ABSTRACT
The purpose of this study was to expose key individuals to the National Highway Traffic Safety Administration (NHTSA)-developed curriculum materials for crash injury management and to teach them how to teach. The scope of the training effort is described using a detailed discussion and separate conclusions for the following tasks: planning, selecting institute sites and dates, developing and adapting course materials, enrolling and informing candidates, selecting and orienting teacher trainers, conducting and evaluating institutes, and providing follow-up services. The objective was accomplished through five 30-hour instructor training institutes conducted in various areas of the country. Enrollees were associated with law enforcement or emergency medical services. Seventy-three percent of the enrollees expect that their organizations will use all or some of the NHTSA curriculum materials in their future training. Appended are: curriculum notice and reference sources; research review, institute outlines, institute forms and handouts, enrollment memoranda, enrollee roster, institute evaluation summaries, and institute follow-up letter. (NTIS)
This document is disseminated under the sponsorship of the Department of Transportation in the interest of information exchange. The United States Government assumes no liability for its contents or use thereof.
The purpose of this study was to expose key individuals to the NHTSA-developed curriculum materials for crash injury management and to teach them how to teach. The objective was accomplished through the conduct of five 30-hour instructor training institutes conducted in various areas of the country. Institutes were held in the spring of 1974. Teaching was shared by representatives of Dunlap and Associates, Inc., and educators from Central Connecticut State College. Various educational institutions throughout the United States served as host colleges for the institutes.

Through its regional offices, state governor's representatives, and state or local agencies, NHTSA identified and referred candidates to attend each institute. A total of 78 enrollees completed the training program. They represented 37 states, Puerto Rico, the District of Columbia and NHTSA. Enrollees were associated with law enforcement or emergency medical services.

Seventy-three percent of the enrollees expect that their organizations will use all or some of the NHTSA curriculum materials in their future training.

All institutes proceeded on schedule and ran smoothly. Ninety-three percent of the enrollees reported that the institute was quite valuable or very valuable to them.
FOREWORD

As part of its continuing efforts to improve and upgrade the effectiveness of the national highway safety program, the U. S. Department of Transportation, National Highway Traffic Safety Administration, recently supported the development of a training program entitled "Emergency medical services: Crash injury management for traffic law enforcement officers." The detailed Instructor's Lesson Plans, Course Guide and Student Study Guide, prepared by Dunlap and Associates, Inc., were developed to provide a standardized means for training first responders to traffic accidents in emergency care techniques. Such individuals are expected to be law enforcement officers patrolling the nation's highways and roads.

In order to assist states in making the program operational, NHTSA supported the conduct of five Crash Injury Management Instructor Training Institutes. The purpose of these institutes was to explain the crash injury management curriculum package in detail to potential instructors and to teach them how to teach. The institutes were conducted in the spring of 1974 by Dunlap and Associates, Inc., in collaboration with educators from Central Connecticut State College, New Britain, Connecticut.

Dr. Aaron Adams of the National Highway Traffic Safety Administration served as Contract Technical Manager. Mr. Joseph T. Fucigna, Executive Vice President of Dunlap and Associates, Inc., served both as Responsible Corporate Officer and as the curriculum expert and teacher at each of the five institutes. Educators from Central Connecticut State College who taught at the various institutes were Dr. Joseph Duffy, Dr. Andrew Baron, Mr. George Barnhardt, Mr. Sahford Rich and Mr. Peter Rodrigues. Ms. Arlene Cleven of Dunlap and Associates, Inc., served as Project Director of the contract and author of the final report on the institute series.
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SUMMARY AND RECOMMENDATIONS

Under this contract, the National Highway Traffic Safety Administration supported the conduct of five regional Crash Injury Management (CIM) Instructor Training Institutes. The purpose of these 5-day, 30-hour institutes was twofold: 1) to provide potential instructors with a detailed explanation of the design, development and use of the NHTSA curriculum package entitled "Emergency medical services: Crash injury management for traffic law enforcement officers," and 2) to train potential instructors in teaching methodology pertinent to the curriculum package.

The scope of the study included a research review of all previously sponsored NHTSA instructor training institutes, all planning relative to the institute series, development of outlines and a schedule for the program, enrolling candidates through NHTSA's regional offices and Governor's Representatives for Highway Safety, conducting and evaluating each institute, and providing on-site follow-up services to selected enrollees on request and within limitations of contract time and funds.

Institutes were held in the spring of 1974 in New Britain, Connecticut; Lansing, Michigan; Atlanta, Georgia area; San Mateo, California; and Denver, Colorado area. All institutes proceeded on schedule and ran smoothly. A local college served as host at each institute. In addition to a campus classroom, the college provided administrative and logistic support.

A set of detailed lesson outlines assured consistency of coverage at each institute while allowing for variation in instructor style. Educators from Central Connecticut State College in New Britain, Connecticut, led all sessions related to teaching methodology. A Dunlap and Associates, Inc., representative, who served as responsible corporate officer on the development of the CIM curriculum package, led all curriculum-related sessions.

The emphasis of the institutes was on the development of teaching skills in contrast to emergency medical care skills. Teaching methodology topics included discussions of teaching and learning, the four-step method of teaching, techniques for effective development of student knowledge and skills, design and use of instructional aids, and techniques for evaluating student knowledge and skills. CIM curriculum-specific topics included discussions on the design, development and use of the curriculum package and course planning considerations. Workshops provided an opportunity for enrollees to develop simple instructional aids and to practice development of written test items. In practice teaching workshops, each enrollee was given an opportunity to teach from a segment of the lesson plans. A session on assimilation of institute principles provided each enrollee with an opportunity to use oral questioning techniques to assess whether the class had learned selected institute principles.
The enrollment process remained active up to and including the first day of each institute. A total of 78 enrollees completed the 5-day program, including five representatives from NHTSA. About two-thirds of the enrollees represented law enforcement services; the remainder represented emergency medical services. Seventy-three percent of the enrollees report that they expect their organizations will use all or some of the CIM course in future training efforts. Eighty-five percent of the enrollees expect to be personally involved in CIM training efforts if the course is instituted at the local level.

Ninety-three percent of the enrollees rated the institute as being quite valuable or very valuable to them. All enrollees reported that the coverage of the institute was adequate in terms of both the curriculum package and teaching methodology. Enrollees found information on the four-step teaching process to be especially valuable. Comments made by enrollees were in general very laudatory about the institute content and conduct as well as about the institute instructors.

Of the 10 series of instructor training institutes thus far sponsored by NHTSA, Dunlap and Associates, Inc., had total technical and administrative responsibility for five, was responsible for the technical conduct of a sixth institute series, and provided the curriculum expert for a seventh series. In addition, as part of the current contract, Dunlap conducted a research review (see Appendix B) of all previously completed NHTSA instructor training institutes. The contractor therefore had extensive familiarity with instructor training programs conducted for NHTSA's highway safety occupational specialties and took advantage of what was learned in the conduct of these other institutes in the planning and conduct of the current CIM institute series. Most of the problems associated with previous institutes have been resolved, and no major problems were noted in the conduct of CIM instructor training programs. With one exception, therefore, no specific recommendations are made for changes in the conduct of any future instructor training institutes. The one exception is in the area of follow-up services. In view of the minimal requests received from enrollees for follow-up services, it is recommended that NHTSA discontinue this task in any future instructor training efforts.

In view of the enthusiastic response received from enrollees who attended the CIM institute series as well as other NHTSA instructor training institutes, it is recommended that NHTSA continue to support such programs for its newly developed highway safety curriculum packages.
INTRODUCTION

During 1973, NHTSA sponsored the development of a training program in emergency medical care for first responders to traffic accidents. Such individuals are expected to be law enforcement officers patrolling the roadway in patrol vehicles. The study resulted in a 40-hour course entitled "Emergency medical services: Crash injury management for traffic law enforcement officers." The curriculum package consists of three documents: a Course Guide developed to aid the training administrator in planning the course, detailed Instructor's Lesson Plans for each lesson unit, and a Student Study Guide designed as an exercise book to assist students in reviewing information presented in class. The 40-hour course was based on the previously developed NHTSA training program for emergency medical technicians.

In order to assist states in making the Crash Injury Management (CIM) training program operational, NHTSA supported the conduct of five regional instructor training institutes in the spring of 1974. The purpose of the institute series was twofold: 1) to explain the curriculum package in detail to potential instructors, and 2) to train potential instructors in teaching methodology pertinent to the curriculum package.

The current study represented one of eight contracts awarded by NHTSA since 1971 for the purpose of conducting instructor training institutes for 10 highway safety occupational specialties (one contract covered three occupations). It is the fifth series of institutes run by Dunlap and Associates, Inc., and the seventh in which Dunlap has participated.

1 NHTSA's notice regarding publication of the curriculum materials (including pricing data and reference source) is reproduced in Appendix A.
3 Dunlap and Associates, Inc., conducted instructor training institutes for the following occupational specialties: emergency medical technician (fall of 1971), breath examiner specialist (spring of 1972), police traffic services (fall of 1972), and police traffic services supervisor (fall of 1973). In addition, under subcontract during the fall of 1973, Dunlap and Associates conducted a series of institutes for driver improvement analyst and served as the technical expert for a series of institutes for the traffic records analyst curriculum package.
The scope of the current training effort was described by the following tasks:

- Task 1 - Planning
- Task 2 - Selecting Institute Sites and Dates
- Task 3 - Developing/Adapting Course Materials
- Task 4 - Enrolling and Informing Candidates
- Task 5 - Selecting and Orienting Teacher Trainers
- Task 6 - Conducting and Evaluating Institutes
- Task 7 - Providing Follow-up Services

With the exception of Tasks 1 and 7, the tasks were not necessarily performed sequentially; rather, there was a good deal of overlap in their accomplishment. For the convenience of the reader, however, each task is discussed separately in the sections which follow. Conclusions are also listed by task.

Appendices include the curriculum notice and reference source, a review of the research of previously conducted NHTSA instructor training institutes, detailed lesson outlines used for the CIM institute series, institute forms and enrollee handouts, enrollment memoranda and forms, an enrollee roster, institute evaluation summaries, and the institute follow-up letter and form.
TASK 1 - PLANNING

Project Plan

Upon receipt of authorization to proceed, Dunlap and Associates, Inc., developed and submitted to the Contract Technical Manager a detailed plan for accomplishing the proposed study. For each of the contract tasks, the project plan listed all subtasks to be accomplished and all factors to be considered in accomplishing each subtask. It therefore served as a useful checklist for the subsequent achievement of study goals.

Review of the Research

Submitted with the project plan was a document entitled "Research review of NHTSA instructor training institutes." The contract specified that this research review should summarize instructor training institutes for the five highway safety occupational specialties for which final reports had been submitted to NHTSA. However, of the remaining four institute series that had been sponsored at the time, Dunlap and Associates, Inc., had been responsible for the conduct of two of them, had assisted in the conduct of a third and had broad familiarity with the fourth. The actual research review, therefore, covered information available at the time (early 1974) on instructor training for the following nine occupational specialties:

- Emergency medical technician—ambulance (EMT)
- Breath examiner specialist (BES)
- Accident investigation technician (AIT)
- Police traffic services (PTS)
- Police traffic services supervisor (PTSS)
- Driver license examiner (DLE)
- Driver license examiner supervisor (DLES)
- Driver improvement analyst (DIA)
- Traffic records analyst (TRA)

The research review was submitted as a preliminary draft for discussion purposes. Since final reports are now available on all contracts, the research review has been updated and is included as Appendix B to this report. Major findings of the research review were as follows:

Enrollment

- Only one institute series achieved its intended quota of 75 trained instructors; in fact, it exceeded its quota by 2 enrollees. The institute with the smallest enrollment achieved only 59% of its quota.
Over three-quarters of the states participated in six or more of the nine programs and approximately two-thirds (67%) participated in seven or more. All states but one participated in at least four of the nine institute series.

Not all enrollees were appropriate candidates for instructor training. When enrollees did not have direct teaching responsibilities, they typically had administrative responsibilities. However, some had no responsibilities relative to the program being introduced.

There appears to be a strong interest on the part of the states in the institute program; the enrollment problem appears to lie with insufficient information filtering down to the proper levels, insufficient screening of candidates on the part of the contractor and insufficient direct contact between the contractor and the designated state agency (agencies) who supply enrollees.

Enrollees at some institutes did not have a clear understanding of the purpose of the institutes. When instructions sent to enrollees were detailed and included a tentative institute schedule, this problem seemed to be alleviated.

Locations of institutes

- The five institutes for each occupational specialty have been scheduled for the following regions: northeast, southeast, central, mountain and Pacific states.

- Three regional institutes of the planned 45 (five institutes and nine occupations) had to be cancelled due to insufficient enrollment—two in the Pacific states region and one in the mountain states region.

- Institutes held near relatively major transportation centers resulted in more efficient and less costly enrollee travel.

- Colleges have served as hosts for all but two of the 42 institutes conducted; their approach has been administrative and advisory in contrast to "participative" in the highway safety program.
Classes have been held successfully both on campus and in enrollee lodgings. Some problems have been noted when enrollees are required to travel between their lodgings and a campus classroom.

Lesson outlines

- Detailed lesson outlines have typically been prepared to provide for consistency of coverage at various institutes.
- Institute coverage typically included sessions on the development, design and use of the curriculum package; sessions on how to teach; and practice teaching sessions in which enrollees taught from a section of the curriculum package and were critiqued on their teaching skills.
- Successful institutes typically provided for as much variety as possible in each institute day and as many opportunities as possible for each enrollee to participate in an instructional capacity.

Teacher trainers

- Most institutes made use of two instructors—a teacher-trainer expert and a curriculum expert.
- Detailed lesson outlines and frequent staff briefings provided for consistency of coverage among institutes of each series.

Institute conduct

- Institutes proceeded on schedule despite occasional last-minute contingencies.
- Enrollees were generally exceptionally laudatory about the quality and nature of the instruction provided.

Institute follow-up services

- Institute follow-up requests have been minimal. Services have included additional instructor training, consultation on adapting the particular curriculum to the enrollee's training program, consultation on starting a training program, and consultation on conducting specific course sessions. In addition, follow-up contacts have been used to obtain additional information on the value of the institute
series, as well as subsequent use being made of the NHTSA curriculum package and the teaching techniques learned at the institute.

Ordering Curriculum Materials

In addition to the preceding efforts, the planning task as defined in the project plan included ordering sufficient copies of the Crash Injury Management curriculum package for distribution to all institute enrollees and instructors. The prepaid order was not completed until about 6 months after it was placed with the Government Printing Office. It was therefore necessary for Dunlap and Associates to borrow curriculum materials from NHTSA in order to conduct the institutes on schedule. Such loan materials were returned to NHTSA when the order placed with the Government Printing Office was completed.
Task 2 involved determining available dates for the five institutes, selecting suitable sites and host colleges, scheduling sites and dates, arranging for enrollee accommodations and arranging for classroom facilities and instructional equipment and materials. Procedures and accomplishments for each of these task elements are discussed below.

Considerations involved in selecting dates for the institutes were as follows:

- Availability of teacher trainers
- Minimum use of weeks in which there were holidays
- Ability to provide enrollees with at least 30 days' notice of the institute to which assigned
- Desirability of completing all institutes prior to the summer vacation period
- Availability of suitable colleges to serve as hosts during the time period

On the basis of the preceding criteria, it was determined that institutes should start in early April and be completed in early June. There was no difficulty in selecting several weeks in this time period for scheduling the five institutes in the series.

For all of the previously completed NHTSA instructor training programs, the five institute sites have been scheduled for the northeast, southeast, central, mountain and Pacific states regions. The assumption was made that each of the 50 states plus Puerto Rico and the District of Columbia would be equally interested in sending at least one enrollee to each institute program. Sites were therefore typically selected near major transportation centers to minimize enrollee travel time. An approximately equal number of states was assigned to each institute site based on proximity to that site.

The contract for the CIM instructor training institute specified that, to the extent practical and economical, site locations were to be determined by:

- Home locations of enrollees completing all previous NHTSA instructor training institutes
- Nature and extent of participation and involvement of local host community colleges
In order to comply with contract directives, scattergrams were made of the total number of enrollees from each state completing an instructor training institute, as well as the total number of institutes (maximum of nine) in which each state participated. These scattergrams are shown in Figures 1 and 2. Although three previously scheduled regional institutes (of a total of 45) had to be cancelled due to insufficient enrollment (DLE and TRA in the Pacific region and DIA in the mountain region), the scattergrams indicated no reason for the CIM institutes not to be scheduled in each of the five regions used for all previous institutes.

With regard to locating the institute within the region, with one exception the scattergrams gave no reason to select one transportation center over any other. The exception was the Pacific northwest where three states (Washington, Oregon and Idaho) have had at least one enrollee complete each of the nine previously conducted institutes. Only three other states (New York, Illinois and Texas) have had at least one enrollee complete each of the previously held institutes. In addition, the state of Washington had slightly more than half again as many enrollees completing previous institutes as did the next most participatory state. It therefore appeared that the institute for the Pacific region should be located in the Pacific northwest and preferably in the state of Washington if possible.

Site locations for all regions, of course, required the availability of a suitable host college and comfortable and inexpensive enrollee lodgings. With regard to a host college, it was considered desirable to utilize colleges that were already giving or planned to give the 81-hour EMT course as part of their regular curriculum. It was also considered desirable to utilize to the extent possible colleges that had served satisfactorily as hosts for previous NHTSA institutes and whose facilities and services were therefore known to Dunlap and Associates, Inc., and NHTSA.

Two of the three colleges previously used by Dunlap and Associates, Inc., in the central, southeast and mountain states were found to be giving the 81-hour course or a variation of it (typically a longer course); one was scheduled to start EMT training in the near future. The host college utilized by Dunlap for the northeast region has always been Central Connecticut State College, the home location of the teacher trainers of the institute; it was selected again to be the site for the kick-off institute for the CIM series.

Since the contractor was unfamiliar with the Washington area, the project director contacted NHTSA’s Region X office whose personnel graciously agreed to assist us in locating a suitable host college and enrollee lodgings. They were successful in locating facilities in Seattle; however, just prior to the start of the enrollment process, the host college informed Dunlap and Associates, Inc., that they would be unable to accommodate the institute on campus. Dunlap was fortunate in being able to arrange for a campus classroom at the host college it has used at previously conducted, successful institutes in the Pacific region.
Figure 1. Scattergram of number of enrollees from each state completing one or more institutes. Excluded are 15 NHTSA enrollees and two representatives of special organizations.
Figure 2. Scattergram of number of institutes (maximum = 9) for which each state has had at least one enrollee receive an NHTSA completion certificate. Excluded are home locations of 15 NHTSA representatives and two enrollees representing special organizations.
The resultant schedule of sites and host colleges was as follows:

- April 1 - 5 -- New Britain, Connecticut  
  Host: Central Connecticut State College

- April 22 - 26 -- Lansing, Michigan  
  Host: Lansing Community College

- May 6 - 10 -- Atlanta, Georgia area  
  Host: DeKalb Community College

- May 20 - 24 -- San Francisco, California area  
  Host: College of San Mateo

- June 3 - 7 -- Denver, Colorado area  
  Host: Community College of Denver, Red Rocks Campus

The number of previous NHTSA institutes (maximum of nine) hosted by each college is as follows:

- Central Connecticut State College -- 5 institutes
- Lansing Community College -- 4 institutes
- DeKalb Community College -- 8 institutes
- College of San Mateo -- 4 institutes
- Community College of Denver -- 7 institutes

Host colleges provided on-campus classrooms at all sites. In addition to a chalkboard, equipment requirements provided at each site included a flip chart and stand, overhead projector and screen, motion picture projector, and video tape equipment. Host colleges also provided (or made arrangements for the contractor to borrow) a resuscitation manikin which was available throughout the week for enrollees to utilize as appropriate for their practice teaching sessions.

Arrangements for enrollee lodging at each site were made either by the contractor or by the host college. Single-room accommodations were provided at all sites except one where a convention in the area at the time of the institute necessitated use of double rooms.

College credit was offered through CCSC at each of the five sites. In addition, three other host colleges offered credit for the course.
In addition to the development of the institute schedule and detailed outlines for each lesson, this task included the design, development and selection of visual aids, design of all forms to be completed by enrollees at the CIM institute, and determination and development of any handouts to be provided to enrollees. Each of these task elements is discussed separately below.

Institute Schedule and Outlines

As stated previously, the purpose of the CIM instructor training institutes was twofold: 1) to describe the CIM course in detail, including the design, development and use of all course documents, and 2) to provide potential CIM instructors with some of the fundamentals of teaching. Since these purposes were identical to those of all other institutes conducted by Dunlap and Associates, Inc., considerable advantage was taken of what was learned at those institutes in developing the lesson outlines and schedule.

In addition to introductory and closing sessions, it was determined that the following coverage would be required:

- Design and development of the CIM course
- Design and use of the CIM Instructor's Lesson Plans, Student Study Guide and Course Guide
- Basics of the teaching-learning process and the domains of learning
- The four steps in the teaching-learning process
- Developing and evaluating CIM knowledge
- Developing and evaluating CIM skills
- Design, development and use of instructional aids

In addition to the preceding topics, it was determined that the schedule should provide for enrollee practice in the following areas:

- Teaching a CIM lesson or lesson segment
- Developing simple instructional aids
- Developing written test items
- Using oral questioning techniques to determine if the class has learned selected institute principles

It was also determined that the schedule should provide for the following:

- A workshop planning session in which a segment of the CIM course was assigned to each enrollee for his practice teaching session
An instructor demonstration of a four-step lesson and enrollee critique of the lesson so that all enrollees would understand what would be expected of them in their practice teaching sessions and how they would be critiqued.

The resultant schedule (shown in Figure 3) used the same principles that Dunlap and Associates, Inc., has used in institutes it has previously conducted for NHTSA, namely:

- Providing as much variety as possible in each day through variations in instructors and interspersing of technical material with workshops. After the first morning session (which covered an overview of the institute and design and development of the CIM course and its documents), no morning or afternoon session was ever devoted exclusively to one type of lesson presentation.

- Providing as much information as possible on teaching techniques prior to the first practice teaching session while still permitting enrollees to start practice teaching as early as possible (on the second day of the institute).

- Having enrollees perform in a "teaching" capacity as much as possible. Each enrollee presented his own lesson segment, developed and led a class discussion on test items for that lesson segment, and conducted an oral evaluation of the class to determine if selected institute principles had been assimilated. In addition, several enrollees had an opportunity to lead the critique session for a fellow enrollee’s practice teaching session.

- Having enrollees prepare the majority of their practice teaching sessions outside of classroom hours. A small amount of classroom time was provided for consultation. Instructors made their time available outside of classroom hours on an as-needed basis to assist enrollees with their practice teaching sessions.

Detailed lesson plans for each session were prepared by Dunlap and Associates, Inc., in collaboration with CCSC. Since the teacher-training areas covered in the institute were essentially the same as those presented in previous Dunlap institutes and were based on the Office of Education guide for the preparation of occupational instructors, the primary effort under this task was adaptation of each lesson unit so that it was relevant to the CIM curriculum package and development of lessons on teaching techniques unique to the CIM course.
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<td>P.M.</td>
<td>definitions, domains of learning, and</td>
<td>effective development of student</td>
<td>3 enrollees teach sections from CIM</td>
<td>3 enrollees teach sections from CIM</td>
<td>FICATE PRESENTATION:** institute eval-</td>
</tr>
<tr>
<td></td>
<td>phases in the teaching-learning</td>
<td>knowledge</td>
<td>lessons</td>
<td>lessons</td>
<td>ulation, reimbursement form, CIM</td>
</tr>
<tr>
<td></td>
<td>process</td>
<td></td>
<td></td>
<td></td>
<td>program plans, presentation of</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>NHTSA completion certificates</td>
</tr>
<tr>
<td>2:00-</td>
<td>4. <strong>WORKSHOP PLANNING:</strong> assignment</td>
<td>9. <strong>PRACTICE TEACHING WORKSHOP:</strong></td>
<td>13. <strong>EVALUATING KNOWLEDGE:</strong></td>
<td>17. <strong>WORKSHOP:</strong> DEVELOPING WRITTEN</td>
<td></td>
</tr>
<tr>
<td></td>
<td>of CIM lessons to enrollees for</td>
<td>3 enrollees teach sections from CIM</td>
<td>advantages, disadvantages, suggestions</td>
<td>TESTS:** each enrollee develops and</td>
<td></td>
</tr>
<tr>
<td></td>
<td>practice teaching</td>
<td>lessons</td>
<td>for test item construction for CIM</td>
<td>describes written test items</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>lesson 19</td>
<td>(for use in CIM lesson 19)</td>
<td></td>
</tr>
<tr>
<td>4:30-</td>
<td>5. <strong>DEMONSTRATION OF 4-STEP LESSON:</strong></td>
<td></td>
<td>18. <strong>ASSIMILATION PLANNING:</strong> enrollee</td>
<td>18. <strong>ASSIMILATION PLANNING:</strong> enrollee</td>
<td></td>
</tr>
<tr>
<td></td>
<td>demonstration of a CIM lesson and</td>
<td></td>
<td>assignments for Unit 19</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>critique</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
The detailed lesson outlines developed for the instructor training institute are included in Appendix C. The objectives of each lesson are given below:

Unit 1. Institute Overview

Provide the enrollee with an overview of the objectives, scope and procedures of the CIM Instructor Training Institute.

Unit 2. The CIM Course

Familiarize enrollees with:

- Course development procedures
- Course documents

Provide enrollees with a detailed description of the Instructor's Lesson Plans.

Unit 3. Teaching-Learning Process

Define learning and teaching

Identify and describe the three domains of learning

Identify the four major phases involved in the pre-planning and execution of the teaching-learning act and key points pertinent to each phase.

Unit 4. Workshop Planning

Inform enrollees of the procedures and assignments for the practice teaching workshops.

Unit 5. Demonstration and Critique of a 4-Step Lesson

Demonstrate to enrollees procedures to follow in presenting a 4-step lesson by presenting a lesson segment from the CIM course.

Have students evaluate the presentation using the workshop checklist.

Unit 6. Instructional Aids

Discuss purpose and uses of instructional aids.
Discuss advantages, disadvantages and hints for effectively utilizing:

- Chalkboards and chart pads
- Prepared charts
- Slides and film strips
- Overhead transparencies
- Films

Unit 7. Lesson Planning and Developing Instructional Aids

Provide each enrollee with the opportunity to develop a variety of instructional aids

Provide enrollees with assistance in planning their lesson segment for the practice teaching workshop

Unit 8. Teaching Information Lessons

Provide the enrollee with hints for effectively utilizing lecture/discussion techniques in developing student knowledge

Unit 9. Practice Teaching Workshop

Provide enrollees with an opportunity to teach segments of the CIM lesson plans

Unit 10. Practice Teaching Workshop

Provide enrollees with an opportunity to teach segments of the CIM lesson plans

Unit 11. Developing and Evaluating CIM Skills

Teach enrollees the basics of good practices in developing and evaluating CIM skills

Review CIM lessons devoted to skill development, application and evaluation

Provide enrollees with practice in developing checklists for skill evaluation

Unit 12. Practice Teaching Workshop

Provide enrollees with an opportunity to teach segments of the CIM lesson plans
Unit 13. Evaluating Knowledge

Teach enrollees how to develop written tests to evaluate achievement of knowledge using:

- True-false items
- Multiple-choice items
- Matching items
- Completion items
- Essay items

Provide enrollees with general techniques for:

- Test construction, administration and scoring
- Interpretation of test results
- Utilization of test results

Unit 14. Practice Teaching Workshop

Provide enrollees with an opportunity to teach segments of the CIM lesson plans.

Unit 15. Course Planning Considerations

Review the following course planning considerations:

- Student characteristics
- Instructor characteristics
- The facility
- The course
  - Class size
  - Course scheduling

Explain how the four-step process was applied to the CIM Instructor's Lesson Plans.

Explain how the four-step process was applied to the CIM Instructor Training Institute.

Unit 16. Practice Teaching Workshop

Provide enrollees with an opportunity to teach segments of the CIM lesson plans.
Unit 17. Workshop: Developing Written Tests

Provide each enrollee with the opportunity to develop a variety of written test items and checklists for skill evaluation.

Unit 18. Assimilation Planning

Make enrollee assignments for Unit 19 and explain procedures to be followed in conducting that unit.

Unit 19. Assimilation of Institute Principles

Provide each enrollee with an opportunity to evaluate whether selected principles taught at the institute have been assimilated by the class.

Unit 20. Forms Completion and Certificate Presentation

Obtain information on the enrollee and his CIM training program plans.

Obtain enrollee comments and opinions on the value of the institute and their suggestions for improving the institute.

Have enrollees complete reimbursement forms.

Award institute completion certificates.

Visual Aids

The selection of visual aids for the institutes was made by Dunlap and Associates, Inc., in collaboration with CCSC. The aids were, in general, relatively simple consisting of words and line drawings. The actual visual aids consisted largely of transparencies for the overhead projector, flip charts, and waxed cards. Many of them had been used in previous institutes conducted by Dunlap and Associates, Inc., and needed only minor modifications to make them relevant to the CIM curriculum package.

In addition to the prepared visual aids, a film was selected for showing at each institute. The film is on the subject of visual aids and has been used at all previous Dunlap Instructor training institutes. Its continued use...
has been due not only to its considered value by all instructors at the institutes but also to the strong positive response it has received from enrollees.

The CCSC instructor at each institute also provided a visual aids kit. This kit contained a variety of materials which enrollees could use either in class (during the instructional aids workshop) or outside of classroom hours to make visual aids for their practice teaching sessions.

Enrollee Handouts and Forms

Each institute enrollee was provided with the following materials:

- The CIM curriculum package--Course Guide, Instructor's Lesson Plans and Student Study Guide

A textbook entitled "Emergency care of the sick and injured," prepared by the American Academy of Orthopaedic Surgeons.1

Workshop planning materials for Unit 4 which included the following (copies of each are included in Appendix D):

- Workshop assignments-- a list of CIM lesson segments from which enrollees could select their practice teaching assignments and indicate assignments selected by all other enrollees

- Workshop checklist-- a checklist to serve as the basis for the critique of each practice teaching session

An assimilation assignment sheet from which the instructors assigned selected sections of the institute coverage to enrollees who were to use oral questioning techniques in Unit 19 to evaluate whether the class had attained the knowledge presented at the institute

Teaching methodology materials entitled:

- Teaching-Learning Process
- Instructional Aids
- Teaching Information Lessons
- Evaluating Knowledge

1A copy of this text, published by the American Academy of Orthopaedic Surgeons, Chicago, Illinois, in 1971, was given by the Academy to each institute enrollee.
These four teaching methodology handouts were copies of Units 3, 6, 8 and 13 of the detailed institute lesson outlines. These outlines have been reproduced in Appendix C. They were provided to assist enrollees in preparing for Unit 19, "Assimilation of Institute Principles."

In addition to the preceding, of course, each enrollee received a variety of miscellaneous items. These included copies of the institute schedule, a directory of institute enrollees, name or place tags, and felt-tipped pens for writing in or highlighting materials in the CIM course documents. Each enrollee was provided with a loose-leaf notebook to store all his documents and written materials.

Forms completed by enrollees at each institute are described below (a copy of each is included in Appendix D):

- **Reimbursement Form**—Submission of this form (along with any required supporting receipts) was required for reimbursement of travel and per diem expenses.

- **CIM Training Program Information Form**—This form was designed to obtain information on the enrollee's perceived qualifications to teach the CIM course, as well as his expectations regarding utilization of the course by his organization.

- **Institute Evaluation Form**—This form was designed to obtain evaluative information on the institute coverage, conduct and facilities.

**Additional Materials**

As part of the contract effort, NHTSA provided sets of curriculum materials for several highway safety occupational specialties. These were displayed in the institute classroom and were available for enrollee review throughout the 30-hour institute program. At the completion of the program, the curriculum materials were given to the host college for deposit in the college library or other repository considered appropriate by the college. Included were all curriculum materials for the following highway safety courses:

- Emergency medical technician—ambulance—basic training
- Emergency medical technician—refresher training
- Breath examiner specialist
- Police traffic services
- Police traffic services supervisor
- Driver license examiner
- Driver license examiner supervisor
- Driver improvement analyst
Alcohol and highway safety (elementary, junior high and senior high levels)
Crash injury management for traffic law enforcement officers

In addition to the preceding materials, selected teaching methodology texts and emergency care texts were available during the week for enrollee reference.

As indicated previously, host colleges made arrangements for a resuscitation manikin to be available throughout the week for enrollee practice teaching sessions as appropriate. In addition, Dunlap and Associates, Inc., provided a supply of splints, cravats and other types of bandages for enrollees to use as needed for their practice teaching sessions.
The enrollment process was initiated by a notice from NHTSA to each of its 10 regions. The notice announced that Dunlap and Associates, Inc., would be conducting five regional instructor training institutes for the CIM curriculum package and would be enrolling candidates through the regional offices. Applications for enrollment were to be provided exclusively through the Governors' Representatives for Highway Safety. A tentative schedule for the institute was attached.

Dunlap and Associates, Inc., subsequently prepared and mailed informational materials to each of NHTSA's 10 regions. A memorandum to the Regional Administrator provided a brief description of the development of the CIM course and the purpose of the instructor training institutes. It also described enrollment procedures and indicated the site to which each state in the region was assigned. Included with the memorandum was a packet of materials for each state in the region. Each packet contained descriptive information on the CIM course and institutes, procedures for enrollment, and the institute site and date to which the state was assigned. Attachments included a CIM Course Guide, CIM tentative institute schedule, and enrollment application forms. Copies of the memoranda and forms are included in Appendix E.

The enrollment forms permitted each Governor's Representative for Highway Safety to nominate one "preferred" candidate from his state and as many "open" candidates as desired. Thus, enrollment procedures provided for holding at least one place at one of the five regional institutes for a "preferred" candidate from each of the 50 states plus Puerto Rico and the District of Columbia. The remaining 23 places (75 minus 52) were to be filled on a first-come, first-served basis by "open" enrollment candidates.

The mailing of the regional memoranda was spread over a 3-week time period. The cutoff dates for submission of candidate names were similarly staggered. Cutoff dates for enrollment served primarily as a stimulus for states to notify the contractor about proposed enrollment for that state. In actual fact, no "preferred" place at any institute site was assigned to an "open" enrollment candidate unless the contractor received direct notification that the given state would not have a representative at the institute.

A memorandum from Dunlap and Associates, Inc., to the enrollee served to confirm the candidate's enrollment at a given site and explained institute coverage, lodging, travel facilities and reimbursement procedures. Included with the memorandum were a copy of the CIM Course Guide, a
tentative institute schedule and a form for the enrollee to complete and return as a firm indication of his intention to attend the specified institute. A copy of this memorandum for New Britain enrollees is included in Appendix E. Memoranda sent to enrollees accepted at other institute sites were identical with the exception of site-specific information.

Up to and including the first day of each institute, the enrollment process remained flexible with individuals cancelling plans to attend, sending alternates, or requesting permission to attend after an initial expression of no interest had been obtained from their states or areas. Accommodations and changes in enrollment were made, therefore, up to and including the first day of each institute.

As indicated previously, the research review revealed that enrollees who have attended previously sponsored NHTSA instructor training institutes have not always been appropriate candidates for instructor training. Sometimes their responsibilities relative to the training program have been administrative rather than instructional. In some instances, enrollees have had no responsibilities relative to the highway safety occupational specialty. In an attempt to eliminate or at least minimize the possibility of inappropriate enrollees attending the institutes, questions to determine enrollee qualifications were added to the application form. It was determined in collaboration with the Contract Technical Manager that, to be qualified, an enrollee should have completed the 81-hour basic course for emergency medical technicians (or its equivalent) and should be scheduled to be an on-line instructor of an emergency medical care course. Therefore, if a candidate did not appear to have the requisite qualifications from the information provided on the application form, he or his agency was contacted and the institute purpose and desired enrollee characteristics were explained. In some cases, emergency care equivalencies were difficult for the contractor to assess from the information provided on the form. In some instances, enrollees did not have firm plans for training since their agency's plans were not firm. Enrollees lacking the necessary emergency care training were accepted from one state at the request of state officials; the officials felt they were "putting the cart before the horse" but had scheduled the enrollees for emergency care training after completion of the instructor training institute. Since no enrollee applications were actually refused, the extent to which this process resulted in identifying more appropriate enrollees than would have been identified otherwise is unknown.

The enrollment procedures resulted in acceptance by Dunlap and Associates of 79 instructor candidates. All but two of these provided confirmation of their intention to attend the institute to which they were assigned. Of the two who did not confirm in writing or by telephone, one did not show up and one sent a substitute. The actual number completing the entire institute series therefore was 78, including five NHTSA representatives. This number exceeded by three enrollees the planned national quota of 75.
It is the second institute series of the 10 thus far sponsored by NHTSA that has equalled or exceeded its planned quota (the BES institute series exceeded its quota by two enrollees).

It might be of interest to note that, at the completion of the CIM institute series, NHTSA had sponsored instructor training for 642 instructor candidates for 10 occupational specialties. Twenty NHTSA representatives have participated as enrollees in six of these programs.

Scattergrams of the number of enrollees from each state completing one or more of the 10 NHTSA-sponsored instructor training institutes and of the number of institutes in which each state has participated are included as Figures 4 and 5. (These are updated versions of Figures 1 and 2 which did not include enrollees from the CIM institute.) The figures show that the following six states have had at least one enrollee complete all 10 NHTSA-sponsored instructor training institutes: Idaho, Illinois, New York, Oregon, Texas and Washington. The distribution of the number of institutes in which states have participated is as follows:

<table>
<thead>
<tr>
<th>No. of institutes</th>
<th>No. of states</th>
</tr>
</thead>
<tbody>
<tr>
<td>10</td>
<td>6</td>
</tr>
<tr>
<td>9</td>
<td>10</td>
</tr>
<tr>
<td>8</td>
<td>14</td>
</tr>
<tr>
<td>7</td>
<td>9</td>
</tr>
<tr>
<td>6</td>
<td>4</td>
</tr>
<tr>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>3</td>
<td>-</td>
</tr>
<tr>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>1</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>52</td>
</tr>
</tbody>
</table>

The number of enrollees from a state completing one or more institutes ranges from 2 to 32. The distribution of the number of enrollees completing one or more of the 10 NHTSA institutes is as follows:

<table>
<thead>
<tr>
<th>No. of enrollees completing one or more of 10 NHTSA institutes</th>
<th>No. of states</th>
</tr>
</thead>
<tbody>
<tr>
<td>31-35</td>
<td>1</td>
</tr>
<tr>
<td>26-30</td>
<td>-</td>
</tr>
<tr>
<td>21-25</td>
<td>1</td>
</tr>
<tr>
<td>16-20</td>
<td>6</td>
</tr>
<tr>
<td>11-15</td>
<td>20</td>
</tr>
<tr>
<td>6-10</td>
<td>22</td>
</tr>
<tr>
<td>1-5</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>52</td>
</tr>
</tbody>
</table>

-26-
Figure 4. Scattergram of number of enrollees from each state completing one or more of 10 NHTSA-sponsored instructor training institutes. Excluded are 20 NHTSA enrollees and 2 representatives of special organizations.
Figure 5. Scattergram of number of institutes (maximum = 10) for which each state has had at least one enrollee receive an NHTSA completion certificate. Excluded are home locations of 20 NHTSA representatives and two enrollees representing special organizations.
The actual number of enrollees completing each CIM institute was as follows:

<table>
<thead>
<tr>
<th>City</th>
<th>Enrollees</th>
</tr>
</thead>
<tbody>
<tr>
<td>New Britain</td>
<td>15</td>
</tr>
<tr>
<td>Lansing</td>
<td>16</td>
</tr>
<tr>
<td>Atlanta</td>
<td>15</td>
</tr>
<tr>
<td>San Mateo</td>
<td>15</td>
</tr>
<tr>
<td>Denver</td>
<td>17</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>78</strong></td>
</tr>
</tbody>
</table>

Enrollees completing the program represented 37 states, Puerto Rico, the District of Columbia and NHTSA. Thus, 75% of the 52 states/areas invited to participate in the program had enrolled representatives who completed the program. State participation in all previously sponsored NHTSA instructor training institutes has ranged from 63% to 85%.

The number of enrollees sent by the 37 states and 2 areas was as follows:

<table>
<thead>
<tr>
<th>No. of States/Areas</th>
<th>No. of Enrollees</th>
</tr>
</thead>
<tbody>
<tr>
<td>One</td>
<td>18</td>
</tr>
<tr>
<td>Two</td>
<td>13</td>
</tr>
<tr>
<td>Three</td>
<td>4</td>
</tr>
<tr>
<td>Four</td>
<td>3</td>
</tr>
<tr>
<td>Five</td>
<td>1</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>39</strong></td>
</tr>
</tbody>
</table>

Agencies represented by the 78 enrollees who completed the instructor training institute were as follows:

<table>
<thead>
<tr>
<th>Agency</th>
<th>Enrollees</th>
</tr>
</thead>
<tbody>
<tr>
<td>Law enforcement: state</td>
<td>35</td>
</tr>
<tr>
<td>county</td>
<td>1</td>
</tr>
<tr>
<td>city</td>
<td>15</td>
</tr>
<tr>
<td>Emergency medical services: state</td>
<td>11</td>
</tr>
<tr>
<td>city</td>
<td>1</td>
</tr>
<tr>
<td>Fire service: state</td>
<td>1</td>
</tr>
<tr>
<td>county</td>
<td>1</td>
</tr>
<tr>
<td>city</td>
<td>3</td>
</tr>
<tr>
<td>University/technical institute</td>
<td>3</td>
</tr>
<tr>
<td>Hospital</td>
<td>1</td>
</tr>
<tr>
<td>Ambulance company</td>
<td>1</td>
</tr>
<tr>
<td>NHTSA</td>
<td>5</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>78</strong></td>
</tr>
</tbody>
</table>
As might be expected, almost two-thirds (65%) of the enrollees represented law enforcement services. With the exception of the NHTSA monitors, the remaining enrollees represented emergency medical services. They most frequently represented state departments of health or human resources. However, they also came from fire services in areas where the fire department has primary responsibility for emergency care, schools, a hospital and an ambulance company.

Certain enrollee information and opinions relative to CIM training are described in the following paragraphs. The information was obtained from a training program information form (see Appendix E) filled out by enrollees at the institute. Since one enrollee failed to submit the form and the form was inapplicable to NHTSA monitors, the discussion is based on a total of 72 instead of 78 enrollees.

Fifty-one (71%) of the enrollees reported that they currently teach an emergency medical care course. Of these, the largest proportion (39%) teach standard and/or advanced first aid, with course lengths ranging from 28 to 60 hours. Thirty-one percent report teaching the DOT emergency medical technician's course, with course lengths ranging from 81 to 125 hours. The others teach various standard or locally customized courses ranging in length from 10 to 52 hours. About half (26) of the 51 enrollees currently providing training report that their students are police personnel; the remainder (25) teach specialized groups, such as ambulance personnel, or all interested groups or individuals. It is interesting to note that 21 enrollees report that they currently have no responsibilities for emergency medical care training.

Enrollees were asked to indicate whether they currently feel qualified to teach the CIM course. Their responses were as follows:

<table>
<thead>
<tr>
<th>Response</th>
<th>Enrollees</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>60</td>
</tr>
<tr>
<td>No</td>
<td>12</td>
</tr>
</tbody>
</table>

Total: 72

Those who did not feel qualified felt the need for further emergency medical care training. As stated previously, not all enrollees had completed the 81-hour DOT course or its equivalent.

When asked whether they felt their organization would use the CIM course in future training efforts, enrollees responded as follows:

-30-

36
Thus, of the total group, 73% expect that their departments will use all or some of the CIM course in future teaching efforts. The remainder do not know whether or not the course will be used. It should be noted that several enrollees reported responsibilities for teaching the DOT 81-hour course or its equivalent to ambulance and other emergency care personnel. It seems reasonable that organizations represented by such individuals would not replace the 81-hour course with the CIM course, since the latter was developed specifically for first responders to traffic accidents and not for ambulance and other rescue personnel.

When asked if they would personally be involved in CIM training if such training were to be implemented by their organization, enrollees responded as follows:

<table>
<thead>
<tr>
<th>Response</th>
<th>Enrollees</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>61</td>
</tr>
<tr>
<td>No</td>
<td>1</td>
</tr>
<tr>
<td>Don't know</td>
<td>9</td>
</tr>
<tr>
<td>No answer</td>
<td>1</td>
</tr>
<tr>
<td>Total</td>
<td>72</td>
</tr>
</tbody>
</table>

Thus, 85% of the enrollees feel they will be personally involved in CIM training if it is initiated by their organizations. Only one enrollee reported that he would not be involved. The others did not know if they would be involved in teaching the CIM course. Certainly, those who lack adequate emergency medical care training would need to acquire such training prior to teaching. However, the extent to which enrollee uncertainty with regard to CIM program involvement is due to lack of training or to presence of other departmental responsibilities is unknown.
# TASK 5 - SELECTING AND ORIENTING TEACHER TRAINERS

Central Connecticut State College is part of the state university system; its Division of Technology specializes in the training of teachers in the vocational and technical education area. Dunlap and Associates, Inc., has used members of the CCSC Technology Division faculty for all of its previous instructor training institutes and found them well suited to the task of teacher training.

The CCSC faculty members selected for the CIM institute were as follows:

<table>
<thead>
<tr>
<th>Institute</th>
<th>Teacher Trainer</th>
</tr>
</thead>
<tbody>
<tr>
<td>New Britain, Connecticut</td>
<td>Dr. Joseph Duffy</td>
</tr>
<tr>
<td>Lansing, Michigan</td>
<td>Dr. Andrew Baron</td>
</tr>
<tr>
<td>Atlanta, Georgia</td>
<td>Mr. George Barnhardt</td>
</tr>
<tr>
<td>San Mateo, California</td>
<td>Mr. Sanford Rich</td>
</tr>
<tr>
<td>Denver, Colorado</td>
<td>Mr. Peter Rodrigues</td>
</tr>
</tbody>
</table>

Since all of the five teacher trainers selected had participated in previous instructor training institutes for highway safety occupational specialties, the task of orienting teacher trainers was greatly simplified. Procedures were as follows:

- After receipt of authorization to proceed, copies of the curriculum package were forwarded to CCSC for review by the selected teacher trainers. They were directed to become familiar with the purpose, scope and general content of all documents. They were neither expected nor required to become proficient in the area of crash injury management.

- Drafts of the schedule and lesson plans for the institute were prepared by representatives of Dunlap and Associates, Inc., in collaboration with CCSC—CCSC being responsible primarily for the teacher training sessions and Dunlap for the curriculum-related sessions. Early communications on the design and development of lesson outlines were handled by telephone and mail.

- The Dunlap project director met with all assigned CCSC teacher trainers and reviewed in detail all lesson outlines and institute procedures.
Prior to initiation of the institutes, the Dunlap project director prepared written instructions and checklists for each teacher trainer relative to material and procedures for conduct of the overall institute and for each lesson.

The Dunlap project director monitored the first institute which was held on the CCSC campus in New Britain. Teacher trainers assigned to subsequent institutes also monitored selected sessions of this first institute to observe techniques and procedures being employed. After such sessions, informal debriefings were held with the project director who answered all questions and reinforced major points to be remembered.

In addition to the preceding activities, four of the five assigned teacher trainers attended a briefing at NHTSA headquarters in Washington, D.C. This briefing was planned and directed by the Contract Technical Manager and served to orient the CCSC educators regarding the purposes and activities of NHTSA's Manpower Development Division and its emergency medical services and police traffic services activities. The Dunlap project director also attended the one-day briefing. The meeting served to further strengthen the teacher trainers in the highway safety area and specifically in the CIM area.

In addition to the CCSC teacher trainer, a member of the Dunlap staff also served as an instructor at each of the institutes. The Dunlap instructor presented lessons on the development and design of the curriculum package, its use and any teaching techniques unique to the subject curriculum. The Dunlap instructor for the CIM institutes was Mr. Joseph T. Fucigna, the Dunlap Responsible Officer for the development of the CIM course. In addition to his teaching responsibilities, the Dunlap representative was responsible for resolving any administrative or logistics problems and for ensuring that teacher trainers were properly oriented, familiar with and following prescribed institute procedures.
TASK 6 - CONDUCTING, AND EVALUATING INSTITUTES

All institutes proceeded on schedule and ran smoothly. Since the conduct of each institute is the result of the entire institute planning process, most of the procedures have been discussed previously under other project tasks. Described below, therefore, will be certain procedures not previously discussed and a summary of enrollee evaluations of the five institutes.

The Dunlap or CCSC instructor arrived at the classroom before the start of each institute to ensure that all equipment and materials were in readiness and that the classroom was in order. When transportation to classes was required, enrollees were met by one of the instructors in the hotel lobby at 8:15 A.M. on Monday morning. Arrangements were made to travel to and from classes in contractor and enrollee cars (enrollees were reimbursed for providing transportation). At one site (Denver), a bus was utilized to transport enrollees to and from classes. Transportation was not required at Lansing where the lodging was within walking distance of the campus.

At each institute, the Dunlap instructor led all curriculum-related sessions. The CCSC instructor led all sessions related to teaching methodology. Both instructors shared responsibilities in the workshops. In order to assure that the curriculum package was literally and systematically "walked through," the Dunlap instructor reviewed the overall contents of each CIM lesson after each enrollee presented his segment of the lesson in the practice teaching workshops.

On the last day of the institute, each enrollee completed an institute evaluation form, a CIM training program information form and an institute reimbursement form. Copies of these forms are included in Appendix D. Each enrollee also received an NHTSA-supplied completion certificate. All institutes were completed on schedule, that is, by noon on Friday. Reimbursement for travel and subsistence was made by mail within two weeks following completion of any given institute.

From the enrollee point of view, opinions regarding the institute can best be assessed by their responses and comments made on the institute evaluation form. One enrollee at Denver failed to complete the form. The total evaluation forms completed, therefore, numbered 77.

The evaluation form included questions on the overall coverage of the institute relative both to the CIM curriculum package and to teaching methodology, a section in which ratings were made of the value of institute contents and workshops as well as of the overall institute, and questions on institute planning and facilities. Each enrollee was encouraged to make any additional comments that would assist in the conduct of the CIM institute series as well as the conduct of future instructor training institutes for highway safety occupational specialties. Detailed information obtained on
the evaluation form at each institute is included in Appendix G. This information is summarized in the following paragraphs.

CIM Curriculum Package Coverage

All 77 enrollees reported that they considered the information presented on the design and development of the CIM training program to be adequate. When asked if they would like more or less emphasis on certain documents or lessons, enrollees responded as follows:

<table>
<thead>
<tr>
<th>Response</th>
<th>More emphasis</th>
<th>Less emphasis</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number</td>
<td>Percent</td>
</tr>
<tr>
<td>Yes</td>
<td>18</td>
<td>23%</td>
</tr>
<tr>
<td>No</td>
<td>59</td>
<td>77%</td>
</tr>
<tr>
<td>No answer</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>77</td>
<td></td>
</tr>
</tbody>
</table>

Of the 18 enrollees indicating they would like more emphasis on certain documents or lessons, three failed to specify an area and four gave areas more appropriately related to teaching methodology than to the curriculum package (for example, visual aids, testing). Seven enrollees indicated one or more CIM documents, but there was no strong preference for additional time on any one document. Three enrollees specified additional discussion on specific emergency care conditions or techniques (e.g., shock, CPR). One enrollee simply said that the whole institute should devote more emphasis to CIM and less to teaching methodology:

Of the three enrollees expressing a desire for less emphasis on CIM documents or lessons, two failed to give an explanation. The third enrollee indicated he would like less emphasis on CPR.

Teaching Methodology Coverage

As with the coverage of the curriculum package, all enrollees felt that the information presented on teaching methodology was adequate. When asked if they would like more or less emphasis in certain teaching areas, they responded as follows:

<table>
<thead>
<tr>
<th>Response</th>
<th>More emphasis</th>
<th>Less emphasis</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number</td>
<td>Percent</td>
</tr>
<tr>
<td>Yes</td>
<td>25</td>
<td>32%</td>
</tr>
<tr>
<td>No</td>
<td>51</td>
<td>66%</td>
</tr>
<tr>
<td>No answer</td>
<td></td>
<td>1%</td>
</tr>
<tr>
<td>Total</td>
<td>77</td>
<td></td>
</tr>
</tbody>
</table>
Twenty-two enrollees indicated teaching areas in which they would like to have had more emphasis, but no clear pattern of preferences emerged. Mentioned by five enrollees each were the areas of instructional aids and evaluation. Other areas mentioned by more than one enrollee were practice teaching, application, and skill training.

Four enrollees indicated areas in which they would like less emphasis, but there was no duplication of areas mentioned.

**Institute Planning and Facilities**

When asked if they understood what was expected of them prior to the start of the institute, all but two enrollees responded that they did. One thought he was going to take the 40-hour CIM course. The other stated that the Dunlap memorandum did not contain a complete explanation of the course.

Classrooms were rated adequate by 71% and inadequate by 29% of the enrollees. Most of the complaints came from two sites where enrollees considered the classrooms to be too small and the ventilation poor. At one of these sites, an unseasonal heat wave occurred during the institute week and contributed to the uncomfortable environment. At other sites, selected enrollees commented on seating arrangements, space for the instructor, and size of the room.

Lodgings were rated adequate by all but five enrollees—all attending the same institute. At this site, arrangements had been made to house enrollees in renovated rooms of an older hotel; however, not all enrollees were placed by the hotel in renovated rooms. They complained that the rooms were old and felt that more modern facilities could have been located in the area for the same price.

**Institute Rating**

Enrollees rated the entire institute as follows:

<table>
<thead>
<tr>
<th>Rating</th>
<th>Number</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very valuable</td>
<td>58</td>
<td>75%</td>
</tr>
<tr>
<td>Quite valuable</td>
<td>14</td>
<td>18%</td>
</tr>
<tr>
<td>Somewhat valuable</td>
<td>4</td>
<td>5%</td>
</tr>
<tr>
<td>Useless</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>No answer</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>77</td>
<td></td>
</tr>
</tbody>
</table>

*One enrollee rated on the line between "quite" valuable and "somewhat" valuable. For tabulation purposes, the lower of the two ratings was used.*
The table shows that 75% of the enrollees rated the entire institute as very valuable; 93% rated the institute as being very valuable or quite valuable.

The percentages of enrollees selecting each value rating for institute topic coverage and workshop sessions are given below. They are listed in decreasing order based on the percentage of enrollees who rated the coverage/workshop as very valuable or quite valuable.

<table>
<thead>
<tr>
<th>Institute coverage/workshop</th>
<th>Very valuable</th>
<th>Quite valuable</th>
<th>Somewhat valuable</th>
<th>Useless</th>
<th>No answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>4-step process--preparation, presentation, application, evaluation</td>
<td>71%</td>
<td>26%</td>
<td>1%</td>
<td>--</td>
<td>1%</td>
</tr>
<tr>
<td>Qualities of a good instructor</td>
<td>62</td>
<td>32</td>
<td>4</td>
<td>--</td>
<td>1</td>
</tr>
<tr>
<td>Design and use of CIM documents</td>
<td>55</td>
<td>39</td>
<td>4</td>
<td>--</td>
<td>3</td>
</tr>
<tr>
<td>Designing and using instructional aids</td>
<td>68</td>
<td>22</td>
<td>6</td>
<td>--</td>
<td>4</td>
</tr>
<tr>
<td>Practice teaching workshop--other enrollees*</td>
<td>69</td>
<td>19</td>
<td>10,</td>
<td>--</td>
<td>1</td>
</tr>
<tr>
<td>Workshop: lesson planning and developing instructional aids</td>
<td>/</td>
<td>62</td>
<td>26</td>
<td>9</td>
<td>--</td>
</tr>
<tr>
<td>Domains of learning--knowledge, skill, attitude</td>
<td>57</td>
<td>31</td>
<td>9</td>
<td>--</td>
<td>3</td>
</tr>
<tr>
<td>Questioning techniques</td>
<td>49</td>
<td>39</td>
<td>10</td>
<td>--</td>
<td>1</td>
</tr>
<tr>
<td>Practice teaching workshop--enrollee's own*</td>
<td>63</td>
<td>19</td>
<td>16</td>
<td>--</td>
<td>1</td>
</tr>
<tr>
<td>Use of checklists for skill evaluation</td>
<td>39</td>
<td>42</td>
<td>17</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Developing CIM skills</td>
<td>36</td>
<td>45</td>
<td>17</td>
<td>--</td>
<td>1</td>
</tr>
<tr>
<td>Conducting practical tests**</td>
<td>25</td>
<td>56</td>
<td>19</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Developing written test items</td>
<td>48</td>
<td>29</td>
<td>18</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>Workshop: developing written tests**</td>
<td>46</td>
<td>26</td>
<td>26</td>
<td>--</td>
<td>2</td>
</tr>
</tbody>
</table>

*One enrollee rated on the line between "quite" valuable and "somewhat" valuable. For tabulation purposes, the lower of the two ratings was used.

**At one institute site, a session on "conducting practical tests" was substituted for the workshop on "developing written tests", at the request of the enrollees. The percentages of these two sessions are therefore based on 'N's of 16 and 51, respectively.
Seventy-two percent of the enrollees rated all institute topic coverage and workshop sessions as either very valuable or quite valuable. Enrollees found the session on the four-step teaching learning process as the most valuable one at the institute. The least valuable was the workshop on developing written tests.

Thirty-eight enrollees made additional comments. Twenty-six (68% of those making additional comments) were laudatory about the institute in general or about the institute instructors. Of the remaining 12 enrollees, three expressed the desire for more time to develop their teaching ability and two felt that a college classroom offered no advantages over a motel facility. Other comments were specific to given enrollees, and no trends were noted in any one institute or across institutes.
As with other instructor training institutes supported by NHTSA, the current study provided for follow-up services to enrollees within the limitations of contract time and funds. The primary purpose of such services was to assist enrollees in initiating and implementing their CIM courses.

In order to assess enrollee interest in such services, a follow-up letter including a form and return envelope was mailed to all but the NHTSA enrollees approximately three weeks after completion of the fifth and final institute. Copies of the letter and form are included in Appendix H.

The letter identified the following types of services that could be made available to enrollees under the contract:

- Helping the enrollee initiate the CIM training program or to adapt it to meet particular local training needs.
- Assisting the enrollee in developing and implementing instructor training programs at the local level.
- Providing some combination of the preceding services.

Ten enrollees expressed interest in some type of follow-up services. Of these, two were from the same agency; the total number of states requesting services was therefore nine. Enrollees requesting services were contacted by telephone to determine if such services could be provided within contract time and funds. Most of the enrollees requesting services did not have their training program at the stage where services could be provided within the time frame of the contract. Actual on-site services were therefore provided to only three states (and four enrollees). All services were provided by the Dunlap and Associates, Inc., institute instructor. All services provided were in the instructor training area. They consisted of the following:

At the request of enrollees from the Georgia State Department of Education and State Department of Human Resources, the Dunlap instructor assisted in the conduct of a one-day instructor orientation program held in Atlanta, Georgia, for 75 CIM instructors and course coordinators. The Dunlap instructor presented sessions on the development, design and use of the CIM curriculum package, development and evaluation of CIM skills, and development of written tests for evaluating knowledge in the CIM course.
At the request of an enrollee from the Idaho Department of Health and Welfare, the Dunlap instructor spent two days in Boise, Idaho, assisting in developing a state capability to conduct CIM instructor training institutes. In consultation with the enrollee, regional EMS personnel and a professional teacher trainer, a schedule for teacher training that fit local requirements was developed and the Dunlap lesson outlines for instructor training were reviewed in detail.

The Dunlap instructor spent two days in Phoenix, Arizona, assisting the Arizona Department of Public Safety in establishing a capability for training CIM instructors who would subsequently train the state highway patrol and possibly municipal and county law enforcement and fire service personnel. The Dunlap instructor conducted a workshop for approximately 15 local instructors; details of the Dunlap lesson outlines were reviewed and procedures for customizing the program to Arizona's specific requirements were discussed.

It is interesting to note that all services provided, although admittedly minimal, were in the area of increasing local instructor training capabilities.
OBSERVATIONS AND CONCLUSIONS

Task 1 - Planning

The planning process proceeded smoothly. As specified by the contract, a project plan was submitted for NHTSA approval. This plan served as a subsequently useful checklist for accomplishment of project tasks and sub-tasks. Because of the contractor's broad familiarity with all of the instructor training institute series thus far sponsored by NHTSA, the research review conducted as part of the planning process covered all nine previously conducted instructor training institutes instead of only five as specified by the contract.

The only problem encountered in the planning process was the slow delivery of our prepaid order of curriculum materials from the Government Printing Office. However, a loan of materials from NHTSA permitted the contract to proceed on schedule. These materials were returned to NHTSA when the Government Printing Office completed its order—approximately 9 months after it had been placed.

Task 2 - Selecting Institute Sites and Dates

All CIM institute sites had been previously used by Dunlap and Associates and found to be satisfactory. An attempt to relocate the Pacific Coast institute to the Pacific northwest to accommodate an expected large enrollment from that area was unsuccessful; however, this caused only minor problems in the early planning process and no problems in the enrollment process since an alternate site had been selected prior to initiation of enrollment procedures.

All host colleges were exceptionally cooperative as they have been in the past. All provided on-campus classrooms. At two of the sites, several enrollees considered the classroom to be too small. One of these classrooms had been used previously without complaint by enrollees of other institutes; however, an unseasonable heat wave made the room uncomfortably warm. Host colleges arranged for all institute equipment and material needs.

At one site, some enrollees found the lodgings to be unsatisfactory. These enrollees had received unrenovated rooms in an older hotel and would have preferred a more modern facility.

Dates scheduled for the institutes appeared to be satisfactory. The schedule provided two weeks between the first and second institutes in the series. However, since no changes were made in institute content and procedures after the first institute (considered to be a pilot test for all institutes in the series), the time between the first and second institutes was not required.
Task 3 - Developing/Adapting Course Materials

From enrollee comments as well as instructor observations, the institute content and schedule resulted in an interesting and worthwhile instructor training program. As was the case in all previous institutes conducted by Dunlap and Associates, detailed lesson outlines provided for consistency of coverage among institutes while permitting variation in instructor style.

In addition to a detailed explanation of the design and use of the CIM documents early in the institute program, the Dunlap instructor reviewed the contents of each of the lessons in the Instructor's Lesson Plans after each enrollee taught a segment from the lesson. Thus, the CIM course was literally and systematically "walked through" as specified by the contract.

Task 4 - Enrolling and Informing Candidates

The enrollment process resulted in 78 enrollees, five of whom were NHTSA representatives. It is the second institute thus far sponsored by NHTSA that has equalled or exceeded its quota (the BES institute series exceeded its quota by two enrollees). It is the second NHTSA institute series that has had an enrolled NHTSA representative complete each of the five regional institutes (PTSS also had five NHTSA representatives complete the program). All monitors served as full participants, not as observers.

Almost two-thirds of the enrollees represented law enforcement services. With the exception of the NHTSA representatives, the remainder represented emergency medical services. Eighty-five percent of the enrollees reported that they expect to be personally involved in CIM training if such training is initiated by their organizations. Twenty-one enrollees reported that they currently have no responsibilities for teaching emergency medical care courses.

Two enrollees reported that they did not understand what was required of them prior to the start of the institute. One thought he was going to take the 40-hour CIM course; the other felt that the Dunlap memorandum did not contain complete information on the instructor training course.

The enrollment process was considered to be satisfactory.

Task 5 - Selecting and Orienting Teacher Trainers

The educators from CCSC were fully competent in their field of teacher training, established a good rapport with enrollees, and favorably impressed enrollees with their technical abilities. The procedures used for orienting teacher trainers appeared to be satisfactory. All teacher trainers had previously taught at NHTSA instructor training institutes and were fully knowledgeable in both technical and administrative institute procedures.
The Dunlap and Associates instructor had served as responsible officer for development of the CJM curriculum package. In addition, he is an accomplished instructor who has taught at four previously sponsored NHTSA instructor training institutes.

**Task 6 - Conducting and Evaluating Institutes**

All institutes proceeded on schedule and ran smoothly. Ninety-three percent of the enrollees rated the entire institute as being very valuable or quite valuable to them. All found the institute coverage to be adequate both in terms of the curriculum package and in terms of teaching methodology. Comments made by enrollees about the institute as a whole and about the institute instructors were laudatory.

**Task 7 - Providing Follow-Up Services**

As with instructor training institutes conducted by Dunlap and other contractors, requests for follow-up services were minimal. They consisted of on-site consulting to enrollees from three states for time periods of 1 to 2 days each. All services provided were in the area of increasing local instructor training capabilities.
APPENDIX A

Curriculum Notice and Reference Source
PUBLICATION OF CURRICULUM MATERIALS: Notice Expires December 30, 1973

SUBJECT: EMERGENCY MEDICAL SERVICES, CRASH INJURY MANAGEMENT (FOR TRAFFIC LAW ENFORCEMENT OFFICERS)

1. PURPOSE. To provide to NHTSA regions, and through these to State agencies, a set of new curriculum publications. To describe the content, intended use, and source of further supply.

2. BACKGROUND. Experience since the development of the "emergency medical technician—ambulance" course showed the need for a shorter course which would train traffic law enforcement officers to a comparable level of proficiency in the treatment of selected traffic-related injuries. Approximately one-half of the 40-hour course is assigned to applied field practice. The course was developed and field-tested under a Section 403 contract for the purpose of enhancing States and community capabilities for manpower development as supported under Section 402.

3. COURSE GUIDE. This item, while included in the three-piece set, is additionally significant as an isolated publication which may be purchased and distributed alone. The course guide briefly presents all information of use to administrators, coordinators, advisory committees and others. Included are: course objectives, lesson topics, course length, schedule, facilities, equipment, and instructor and student pre-requisites.

4. INSTRUCTOR'S LESSON PLANS AND STUDENT STUDY GUIDE. As described on pages 19-20 of the course guide, the lesson plan book with the required number of copies of the student study guide permit a qualified local instructor to initiate classes with a minimum of leadtime preparation.
5. **PLAN FOR INSTRUCTOR TRAINING.** NHTSA has followed a practice in conjunction with the publication of a curriculum package of conducting an instructor institute. A limited number of selected on-line instructors from State and community jurisdictions will receive one week of training in methods and techniques applied to teaching the new crash-injury management course. It is planned that information will be made available by January through NHTSA regions for instructor-training to be conducted in the Spring of 1974.

6. **PURCHASE SOURCE.** Sets of materials or quantities of individual items are available for purchase through the Government Printing Office only. To assist in this procedure an order form is attached. Additional copies of the form may be duplicated locally.

Attachments

[Signature]

Willard Y. Howell  
Acting Associate Administrator  
Traffic Safety Programs

A-3

52
# Order Blank


<table>
<thead>
<tr>
<th>Date</th>
<th>19..</th>
</tr>
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<tbody>
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</tr>
<tr>
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<td></td>
</tr>
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**FOR ADDITIONAL SPACE ATTACH ANOTHER SHEET.**

**TOTAL AMOUNT ENCLOSED**

IMPORTANT

Please include your ZIP CODE when filling out the mailing label below.

**NOTE:** Allow 25% discount on individual items in excess of 100 each.
APPENDIX B

Research Review
RESEARCH REVIEW OF
NHTSA INSTRUCTOR TRAINING INSTITUTES:
Emergency Medical Technician--Ambulance
Breath Examiner Specialist
Accident Investigation Technician
Driver License Examiner
Driver License Examiner Supervisor
Police Traffic Services
Police Traffic Services Supervisor
Driver Improvement Analyst
Traffic Records Analyst

Revised
October 1974

Contract No. DOT-HS-4-00847

Prepared for:
U.S. Department of Transportation
National Highway Traffic Safety Administration
Washington, D.C. 20590

Prepared by:
Dunlap and Associates, Inc.
Darien, Connecticut 06820

B-2

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FOREWORD

This research review of NHTSA-sponsored instructor training institutes is submitted in accordance with the requirements of the subject contract. It covers the nine occupational specialties for which NHTSA had supported instructor training institutes prior to the conduct of the Crash Injury Management Institute series.
# CONTENTS

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<th>Section</th>
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</tr>
</thead>
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</tr>
<tr>
<td>SUMMARY AND CONCLUSIONS</td>
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<td>B-8</td>
</tr>
<tr>
<td>IDENTIFICATION OF ENROLLEES</td>
<td>B-11</td>
</tr>
<tr>
<td>IDENTIFICATION OF INSTITUTE SITES AND DATES</td>
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<td>B-27</td>
</tr>
<tr>
<td>PROVISION OF ON-SITE FOLLOW-UP SERVICES</td>
<td>B-29</td>
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</table>
SUMMARY AND CONCLUSIONS

NHTSA has supported the conduct of 5-day, 30-hour instructor training institutes for nine occupational specialties: emergency medical technician, driver license examiner, breath examiner specialist, accident investigation technician, police traffic services, police traffic services supervisor, traffic records analyst, driver improvement analyst and driver license examiner supervisor. Five regional institutes were scheduled for each program with the twofold purpose of exposing 75 potential instructors to the curriculum package for each occupational specialty and teaching them how to teach. (Note: No curriculum package was available for the accident investigation technician institute.) Results and conclusions are summarized below.

Enrollment

Only one institute series achieved its intended quota of 75 trained instructors; in fact, it exceeded its quota by 2 enrollees. The institute with the smallest enrollment achieved only 59% of its quota.

Over three-quarters of the states have participated in six or more of the nine programs and approximately two-thirds (67%) have participated in seven or more. All states but one have participated in at least four of the institute series.

Not all enrollees were appropriate candidates for instructor training. When enrollees did not have direct teaching responsibilities, they typically had administrative responsibilities. However, some had no responsibilities relative to the program being introduced.

There appears to be a strong interest on the part of the states in the institute program; the enrollment problem appears to lie with insufficient information filtering down to the proper levels, insufficient screening of candidates on the part of the contractor and insufficient direct contact between the contractor and the designated state agency (agencies) who will supply enrollees.

Enrollees at some institutes did not have a clear understanding of the purpose of the institutes. When instructions sent to enrollees were detailed and included a tentative institute schedule, this problem seemed to be alleviated.
Locations of Institutes

The five institutes for each occupational specialty have been scheduled for the following regions: northeast, southeast, central, mountain and Pacific states.

Three regional institutes of the planned 45 (five institutes and nine occupations) had to be cancelled due to insufficient enrollment—two in the Pacific states region and one in the mountain states region.

Institutes held near relatively major transportation centers resulted in more efficient and less costly enrollee travel.

Colleges have served as hosts for all but two of the 42 institutes conducted; their approach has been administrative and advisory in contrast to "participative" in the highway safety program.

Classes have been held successfully both on campus and in enrollee lodgings. Some problems have been noted when enrollees are required to travel between their lodgings and a campus classroom.

Lesson Outlines

Detailed lesson outlines have typically been prepared to provide for consistency of coverage at various institutes.

Institute coverage typically included sessions on the development, design and use of the curriculum package; sessions on how to teach; and practice teaching sessions in which enrollees taught from a section of the curriculum package and were critiqued on their teaching skills.

Successful institutes typically provided for as much variety as possible in each institute day and as many opportunities as possible for each enrollee to participate in an instructional capacity.

Teacher Trainers

Most institutes made use of two instructors—a teacher-trainer expert and a curriculum expert.
Detailed lesson outlines and frequent staff briefings provided for consistency of coverage among institutes of each series.

**Institute Conduct**

Institutes proceeded on schedule despite occasional last-minute contingencies.

Enrollees were generally exceptionally laudatory about the quality and nature of the instruction provided.

**Follow-up Services**

Institute follow-up requests have been minimal. Services have included additional instructor training, consultation on adapting the particular curriculum to the enrollee's training program, consultation on starting a training program, and consultation on conducting specific course sessions. In addition, follow-up contacts have been used to obtain additional information on the value of the institute series as well as subsequent use being made of the NHTSA curriculum package and the teaching techniques learned at the institute.
INTRODUCTION

As part of its continuing efforts to improve and upgrade the effectiveness of the national highway safety program, the U.S. Department of Transportation, National Highway Traffic Safety Administration (NHTSA) has recently supported the development of training programs for several highway safety occupational specialties. In order to provide a standardized means for training, these training programs have typically resulted in a curriculum package consisting of the following documents: Instructor's Lesson Plans, Course Guide and Student Study Guide.

In order to assist states in making each program operational, NHTSA considered it important to train individuals to serve as instructors for each course. NHTSA therefore supported the conduct of five regional instructor training institutes for each curriculum package. The purpose of the five-day, 30-hour institutes was twofold: 1) to expose potential instructors to the curriculum package, and 2) to teach them how to teach. It was NHTSA's intention to enroll only individuals who were knowledgeable in the subject matter of the occupational specialty. The emphasis of each institute was therefore on the development of teaching skills in contrast to the development of the specific skills covered in the curriculum package.

By sponsoring the conduct of five regional instructor training institutes for each curriculum package and by enrolling 15 potential instructors at each institute, NHTSA planned to develop an initial cadre of 75 trained, key state and local instructors to teach each of the highway safety program occupational specialties. It was also NHTSA's intention that state and local training facilities utilize the highest degree of autonomy in implementing each training program.

Since the fall of 1971 and prior to the award of the current contract, NHTSA had sponsored the conduct of regional instructor training institutes for nine occupational specialties. These specialties and the dates of instructor training for each are as follows:

- Emergency medical technician (EMT) -- Fall, 1971
- Driver license examiner (DLE) -- Fall, 1971
- Breath examiner specialist (BES) -- Spring, 1972
- Accident investigation technician (AIT) -- Spring, 1972
- Police traffic services (PTS) -- Fall, 1972
- Police traffic services supervisor (PTSS) -- Fall, 1973
- Traffic records analyst (TRA) -- Fall, 1973
- Driver improvement analyst (DIA) -- Fall, 1973
- Driver license examiner supervisor (DLES) -- Fall, 1973
It should be noted at the outset that, for one of the occupational specialties (accident investigation technician), a curriculum package was not available at the time of the instructor training institute. Only a task and function analysis had been performed for the AIT prior to institute conduct. The procedures and emphasis for the AIT instructor institutes are therefore understandably different from those of the other institutes. As one would expect, one of the primary differences was an emphasis in the AIT institute on the lesson plan development aspect of instructor training; this aspect was not emphasized in the other institutes since lesson plans were available.

For the first six occupational specialties listed above (EMT, DLE, BES, AIT, PTS and PTSS), separate contracts were completed and final reports were prepared and submitted to NHTSA. Instructor training for the last three occupational specialties (TRA, DIA, and DLES) were combined in one contract and described in one report. This "review of the research" is based on all seven reports, which are as follows:

- **Emergency medical technician instructor training institute.**

- **Training state and local driver license examiner instructors.**

- **Breath examiner specialist instructor training institute.**

- **Accident investigation technician instructor training institute.**
  Final Report. Contract DOT-HS-115-1-169, October 1972 (prepared by The Ohio State University Center for Vocational and Technical Education)


- **Police traffic services supervisor instructor training institute.** Final Report. Contract DOT-HS-099-3-760, April 1974 (prepared by Dunlap and Associates, Inc.)

- **Training state and community instructors in use of NHTSA curriculum packages: driver improvement analysis, driver license examiner supervisor, traffic records analysis.** Final Technical Report. Contract DOT-HS-100-3-738, June 1974 (prepared by Technical Education Research Centers in collaboration with Dunlap and Associates, Inc.)
The scope of each instructor training institute contract generally included the following elements (not necessarily sequential and frequently overlapping):

- Identification and selection of instructor candidates (enrollees) to attend each institute

- Identification of five institute sites and dates including completion of all local arrangements (e.g., host college, classroom facility, enrollee lodging accommodations, instructional equipment and supplies)

- Development/adaptation of lesson outlines for a five-day, 30-hour instructor training institute

- Selection and orientation of teacher trainers

- Conduct and evaluation of each of the five institutes

- Provision of on-site follow-up services to enrollees as required

Information available on each of these contract elements is discussed separately below. In order to make the report more meaningful to the reader, procedures and results for each element are discussed together, that is, a discussion of enrollment procedures also includes a description of enrollees who actually attended the institutes.
IDENTIFICATION OF ENROLLEES

A. Procedures

Identification and selection of instructor candidates to attend each institute are discussed below. The discussion for two or more institutes is combined where procedures are identical or similar. The procedures for the AIT institute are discussed first since they appear to be considerably different from those used for the other institutes.

1. AIT Procedures

From the AIT final report, it appears that solicitation of enrollees was not through "normal channels" (that is, through the regional offices to the Governor's Highway Safety Representatives). Through agreement with the Contract Technical Manager, it appears that contact was made instead with representatives of state and local agencies considered appropriate to the particular task at hand--curriculum development. Since enrollees were required to do preparatory work prior to institute attendance, they received several materials and extensive instructions by mail directly from the contractor. Since, as stated previously, the purpose of this series of institutes was so different from that of the others because of the lack of a curriculum package, the success of the process or appropriateness of enrollees for future instructional training institutes to be conducted by NHTSA cannot be fully assessed and will not be discussed further here.

2. EMT, DLE, BES, PTS and PTSS Procedures

For these instructor-training institutes, enrollment processes were generally similar with changes and improvements being made for subsequent institutes as appropriate. For all of them, solicitation was made from NHTSA to the 10 regional office administrators with the request that they obtain names of qualified candidates from Governor's Representatives. For the first two institutes (EMT and DLE), names were solicited prior to the selection of institute sites and dates and were intended to provide a basis for selecting appropriate sites that would be most convenient for those enrollees wishing to attend. However, the result was that several weeks elapsed between receipt of an enrollee name and assignment of that enrollee to a specific institute; this time lapse resulted in a breakdown in the enrollment process (some enrollees initially expressing interest were no longer available, some were provided insufficient lead time for the specific institute, etc.). Therefore, for the other three institutes (BES, PTS and PTSS), NHTSA simply asked regions to determine whether states were interested in attending; the determination of sites was to be based on that expression of interest, and specific sites and dates were assigned to states prior to
solicitation of specific enrollee names. In all cases, at least one place was reserved for each of the 50 states plus the District of Columbia and Puerto Rico ("prime enrollment" candidates); the remaining 23 vacancies (75 minus 52) were to be filled on a first-come, first-served basis ("open enrollment" candidates). In all cases, confirmation of enrollment and an indication of institute purpose, procedures, arrangement for lodgings, etc., were handled directly between the contractor and the enrollee. In the case of the EMT, BES, PTS and PTSS institutes, the contractor provided detailed and extensive instructions to each enrollee. For the BES, PTS and PTSS enrollees, the materials included a tentative institute schedule.

3. DIA, TRA and DLES Procedures

Enrollment procedures for these institutes were essentially similar to those reported above with the exception that the initial solicitation of names from the regions was initiated by the contractor after a notice had been issued by NHTSA to the regions. The contractor provided detailed instructions to each region, with copies to be submitted by the regions to the states. When enrollee names were supplied, the contractor wrote a letter to each and included a brochure which described the curriculum package, arrangements for meeting the first morning of the institute, and general institute purpose and procedures.

B. Results

The actual number of enrollees completing each institute and the number of states participating in each are shown in Table 1. The table does not

<table>
<thead>
<tr>
<th>Institute</th>
<th>No. of enrollees completing the institute*</th>
<th>No. of states represented**</th>
</tr>
</thead>
<tbody>
<tr>
<td>EMT</td>
<td>64</td>
<td>39</td>
</tr>
<tr>
<td>BES</td>
<td>77</td>
<td>44</td>
</tr>
<tr>
<td>DLE</td>
<td>72</td>
<td>44</td>
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<td>AIT</td>
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<td>PTS</td>
<td>66</td>
<td>41</td>
</tr>
<tr>
<td>TRA</td>
<td>55</td>
<td>34</td>
</tr>
<tr>
<td>DIA</td>
<td>44</td>
<td>33</td>
</tr>
<tr>
<td>DLES</td>
<td>57</td>
<td>41</td>
</tr>
<tr>
<td>PTSS</td>
<td>65</td>
<td>37</td>
</tr>
<tr>
<td>TOTAL</td>
<td>564</td>
<td>65</td>
</tr>
</tbody>
</table>

* Included are 15 NHTSA representatives who completed certain institutes as follows: PTS--1; TRA--3; DIA--3; DLES--3; PTSS--5.
** Excluded are the states of the 15 NHTSA representatives and of 2 PTSS enrollees of American Indian organizations--these 17 enrollees are considered representative of their respective organizations rather than of the states in which they work.
include enrollees who attended part of an institute but were unable to complete the institute (for example, due to illness). It also does not include "no shows" which represented a minor but consistent problem at the institutes. However, it should be noted that, when confirmed enrollees fail to show, it may be a last-minute problem on the part of the enrollee and not necessarily a lack of interest in participating in the institutes on the part of the state which the enrollee represents.

Table 1 shows that only one institute (BES) achieved its intended quota of 75 enrollees; in fact, it exceeded the quota by 2 enrollees. The institute with the smallest number of participants was the DIA institute which achieved only 59% of its planned quota; perhaps the newness of this particular occupational specialty might have accounted in part for the low enrollment.

The total enrollees sent by each state and the total number of institutes each state has participated in are shown graphically in Figures 1 and 2. In addition to the facts that "no-shows" and "incompletes" are excluded from the data, one additional point should be considered in interpreting the graphic material presented--the number of enrollees completing an institute should not necessarily be considered indicative of the interest of a given state in participating in a given institute or in institutes in general. In some instances, when spaces were available, phone calls were made to Governor's Highway Safety Representatives in states near the institute location and the first state responding was given all available spaces. In one instance, an institute would have been cancelled (or, more appropriately, combined with another institute) because of the low enrollment until one state came up with half of the total enrollees eventually attending the institute. In addition, it might be of interest to know 17 participants attended two different institutes and one attended three. Therefore, the interest of some states might be considered "inflated" in the sense that they sent the same enrollee to more than one institute.

In terms of state participation, it might be noted that over three-quarters (77%) of the states have participated in six or more of the nine institutes, and approximately two-thirds (67%) have participated in seven or more. All but one state has participated in at least four institutes.

The enrollees attending the various institutes have been variable in their job responsibilities and teaching responsibilities. In early institutes conducted and in three of the last four institutes conducted, there appeared to be some confusion among enrollees regarding institute purpose and coverage. This could be due to a lack of information filtering down to the given enrollees during the selection process. However, it was observed that, when instructions sent to enrollees included a tentative schedule of the week's events that outlined all institute coverage, this problem seemed to be alleviated.

In many instances, enrollees who attend the institutes do not have direct teaching responsibilities in their respective state or local areas. When they
Figure 1. Scattergram of number of enrollees from each State completing one or more institutes. Excluded are 15 NHTSA enrollees and 2 representatives of special organizations (see text).
Figure 2. Scattergram of number of institutes (maximum = 9) for which each State has had at least one enrollee receive an NHTSA completion certificate. Excluded are home locations of 15 NHTSA representatives and two enrollees representing special organizations (see text).
do not have teaching responsibilities, their primary responsibility is typically administrative. Apparently when a new curriculum package is released and available for training purposes, those in administrative positions like to have a "first look."

In summary, it appears that there is a strong interest in the instructor training programs on the part of the states in view of their support of the instructor training institutes. In some instances, it appears that the enrollment process does not always result in the proper individual(s) being nominated to attend the institute. This problem might be eliminated or at least alleviated if the contractor were to specify prerequisites for attendance and were to collect information from the candidate during the enrollment process that would provide him with information on which to judge the qualifications of the prospective enrollee. In addition, if the contractor were permitted to deal directly with agency personnel once a suitable agency (or agencies) had been identified through regional contacts with the Governor's representatives, it might be easier for the contractor to assist agencies in identifying instructor candidates with appropriate qualifications.
IDENTIFICATION OF INSTITUTE SITES AND DATES

With regard to selecting institute dates, institutes were typically scheduled to provide, if possible, one week between at least the first and second institutes to permit time for any desired changes in content and schedule. In addition, attempts were made to avoid holding institutes during weeks which included holidays. The remainder of this section discusses selection of institute sites, host colleges, classroom facilities and enrollee accommodations.

A. Procedures

Criteria utilized by the three contractors in identifying suitable sites and dates for the institutes were approximately the same. Criteria for site selection generally included the following:

- Institutes should be held in all areas of the country to accommodate all enrollees who might wish to attend.
- Within these areas, institutes should preferably be held near major transportation centers to minimize enrollee travel time and expense.
- It was considered desirable to have a college available to serve as host for the institute.
- Suitable classroom facilities should be available.
- Suitable lodgings should be available (suitable both in terms of enrollee comfort and expense).

For the five institutes for any one curriculum package, each contractor selected one site from the northeast, southeast, central, mountain and Pacific states. For three occupational specialties, there were only four institutes (instead of the planned five) because of insufficient enrollment. Institutes planned for DLE and TRA in the Pacific states were cancelled; the institute planned for DIA in the mountain states was cancelled. The metropolitan areas in which institutes were held were as follows:

Northeast (9 institutes)
- Hartford, Connecticut, area—six institutes (EMT, BES, AIT, PTS, PTSS and DIA)
- Springfield, Massachusetts (which is serviced by the same airport that services Hartford)—one institute (DLE)
- Newark, New Jersey—two institutes (TRA and DLES)
Southeast (9 institutes)
- Atlanta, Georgia, area--all nine institutes

Central states (9 institutes)
- Chicago, Illinois, area--four institutes (AIT, TRA, DIA and DLES).
- Lansing, Michigan--four institutes (EMT, BES, PTS and PTSS)
- Champaign, Illinois--one institute (DLE)

Mountain states (8 institutes)
- Denver, Colorado, area--seven institutes (DLE, BES, AIT, PTS, PTSS, TRA and DLES)
- Kansas City, Missouri--one institute (EMT)

Pacific states (7 institutes)
- San Francisco, California, area--five institutes (EMT, BES, AIT, PTS and PTSS)
- Portland, Oregon, area--two institutes (DIA and DLES)

Most institutes were held in a suburban community of the metropolitan area mentioned, the reason being twofold: the availability of a host college and the availability of satisfactory and inexpensive lodging.

Forty of the 42 institutes conducted utilized local colleges as hosts. The planned host college for the remaining two institutes cancelled its services at the last minute. The colleges used are listed below in decreasing order of number of institutes hosted:

- DeKalb Community College, Georgia (8 institutes)
- Denver Community College, Colorado (7 institutes)
- Central Connecticut State College, Connecticut (5 institutes)
- Lansing Community College, Michigan (4 institutes)
- San Mateo Community College, California (4 institutes)
- Southwest College, Illinois (3 institutes)
- Essex County College, New Jersey (2 institutes)
- Atlanta Area Technical School, Georgia (1 institute)
- Manchester Community College, Connecticut (1 institute)
- City College of San Francisco, California (1 institute)
Host colleges served largely in an administrative and advisory capacity, providing classrooms where available, audiovisual equipment, secretarial support when required, and advice on local lodging for enrollees. Practically all host colleges offered credit for the 30-hour course.

Although the data are not precise from the final reports, it appears that, of the 42 institutes thus far conducted, 25 have been held on a college campus. The remaining institutes have been conducted in a meeting room of the enrollee lodging facility.

Final reports do not describe enrollee lodgings in detail and typically do not describe procedures for selecting lodgings. In some instances, the contractor apparently visited the site prior to selecting lodgings. In most instances, arrangements were made by telephone through the host college or directly with the lodging.

B. Results

In terms of areas of the country, it is interesting to note that contractors frequently selected the same area and the same host college. This was due in part to coordination and communication among the contractors. Comments and observations (not necessarily previously provided in formal reports) follow:

All host colleges (except the one that cancelled its services the last minute) were extremely helpful in identifying classroom facilities and lodgings and providing general administrative services and equipment.

Host colleges in general tended to view their role as "supportive of" the individual contractor in contrast to "participative in" the highway safety program.

Transportation for enrollees was more difficult and costly when institutes were not held near major transportation centers (for example, Champaign, Illinois, was not easily accessible; Lansing, Michigan, was not as accessible as Chicago--in fact, some attendees had to fly into Chicago and "backtrack" to Lansing).

D&A changed only one site location for the 25 institutes it has conducted--it moved the mountain states institute from
Kansas City, Missouri, to Denver, Colorado. Although this move was due partly to a shift in the enrollment pattern, it was due largely to the contractor's inability to locate economical accommodations in Kansas City.

There appeared to be no advantages to conducting an institute on campus in contrast to holding it at the enrollee accommodations. In fact, the latter appeared preferable in some instances (for example, when the lodging was not within easy transportation distance from the host college). Enrollees did not appear to need to identify with the host college to maintain a professional atmosphere at the institutes. In fact, some resented being required to transport themselves or to be transported to a college facility for classes. Mature adults are apparently used to attending professional conferences at hotel/motel accommodations.

Most contractor arrangements resulted in satisfactory enrollee accommodations.

The following specifications appeared to result in satisfactory enrollee lodgings:

- Providing single rooms for each enrollee if desired
- Assuring availability of eating places other than the lodging—preferably with a variety of price levels
- Assuring that individuals would feel personally comfortable and safe moving about the general area at reasonable times of the day and night
- Providing quality accommodations at reasonable cost
A. Procedures

All three contractors reported utilizing the OE Guide on Preparation of Occupational Instructors as a base for the 30-hour instructional training program. The concepts presented in this Guide were utilized directly or adapted as appropriate to the particular highway safety occupational specialty. For eight of the occupational specialties, institute coverage was generally similar and included descriptions of development and use of the curriculum package, sessions on how to teach, and practice-teaching sessions in which individual enrollees presented a section of the curriculum package and were critiqued on their performance. For the one occupational specialty (accident investigation technician) for which there was no curriculum package, more classroom time was devoted to the curriculum development aspect of the teaching process. However, institutes for this occupational specialty also included sessions on how to teach and individual enrollee practice teaching sessions.

In addition to introductory and closing sessions, institute coverage for occupational specialties for which there were curriculum packages typically included the following:

- Development of the curriculum package
- Design and use of each document in the curriculum package
- The teaching-learning process and the domains of learning
- The four-step process of teaching
- Developing skills
- Teaching knowledge
- Designing and using instructional aids
- Developing and administering evaluative devices
- Utilizing teaching techniques specific to the curriculum package (for example, field exercises, laboratory sessions, role playing, etc.)
- Enrollee practice teaching sessions
Institutes were generally scheduled to run from Monday to Friday with a day length of approximately 7 hours. Typically, institutes ended at noon or shortly thereafter on Fridays to ease enrollee travel to their homes. Individual sessions lasted from 3/4 hour to 1-1/2 hours. Most institutes required some "after-hours" work on the part of the enrollee in planning his practice teaching session. For the accident investigation technician curriculum package, enrollees were required to accomplish some lesson plan preparation prior to attendance at the institute.

As contracts were awarded for instructor training institutes, considerable use was made of prior experience with such institutes, with any one contractor depending heavily on his own previous experiences. In this regard, the contractor responsible for the largest number of institutes developed the following principles to govern design of the 30-hour program:

- Provide as much variety as possible in each day through variations in instructors, use of workshops for developing instructional aids and evaluative devices, and interspersing of technical material with workshops so that, after the first morning (devoted to an institute overview and discussion of curriculum development procedures and the resultant curriculum package), no morning or afternoon session was ever devoted exclusively to one type of lesson presentation.

- Provide as much information on teaching techniques as possible prior to the first practice teaching session. Essential material for practice teaching was presented without compromising the objective of providing for variety in teaching method while at the same time enabling students to start practice teaching sessions as early as possible (on the second day of the institute).

- Have enrollees perform in a "teaching" role as many times as possible. This was accomplished by the following means: (1) presenting practice teaching sessions (each enrollee), (2) leading the critique of another enrollee's practice teaching session (selected enrollees), (3) presenting and discussing test items developed in the evaluation workshop (each enrollee), and (4) performing a verbal evaluation to determine if other enrollees had assimilated institute principles. Thus, each enrollee had three opportunities (and some had four) to perform in a "teaching" capacity.

The schedule used for a recent instructor training institute (DIA) is included in Figure 3 as an example.
**INSTITUTE SCHEDULE**

**DRIVER IMPROVEMENT ANALYST INSTRUCTOR TRAINING INSTITUTE**

<table>
<thead>
<tr>
<th>A.M.</th>
<th>8:30</th>
</tr>
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<tbody>
<tr>
<td>1. Institute Overview</td>
<td>6. Instructional Aids</td>
</tr>
<tr>
<td>2. DIA Course and Course Documents</td>
<td>7. Workshop: Developing Instructional Aids</td>
</tr>
<tr>
<td>12:00</td>
<td>10. Conducting Practical Application Sessions</td>
</tr>
<tr>
<td>11. Practice Teaching Workshop (3 enrollees)</td>
<td>14. Practice Teaching Workshop (3 enrollees)</td>
</tr>
<tr>
<td>15. Evaluating Student Performance</td>
<td>18. Assimilation of Institute Principles</td>
</tr>
<tr>
<td>19. Evaluation, Forms Completion, Certificate Award</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>P.M.</th>
<th>1:00</th>
</tr>
</thead>
<tbody>
<tr>
<td>4. Teaching Information Lessons</td>
<td>9. Practice Teaching Workshop (3 enrollees)</td>
</tr>
<tr>
<td>5. Workshop Planning</td>
<td>12. Role Playing</td>
</tr>
<tr>
<td></td>
<td>13. Practice Teaching Workshop (3 enrollees)</td>
</tr>
<tr>
<td></td>
<td>16. Practice Teaching Workshop (3 enrollees)</td>
</tr>
<tr>
<td></td>
<td>17. Workshop: Developing Written Tests</td>
</tr>
</tbody>
</table>

Figure 3. Sample schedule for a recently completed instructor training institute.
B. Results

From enrollee comments and contractor observations, the institute coverage and schedules resulted in achievement of planned objectives. Enrollee comments on specific lessons were frequently similar at any one institute site and appeared to reflect the opinions of one or more vocal individuals at that site.

In terms of scheduling, enrollees found that institute sessions were occasionally too long. In order to provide 30-hours of training in one week necessitated a long training day. Scheduling a rest break of 10 minutes for each training hour in addition to providing for variation in the daily schedule helped to alleviate this problem. In addition, as stated previously, having each enrollee "in front of the class" at least three times provided for variation in instructors as well as additional opportunities for each enrollee to practice his teaching skills.
A. Procedures

The contractor who conducted instructor training institutes for five curriculum packages (EMT, BES, PTS, PTSS and DIA) was also the author of each of the curriculum packages. For teacher-trainers, this contractor utilized individuals who are currently full-time college educators. With the exception of the EMT institute services, the contractor worked on a team basis with these educators, both in the development and in the presentation of the instructor training institute, the contractor assuming overall responsibility for the development and conduct of each institute. Primary responsibility for coverage of teacher-training aspects of the institutes was allotted to the educators; primary responsibility for all curriculum-related topics and application of all the teaching concepts to the curriculum was assumed by the contractor. A different teacher trainer was utilized for each of the five institutes for any one curriculum package. In all, a pool of 10 educators has been utilized by the contractor for the 25 institutes thus far conducted.

In terms of orientation, the following procedures were used. Upon contract award, each teacher trainer was provided with a set of the curriculum package. He was requested to become generally familiar with the package so that he could relate teacher-training aspects of the institute to the package as appropriate; he was not expected or required to become an expert in the subject matter of the curriculum package. Detailed lesson outlines were developed by the teacher trainer or contractor (as indicated above) and edited and refined by the contractor. Frequent meetings between the contractor and teacher trainers provided for detailed discussions of the content and procedures to be followed at each institute. In addition, for any one series of institutes, the first of the five institutes was hosted by the college providing the teacher trainers. All teacher trainers had frequent contact with the contractor during the first week's session, attended as many individual sessions as their teaching schedule would permit, and attended a debriefing and general discussion at the end of the first week's institute. Although each instructor was encouraged to utilize his own style in his presentations, the detailed lesson outlines and specific instructions provided by the contractor assured consistency of coverage at all institutes.

For two of the institutes (DLE and DLES), most of the instructional staff was provided by the contractor who also prepared the curriculum.

1 For the EMT institute series, the conduct of the institute was accomplished solely by the teacher-trainer educator. The lack of a curriculum expert at these institutes was considered a serious detriment by enrollees.
package. Detailed plans or procedures for orientation of teacher trainers were therefore not necessary.

One institute (TRA) was conducted by teacher-trainers and curriculum experts who had no part in development of the curriculum package. Indoctrination procedures were reportedly similar to those used by the contractor who conducted the majority of the instructor training programs and described in the second paragraph of this section of the report.

For the AIT institute series, instructors were selected from a "bank" of educators who had previously served as consultants to the contractor. Following a detailed memorandum to each individual, a two-day workshop was held at the contractor's facility to assure that all plans were finalized, each consultant fully understood his role in relation to the conduct of the workshop, and decisions were made on all topics to be presented relative to the teaching-learning process.

B. Results

All contractors appear to have utilized effective measures in selecting and indoctrinating teacher-trainers. Two teacher-trainers, one serving as the educator and one as the curriculum expert, have been utilized at practically all of the institutes conducted. Utilization of two instructors has the advantages of providing for variety in instruction as well as assuring expertise in a select area.

Although the use of two instructors is considered preferable, it is recognized that one instructor could serve (and has served) in both roles--as a curriculum expert and as a teacher-trainer. If one teacher is to be used, he should be thoroughly knowledgeable in the subject matter area, in the area of training program development, and in the area of teaching.
CONDUCT AND EVALUATION OF INSTITUTES

The conduct of each institute is, of course, the result of the entire institute planning process. Since results and procedures for the various institute tasks have been described together in the previous sections of this report, the majority of information on conduct and evaluation of institutes has been covered. This section will therefore cover certain miscellaneous details that have not been previously addressed.

With the exception of the three institutes that were cancelled due to insufficient enrollment, all institutes proceeded on schedule and ran smoothly despite the existence of last-minute problems. Such problems included late arrival of the curriculum package at one site and cancellation of the host college facilities at another. The contractors, assigned teachers and institute schedule permitted adaptation to any contingencies that arose.

In addition to the teachers at each institute, a representative of the host college typically greeted the enrollees on the first day of the institute and also spoke a few words at the final ceremonies. At several of the institutes, representatives of the NHTSA regional offices addressed enrollees briefly on the last day of the institute and presented the completion certificates.

At most institutes, reimbursement was made after the institute was completed. On the last day of the institute, each enrollee filled out a reimbursement form. Reimbursement was permitted for actual costs of air economy travel, a rate of 10¢ per mile plus tolls for ground travel, the actual cost of the hotel room, and an allowance of $10 per day for food. Special reimbursement problems were considered on an individual basis. A check was mailed to the enrollee within one to two weeks after the institute he attended was completed. These procedures appeared to be satisfactory in most instances.

At several institutes, enrollees were also asked to fill out a form that described their intended use of the curriculum package. It was hoped initially that this form might serve as a means of determining training programs that might be starting in the near future and therefore as a preliminary identification of enrollees who might require follow-up services. Since specific training plans were not frequently known by enrollees at the time of attending the institute, however, the form proved useful primarily as a means of determining enrollee interest in the curriculum package and possible plans for its future use.

An evaluation form was also typically filled out on the last day of the institute. This form varied with the contractor. In some instances enrollees were asked only to evaluate the technical aspects of the institutes; in others,
they were asked to evaluate the planning process as well. In some instances, they were asked to make their ratings on a scale; in other instances, simple "yes-no" responses were required. In general, enrollees were most laudatory about the institute coverage and teachers. Comments and suggestions for improvement have been noted in other sections of this report.
Each contract thus far awarded by NHTSA has provided for on-site follow-up services. The original intent of these services was to assure that enrollees conducting their "solo" course would have the benefit of additional instructional assistance in order that their first course would proceed as smoothly as possible. The plans for follow-up services as originally conceived were never implemented fully for any of the curriculum packages.

For the first two institutes conducted (EMT and DLE), interest in follow-up services was minimal. In one case (EMT), the reason may have been the fact that the curriculum package had already been in existence for some time at the start of the institute. In any event, the contractors for both series of institutes made extensive telephone contacts with enrollees to determine the nature and extent of follow-up services required. These calls resulted in a small number of on-site visits in which the contractor provided consulting services in specific areas requested by the enrollees. For an additional two institutes (BES and PTS), follow-up services consisted largely of providing instructor training to additional members of the enrollee's staff in contrast to direct assistance to the enrollee. For the AIT program, follow-up services consisted of a meeting between the contractor, representatives of NHTSA and certain enrollees to provide for final editing and review of the curriculum package that resulted from this particular series of institutes.

Follow-up services for the PTSS institute consisted of on-site consultation to five enrollees for time periods of 2 to 3 days each. They included monitoring and evaluating on-going courses from both a technical and instructional standpoint, providing advice on how the PTSS program might be adapted to the constraints of the local training department, and providing consultation on the presentation of instructor training institutes at the local level.

For the last three institutes (DIA, DLES and TRA), follow-up services were handled concurrently since, as indicated previously, the three institutes were conducted under one contract. Services consisted of a detailed questionnaire mailed to each enrollee who had completed one of the three institutes and on-site interviews with selected enrollees. Through these efforts, additional information was obtained on both the effectiveness of the training institute and how the NHTSA curriculum materials and training were being utilized by participants in their home states and localities.
As a direct aid to its enrollees, one contractor of several institutes has frequently mailed its enrollees a set of the detailed outlines used at the instructor training institutes. This follow-up service provided each enrollee with a detailed master set of notes for the institute that could serve to assist him in conducting instructor training at the local level if he so desired.

From the results thus far, it is difficult to assess the value of follow-up services. Some requests have been received from attendees at all institutes; however, the number of requests has been small for each institute. The need to provide funds in future contracts for follow-up services as defined appears questionable.
APPENDIX C

Institute Outlines
Crash Injury Management
Instructor Training Institute

LESSON OUTLINES

March 1974
Contract DOT-HS-4-00847
| Day    | Time  | Monday                                                                                           | Tuesday                                                                                           | Wednesday                                                                                           | Thursday                                                                                           | Friday                                                                                           |
|--------|-------|-------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------|
|        | 8:30  | **1. INSTITUTE OVERVIEW:** objectives, scope, procedures                                         | **6. INSTRUCTIONAL AIDS:** advantages, disadvantages, hints for using aids                         | **10. PRACTICE TEACHING WORKSHOP:** 3 enrollees teach sections from CIM lessons                      | **14. PRACTICE TEACHING WORKSHOP:** 3 enrollees teach sections from CIM lessons                      | **19. ASSIMILATION OF INSTITUTE:** each enrollee conducts a verbal evaluation to determine if the class has assimilated institute principles |
| A. M.  | 11:45 | **2. THE CIM COURSE:** course development, Instructor's Lesson Plan and contents of the 20 lessons, design and use of Student Study Guide | **7. LESSON PLANNING AND DEVELOPING INSTRUCTIONAL AIDS:** enrollees plan their practice teaching lessons and develop simple instructional aids appropriate to the lessons | **11. DEVELOPING AND EVALUATING CIM SKILLS:** 4-step process applied to CIM skill development, techniques of skill evaluation, design and conduct of CIM lessons 15, 16, 17, 18 and 20 | **15. COURSE PLANNING:** review of the CIM course guide                                                |                                                                                                    |
| C-3    | 1:00  | **3. TEACHING LEARNING PROCESS:** definitions, domains of learning, and phases in the teaching-learning process | **8. TEACHING INFORMATION LESSONS:** effective development of student knowledge                   | **12. PRACTICE TEACHING WORKSHOP:** 3 enrollees teach sections from CIM lessons                      | **16. PRACTICE TEACHING WORKSHOP:** 3 enrollees teach sections from CIM lessons                      |                                                                                                    |
| P. M.  | 4:30  | **4. WORKSHOP PLANNING:** assignment of CIM lessons to enrollees for practice teaching           | **9. PRACTICE TEACHING WORKSHOP:** 3 enrollees teach sections from CIM lessons                     | **13. EVALUATING KNOWLEDGE:** advantages, disadvantages, suggestions for test item construction for CIM lesson 19 | **17. WORKSHOP:** DEVELOPING WRITTEN TESTS: each enrollee develops and describes written test items (for use in CIM lesson 19) |                                                                                                    |
|        |       | **5. DEMONSTRATION OF 4-STEP LESSON:** demonstration of a CIM lesson and critique                |                                                                                                    |                                                                                                     | **18. ASSIMILATION PLANNING:** enrollee assignments for Unit 19                                      |                                                                                                    |
UNIT 1
INSTITUTE OVERVIEW

Objective: Provide the enrollee with an overview of the objectives, scope and procedures of the CIM Instructor Training Institute

WELCOMING REMARKS

1. Teacher introduction
   a. Job title and function
   b. Responsibilities relative to development of the CIM course

2. Enrollee welcome on behalf of:
   a. DOT/NHTSA
   b. D&A
   c. Host college

INSTITUTE PURPOSE AND EMPHASIS

1. **Purpose.** The institute program has a dual purpose:
   a. To explain the CIM curriculum package in detail to potential instructors
   b. To train potential instructors in teaching methodology pertinent to the curriculum package

2. **Emphasis.** The institute emphasis is on the methodology of teaching and not on techniques of emergency care— all enrollees are expected to be knowledgeable in emergency medical care.

3. **Number in series.** DOT/NHTSA is sponsoring the conduct of 5 regional CIM instructor training institutes this spring:
   a. This is the (1st, 2nd, etc.) of such institutes

C-4
b. Others have been (will be) given in __________, __________, and ________ (New Britain, Conn; Lansing, Mich; Atlanta, Ga; Denver, Colo; and San Mateo, Calif.)

BACKGROUND ON NHTSA

1. Responsibility. NHTSA is responsible for the development and implementation of standards that will improve the safety of the motorist on the nation’s highways and roads.

2. Manpower development. As part of this responsibility, NHTSA is concerned with the development of programs for training state and local safety manpower.

3. Phases of manpower development. Each program passes through several phases before becoming operational. These include:

   a. Job market and labor force surveys
   b. Development and publication of new instructional materials
   c. Instructor training—it is this phase with which the instructor training institutes are concerned

4. Training at local level. It is NHTSA’s intention to preserve the highest degree of local autonomy in the ultimate presentation of training programs within any state.

5. NHTSA Instructor Training institutes. NHTSA has thus far supported the conduct of instructor training institutes for nine highway safety occupational specialties for which it also supported development of curriculum materials, namely:

   a. Emergency Medical Technician and Driver License Examiner—held in the fall of 1971
   b. Breath Examiner Specialist and Accident Investigation Technician—held in the spring of 1972
   c. Police Traffic Services (Basic)—held in the fall of 1972
   d. Police Traffic Services (Supervisor), Driver License Examiner (Supervisor), Traffic Records Analyst and Driver Improvement Analyst—held in the fall of 1973

6. CIM instructor training institute. The CIM instructor training institute represents the 10th in the series of institutes thus far supported by NHTSA. These highway safety training programs and the instructor
training programs for each therefore represent a broad effort on the part of NHTSA in highway safety manpower development.

7. **Curricula in host college library.** A set of curriculum materials for all 10 highway safety occupational specialties will be deposited by NHTSA with the library of the host college. This set of materials is available at the institute for enrollee review.

**BACKGROUND ON D&A**

1. **What it is:** A research-consulting firm specializing in, among other areas, highway safety and curriculum development.

2. **Examples of work--brief description of each:**
   
   a. **Highway safety**
      
      1) Emergency medical care
         
         a) Economics of emergency ambulance service
         b) 81-hour EMT basic course
         c) 20-hour EMT refresher course
         d) 420-hour EMT advanced course
         e) 40-hour CIM course
      
      2) Alcohol
         
         a) BES basic training course
         b) Nassau ASAP
         c) New Hampshire ASAP
         d) Youth and alcohol
         e) Highway safety interlocks
      
      3) Drugs and driving
      
      4) Police traffic services--basic and supervisory training
      
      5) Driver improvement analyst training
      
      6) Pedestrian safety
   
   b. **Curriculum development**
      
      1) All courses mentioned previously--four emergency care courses plus BES, PTS, PTSS and DIA
      
      2) EMS coordinator training
      
      3) Military training programs
4) Industrial training

3. Comments regarding CIM course
   a. It was developed under contract to NHTSA
   b. D&A prepared all curriculum materials and submitted them to DOT for publication
   c. DOT arranged for publication through GPO
   d. Once published, documents are in the public domain

INSTITUTE DEVELOPMENT AND CONDUCT

1. This instructor training institute was developed jointly by D&A and CCSC.
2. It is the sixth occupational specialty for which D&A and CCSC have been responsible for instructor training.
3. D&A will lead all institute sessions concerned with design, development and use of the CIM curriculum package and teaching techniques specific to that package.
4. CCSC will lead all sessions devoted to educational methodology.

CCSC INSTRUCTOR INTRODUCTION

1. The CCSC instructor will be:
   a. Name and title
   b. Number of previous institutes in which he has participated
2. Description of college credit available through CCSC—including procedures and costs involved.

HOST COLLEGE INTRODUCTION

1. Identification of host college.
2. Introduction of host college representative as appropriate.
3. Description of college credit available for the institute through the host college— including procedures and costs involved.
GUEST INTRODUCTION

1. Identification of other guests at the institute as appropriate.

ENROLLEE IDENTIFICATION

1. Ask each enrollee in turn to give the following:
   a. Name
   b. State represented
   c. Department or agency represented
   d. Role in emergency medical care training

INSTITUTE SCHEDULE

1. Review the institute schedule, indicating for each unit of the course:
   a. The reason for its inclusion relative to CIM training
   b. What the teacher trainer will attempt to accomplish
   c. What the enrollee should accomplish

ADMINISTRATIVE PROCEDURES

1. Discuss procedures to be followed relative to:
   a. Rest breaks—timing and facilities involved
   b. Lunch—timing and facilities involved
   c. Reimbursement—thoroughly discuss the policy and the form to be completed on the last day of the institute
   d. Transportation—make sure each enrollee has transportation to and from the institute each day
   e. Breakfast and dinner—indicate facilities near the school or lodging where the enrollee may eat breakfast or dinner if he does not wish to eat at the lodging.

SUMMARY AND QUESTIONS

1. Summary of main points
2. Class questions or comments
UNIT 2
THE CIM COURSE

Objective: Familiarize enrollees with:

- Course development procedures
- Course documents

Provide enrollees with a detailed description of the Instructor's Lesson Plans

OBJECTIVES

1. Brief explanation of the objectives of the unit of instruction.

BACKGROUND

1. Purpose

a. The course was developed to provide training in emergency medical care for first responders to traffic accidents.

b. Such persons are expected to be law enforcement officers patrolling the nation's highways and roads in patrol vehicles.

2. Relationship to Other Emergency Care Training

a. NHTSA had previously supported the development of the 81-hour Basic Training Program for Emergency Medical Technician--Ambulance.

b. The 81-hour course included 71 hours of classroom time and 10 hours of in-hospital experience.

c. The 81-hour course is considered basic training for ambulance drivers and attendants and therefore includes all emergency care and operational aspects of the EMT's job.
d. Since the 81-hour course was designed specifically to satisfy the needs of ambulance personnel, the training provided was considered by NHTSA to be broader than that required for law enforcement personnel.

e. In terms of emergency medical care, the law enforcement officer performing a patrol function will deal primarily with crash-related injuries and illnesses.

f. In addition, the law enforcement officer's vehicle is not designed to provide a transportation function or to house sophisticated emergency medical care equipment.

3. Resultant NHTSA Directives

a. Scope of contract. With regard to the scope of the contract, NHTSA provided the following directive:

   "The course shall be modeled on Basic Training Program for Emergency Medical Technician: Ambulance with changes as necessary to (1) incorporate or expand training in treatment of usual crash-induced injuries and (2) eliminate training in other treatments."

b. Course design and development. NHTSA further specified the following changes and guidance in course design and development:

   "Instructor qualifications and instructional materials shall be changed, as necessary, to encourage the use of a single instructor who may be other than a physician." (The 81-hour course recommended that all medical aspects of the course be taught by a physician.)

   "A minimum of outside development and preparation is to be required assuming a qualified instructor." (This directive required that the resultant lesson plans be very detailed.)

   The training program was designed with the preceding directives serving as guidelines.

COURSE COVERAGE

1. Procedures for Determining Course Scope

a. An analysis of roles and responsibilities of the law enforcement officer at the accident scene resulted in a list of assumptions that served to define the scope of training.
b. Contents of the 81-hour course were then analyzed to select course coverage appropriate to the assumptions.

c. Assumptions regarding availability of equipment and supplies aboard the patrol vehicle served to further limit and define the course coverage.

2. Rescuer's Roles and Responsibilities

a. Basic assumptions—three basic assumptions served to limit training course contents:

   The law enforcement officer is not an ambulance emergency medical technician. If he is expected to perform in an ambulance role, he should take the complete 81-hour course which was designed to accommodate the needs of all ambulance personnel whether they are from private, volunteer or municipal groups.

   The law enforcement officer is not a member of a rescue crew that has sophisticated equipment for gaining access to and extricating trapped patients from vehicles. If he is a member of such a crew, he will need extensive training in the extrication area that is not provided by this course.

   The law enforcement officer is performing a highway patrol function in a patrol vehicle; that is, his primary concern lies with the highway accident victim in contrast to the home accident or ill victim.

b. Other assumptions:

   He is likely to be the first official at the accident scene and will need sufficient knowledge and skill to stabilize the patient's condition and care for him until local ambulance emergency medical care support arrives.

   If local emergency medical care support is delayed, he may be the only person at the scene for some time who is qualified to provide an emergency medical care support function.

   His major responsibilities relative to emergency medical care will include caring for life-threatening emergencies, crash-induced injuries, and illnesses/conditions or injuries that might cause or result from a crash (for example, a heart attack or emergency childbirth).
He will perform no transportation function except under unusual conditions when other transportation is impossible or impractical to obtain. In any event, he will not have litters for transportation nor will he be likely to have space for a prone or supine patient.

His patrol car will be equipped with a minimum amount of equipment consistent with his role of stabilizing the patient's condition and supporting him until local ambulance emergency medical care support arrives.

Since he is likely to be on the scene before rescue crews arrive, he should have some basic understanding of techniques of gaining access to patients using simple car tools.

Training in non-emergency care aspects of his work will be covered in other recruit training courses (that is, training in such areas as radio communications, driving an emergency vehicle, records and reports).

Training in human relations (that is, techniques of dealing with both normal and disturbed persons) will be covered in other aspects of his recruit training.

c. An analysis of the 81-hour course relative to satisfying the preceding assumptions resulted in the selection of the topical areas and equipment coverage discussed below.

3. Resultant Course Coverage: Topical Areas

a. Emergency medical care topics

The following emergency medical care subjects were selected for inclusion in the training course:

- Sign and symptom recognition
  - Patient examination
  - Diagnosis
  - Triage
- Life-threatening emergencies
  - Airway obstruction
  - Pulmonary arrest
  - Cardiac arrest
  - External bleeding
- Internal bleeding
- Shock

Crash-induced injuries
- Wounds and soft-tissue injuries to all body parts—head, face, eye, neck, chest, abdomen, extremities, genitalia
- Fractures, dislocations and sprains to all body parts—head, face, spine, ribs, pelvis, extremities
- Burns from fire, chemicals and electricity

Conditions that might cause or result from a crash
- Heart attack
- Stroke
- Diabetic coma or insulin shock
- Alcohol and drug abuse
- Epilepsy
- Emergency childbirth
- Bites and stings
- Exposure to heat and cold

b. Operational topics

Operational topics selected for inclusion in the course were as follows:

- Emergency medical care roles and responsibilities of the law enforcement officer at the accident scene
- Legal implications of providing emergency medical care
- Responsibilities of the law enforcement officer relative to other emergency care personnel

c. Additional topical coverage

In addition, the following topics were included in the course coverage:

- Patient access and handling—gaining access to patients using simple tools and techniques of moving patients should movement be necessary or desirable
Ingested poisons--although technically this topic is not considered likely to be crash-related, a very small amount of time is devoted to its coverage in view of the traditional heavy exposure of law enforcement officers to poisoning incidents.

4. Resultant Course Coverage: Equipment

   a. Emergency medical care: minimal equipment list

In terms of emergency medical care, if it is assumed that the rescuer will have at least the following equipment and supplies:

- Universal dressings/gauze pads
- Triangular bandages
- Self-adhering roller-type bandages
- Upper and lower extremity splints--specific types not specified since they are expected to vary jurisdictionally
- Short spine board or splint with associated neck and back supports and straps
- Eye protector (cup or cone)
- Blanket

   b. Emergency medical care: additional desirable equipment

In addition, in the event that it is available in the jurisdiction, a small amount of training time is devoted to an instructor demonstration and discussion of the use of the following equipment:

- Airways
- Bag-mask resuscitator
- Oxygen equipment

Note: Training time devoted to this last group of equipment is minimal and primarily of a familiarization nature in the event that the rescuer may support ambulance personnel who have such equipment. If such equipment is regularly available in the patrol cars of the jurisdiction, time should be added to the course for practice in its use.
Note: The specification of emergency medical care equipment is in no way intended to limit the amount of equipment carried in the vehicle. Rather, it is intended to represent a reasonable minimum for the purposes of stabilizing patient conditions and saving lives at the scene of an accident. As stated previously, a basic assumption of course design is that the rescuer is not an ambulance emergency medical technician. The equipment selected for training is considered consistent with the rescuer's function of stabilizing the patient's condition until the ambulance arrives.

c. Other car tools and materials

It is assumed that the following car tools, equipment and materials will routinely be available in the rescuer's vehicle:

- Jack
- Tire iron
- Pliers
- Rope
- Gloves
- Screwdriver
- Hammer
- Knife (for cutting seat belts)

Note: The preceding list includes only those car tools and miscellaneous equipment specifically mentioned in the training course. It is not intended in any way to reflect on the desirability of other equipment (such as fire extinguishers, flashlights, etc.) which would hopefully be equipment routinely carried in all patrol vehicles.

d. Discussion of the two equipment lists -- comparison with lists recommended by AAOS if available

COURSE EMPHASIS

1. At the accident scene, the rescuer will be concerned with the speedy implementation of practical (in contrast to theoretical) skills. It was therefore determined that the course should emphasize the practical aspects of the rescuer's emergency care work and that details of anatomy and physiology should be minimized.

2. It was also noted that the rescuer will need to perform his skills in a confined environment, that is, in a vehicle. It was therefore determined that the course should include skill practice in a field setting where
students can dress and bandage "wounds" and immobilize "fractures" in a confined environment similar to what they might experience at a traffic accident scene.

3. The primary course emphasis and the majority of training time is devoted to life-threatening emergencies and caring for injuries that are directly crash-related, that is, fractures and wounds.

4. Time devoted to conditions that may or may not be crash related depending on the situation (that is, certain medical, environmental and other emergencies) are minimized consistent with the rescuer's role.

5. However, sufficient training is provided for the rescuer to recognize all patient conditions and provide appropriate life-saving care until local ambulance emergency medical services arrive at the scene.

RESULTANT CIM COURSE

1. Twenty lessons were developed for the course. These include technical lessons, field training, review lessons and final examinations, and account for 36 hours of training time.

2. In addition, it is recommended that four 1-hour "Review and Discussion" lessons be interspersed in the training schedule, for a total training course time of 40 hours. It is suggested that one "Review and Discussion" lesson be interspersed for each 8 hours of training time.

CIM COURSE DOCUMENTS

1. Three basic working documents:
   a. Course Guide
   b. Student Study Guide
   c. Instructor's Lesson Plans

2. Course Guide:
   a. It was designed to be used by the training administrator (who may also be the course instructor) as the basic planning document for the course.
   b. It contains a detailed description of the training program and suggestions for planning and implementing the training course.
   c. Details included in the Course Guide will be covered in a later unit on Course Planning Considerations.
3. Student Study Guide—go through the document in detail

a. The contract specified development of a Student Study Guide for the course; such study guides typically serve as basic student reference texts.

b. Since several texts (refer to list of references) are available in the emergency medical care area for student texts, it appeared inappropriate to develop a Study Guide that would serve as a student reference source.

c. Rather, a workbook designed specifically to assist the student in reviewing and reinforcing information presented in class was developed.

d. Included in the Guide is a unit of study for each lesson of the course. The training objectives are given and, for most lessons, a set of review exercises is provided. No review exercises are included when the lesson provides general background information or when the lesson is a review or examination session.

4. Instructor's Lesson Plans—go through this document in detail

a. It is the basic instructor training document and will be used throughout this Instructor Training Institute; it is the foundation of the course and was prepared to aid the instructor in the day-to-day conduct of the course.

b. Overview of contents:

1) Introductory material describing:
   a) Purpose of the document
   b) Objectives and scope of the course
   c) Equipment coverage
   d) Course content
   e) References
   f) Student Study Guide
   g) Using the lesson plans
   h) Measurement of student achievement

2) Detailed plans for conducting each of the 20 lessons.

3) A list of references.

c. Design of a lesson plan—refer to actual document

1) Each lesson plan consists of two parts:
Objectives and requirements of the lesson
Detailed outline of lesson content

2) The outline gives detailed procedures and content for each lesson.

3) Estimates of elapsed and projected times are included as:
   - Aids to the instructor in maintaining his lesson on schedule
   - A means of indicating emphasis to be given to a topic area

4) A column to the right of the lesson outline lists training aids appropriate to the topic area and provides space for the instructor to make notes or list other training aids he plans to use.

5) Since contract directives specified that the course require a minimum of outside development and preparation on the part of the instructor, contents of each lesson plan are specified in some detail.

6) In general, the instructor will need to develop his own materials only when the information or skill to be presented is expected to vary jurisdictionally. As examples, it is expected that laws governing provision of emergency medical services by law enforcement officers will vary jurisdictionally as will equipment available for splinting upper and lower extremities.

7) In order to provide standardization of coverage, all medical content of the course has been based on the text entitled Emergency Care and Transportation of the Sick and Injured, prepared by the American Academy of Orthopaedic Surgeons. This document and other references that might be useful to instructors and students are listed in the appendix.

d. Coverage of each lesson

Lesson 1. Introduction to Crash Injury Management Training
   - Course coverage, schedule, and requirements
     - Rescuer's emergency care role and responsibilities and legal rights and responsibilities relative to emergency care
Introduction to emergency care equipment which student will be trained to use

Lesson 2. **Overview of the Human Body and Diagnostic Signs**

- Overview of body systems—skeletal, muscular, nervous, respiratory, circulatory, digestive, genitourinary
- Overview of diagnostic signs—pulse, respirations, temperature, skin color, pupils of the eyes, states of consciousness, ability to move on command, and reaction to physical stimulation

Lesson 3. **Airway Care and Pulmonary Resuscitation**

- Importance of oxygen to the body, particularly the brain
- Components of the respiratory system and explanation of how the system works
- Signs of adequate and inadequate breathing
- Airway care and resuscitation procedures for neck breathers (laryngectomees)
- Manikin practice on the four techniques for maintaining an open airway
- Manikin practice on procedures for dislodging foreign objects from the airway
- Manikin practice on mouth-to-mouth and mouth-to-nose techniques of pulmonary resuscitation
- Manikin practice on mouth/nose technique for infants

If equipment is available:

- Ventilation of a manikin using the bag-mask resuscitator
- Setting up, using and shutting down oxygen equipment
Lesson 4. **Cardiopulmonary Resuscitation**

- Inserting and precautions to follow when using airways
- How the heart functions
- Signs of cardiac arrest
- Technique of cardiopulmonary resuscitation and variations in technique for infants and small children
- Organs near the heart and dangers to the patient if cardiopulmonary resuscitation is not performed correctly
- Manikin practice on cardiopulmonary resuscitation by a lone rescuer
- Cardiopulmonary resuscitation on an infant manikin
- Manikin practice on cardiopulmonary resuscitation as a member of a team performing both as a ventilator and as a compressor, including changing positions during resuscitation

Lesson 5. **Shock, Bleeding, and Injuries to Soft Tissues**

- Design, functions and components of the circulatory system
- Meaning of shock, signs of shock, and techniques for preventing shock
- Meaning of and emergency care for anaphylactic shock
- Signs, symptoms and emergency care for internal bleeding
- Differences between arterial, venous and capillary bleeding
- Means of controlling bleeding
Lesson 6. Fractures and Dislocations of the Extremities

Design of the extremities

Definitions of fractures and dislocations and their common signs

Procedures for examining a patient for fractures of the extremities

Reasons for splinting fractures

Procedures for immobilizing all fractures and dislocations of the extremities

Practice in immobilizing fractures and dislocations of the extremities

Lesson 7. Injuries to the Skull, Spine, Chest and Pelvis

Design of the skull, spine, chest cavity and pelvis

What cerebrospinal fluid is and why no attempt should be made to stop bleeding from the nose or ears when a skull fracture is suspected

Signs of a skull fracture and of brain injuries

Management of patients with skull fractures and with brain injuries

Main danger associated with fractures of the facial bones

Main danger associated with fractures of the spine and complications that can result from spine injuries

Examining a patient for spine injuries

Main dangers and complications associated with chest injuries
Lesson 8. **Signs and management of patients with pelvic fractures.**

**Practice in bandaging an open skull wound**

**Practice in immobilizing a rib fracture**

**Practice in immobilizing the head and spine of seated patients**

**Lesson 8. Heart Attack, Stroke, Diabetes and Epilepsy**

**Causes, signs and emergency care for the following medical emergencies:**

- Heart attack
- Angina
- Heart failure
- Stroke
- Diabetic coma
- Insulin shock
- Epilepsy

**Lesson 9. Poisons and Drugs**

**Signs, emergency care and cautions associated with ingested poisons**

**Seriousness, care and cautions associated with bites and stings**

**Effects of alcohol and drugs, emergency care and cautions in dealing with alcohol and drug patients**

**Lesson 10. Burns and Exposure to Heat and Cold**

**First, second and third degree burns**

**Rule of nines in estimating the criticality of a burn**

**Emergency care for heat and chemical burns**

**Causes, signs and care for:**

- Heat cramps
- Heat exhaustion
- Heat stroke
Lesson 11. Emergency Childbirth
- Procedures to follow in caring for the mother and baby in the event of an emergency childbirth

Lesson 12. Gaining Access to the Patient
- Techniques of gaining access to a patient, using simple tools

Lesson 13. Moving Patients
- When accident victims should and should not be moved
- Emergency moves
- Practice in lifting and moving patients from ground surfaces

Lesson 14. Patient Examination and Triage
- Implications of variations in each vital sign
- Procedures to follow in performing a patient examination
- Cases which would be considered of the highest priority for emergency and medical care

Lesson 15. Cardiopulmonary Resuscitation Practice
- Additional student practice in the technique of cardiopulmonary resuscitation

Lesson 16. The Accident Scene: A Situational Review
- Review and integration of course content

Lesson 17. Field Training I
- Practice in dressing and bandaging wounds and immobilizing fractures in a field setting
Lesson 18: Field Training II

Practice in dressing and bandaging wounds and immobilizing fractures in a field setting

Lesson 19. Final Written Examination

Achievement of course objectives

Lesson 20. Final Practical Examination

Student demonstration of the following skills:

- Bandaging the head, eye and extremity
- Cardiopulmonary resuscitation alone and as a member of a team
- Performing an examination of life-threatening problems and a systematic check of injuries
- Splinting a fracture of the upper extremity
- Splinting a fracture of the femur
- Immobilization of the neck and torso of a sitting patient on a short backboard
- Immobilizing a flail chest
- Bandaging a sucking chest wound

SUMMARY AND QUESTIONS

1. Summary of main points.
2. Class questions or comments.
UNIT 3

TEACHING-LEARNING PROCESS

Objectives:

1. Define learning and teaching
2. Identify and describe the three domains of learning
3. Identify the four major phases involved in the preplanning and execution of the teaching-learning act and key points pertinent to each phase

OBJECTIVES

1. Brief explanation of objectives of the unit of instruction.
2. Explanation that this is general introduction to the teaching-learning process; specifics will come later.

DEFINITIONS OF LEARNING AND TEACHING

1. Learning--any activity involving the senses that affects behavior (covert and overt).
2. Teaching--providing an efficient learning environment.

SENSES THROUGH WHICH WE LEARN

1. Sight
2. Sound
3. Touch
4. Taste
5. Smell

DOMAINS OF LEARNING

1. Cognitive = Information
a. Order of development--each level of cognition must be provided for and developed as a basic consideration before further development:

1) Perceiving
2) Remembering
3) Discriminating
4) Integrating
5) Abstracting
6) Generalizing
7) Evaluating
8) Imagining
9) Thinking
10) Problem-solving
11) Inventing
12) Creating

2. Psychomotor = manipulative skills

a. Order of development

1) Observing
2) Imitating
3) Manipulating
4) Performing
5) Perfecting

b. Limiting factors

1) Strength
2) Speed
3) Impulsion
4) Precision
5) Coordination
6) Flexibility

3. Affective = attitudes

a. Order of development:

1) Receiving
2) Responding
3) Valuing
4) Organizing
5) Characterizing

b. Outcome

1) Toward self--feelings, attitudes, values
1. Verbal symbols
2. Visual symbols
3. Recordings, radio, still pictures
4. Motion pictures
5. Television
6. Exhibit
7. Field trips
8. Demonstrations
9. Dramatized experiences
10. Contrived experiences
11. Direct, purposeful experiences

COMPONENTS OF THE LEARNING ENVIRONMENT

1. Student—individual differences
   a. Physical
   b. Mental
   c. Psychological

2. Teacher

3. Facility

4. Course—lesson content

THE TEACHER

1. Personal qualities
   a. Personal appearance
   b. Courtesy
   c. Self-control
   d. Tact
   e. Voice
   f. Enthusiasm

2. Ability to communicate
   a. Proper language
   b. Correct pronunciation
3. Knowledge of subject
4. Thorough preparation
5. Professionalism

PHASES IN THE TEACHING-LEARNING PROCESS

1. The process of getting ready for and implementing the teaching-learning process may be examined in the context of four distinct phases:

   a. **Preparation Phase** - Getting the learner, the learning environment and the teacher into a state of readiness.

   b. **Presentation Phase** - The teaching-learning process in action.

   c. **Application Phase** - Providing appropriate opportunities for the student to practice and apply this new learning.

   d. **Evaluation Phase** - A process for examining the degree of success of the teaching-learning experience--basis for decisions.

2. The four-step process reflects the following principles of learning:

   a. Readiness-learner has to have a need to acquire the information,

   b. Practice--learner needs to try out or apply the information or skill.

   c. Effect--learner must derive satisfaction from the learning experience.

SITUATIONAL EXAMPLE

1. Suppose the class has been asked to teach Lesson 4, Cardiopulmonary Resuscitation. Referring to the actual lesson, develop with the class elements of each phase in the teaching-learning process as given in Sections 2-5, below.

2. **Preparation Phase.** During this phase, the instructor must make a series of decisions or review previous decisions. Even though a lesson plan is available, teacher preparation is still required.

   a. Instructor readiness considerations:

      1) What are the stated objectives of the lesson?
2) What subject matter content is included? Does some of it need to be developed?

3) How much review of content is needed by instructor?

4) Is available time a limitation?

5) How will achievement of the objectives be determined? Do tests need to be developed?

b. Learning environment considerations:

1) What teaching methods would be most effective?

2) Can a variety of methods be used?

3) What teaching aids should be used for this lesson? Where can they be obtained?

4) Will a film need to be obtained? (Source, use date, film preview)

5) What supplies, equipment or materials are needed for demonstration?

6) How will the students practice new skills or apply new knowledge?

7) Is the classroom adequate? (Lighting, seating, ventilation, heating)

8) How will the workplace be arranged?

c. Student readiness considerations:

1) How should the lesson be introduced to the class?

2) Will the introduction help the student realize the importance of the knowledge and skills taught in the lesson?

3. Presentation Phase. During this phase, the instructor is in action with the student group. The instructor implements the selected methods of teaching:

a. Shows how to do it (demonstrate).

b. Explains how, as he demonstrates.
c. Asks questions frequently.

d. Involves the student in demonstrations or discussions.

e. Holds lecture to a minimum--discusses with students instead.

f. Uses visuals whenever appropriate.

g. Shows the object if possible; doesn't just talk about it.

h. Makes sure all can see visuals, demonstrations, chalkboard.

i. Maintains a classroom climate that is open--does not inhibit relevant communication.

j. Uses language suitable to the group--does not talk over their heads.

k. Makes eye contact with every student repeatedly.

l. Utilizes as many senses as possible in presenting--especially seeing.

m. Stands while presenting, moves about and gestures--is dynamic and interested in the subject.

n. Has a sense of humor--interjects humor in presentation if appropriate.

4. Application Phase

a. The student must be given an opportunity to try out whatever has been demonstrated or explained to him.

1) Provide practice as soon as possible after new learnings have been presented.

2) Observe the learners performing the tryout experiences.

3) Provide assistance and correction if necessary so that the first attempt is done properly.

4) Have students discuss new information in relationship to other situations or applications.

b. Practice or application may be provided by:

1) Homework assignments in the Student Study Guide.
2) Classroom practice of skills.

3) Classroom reinforcement of knowledge through verbal drills and quiz and review sessions.

5. Evaluation

a. The process of evaluation involves examining the total teaching-learning activity. It is not only testing of the student for achievement, although this is part of it.

b. Evaluating student achievement:

1) It should be based on objectives of the instruction.

2) Achievement of skills will need to be measured differently from knowledge or attitudes.

3) Attitudes are difficult to measure.

4) Devices can be constructed to assist the instructor in measuring changes in the three areas of human behavior.

c. Evaluating the learning environment:

1) Did the selected methods work well?

2) Was the student practice and application appropriate and adequate?

3) Was enough time provided for instruction and practice?

4) Were visual aids adequate?

5) Are additional aids needed?

6) Was the class too large for efficient and effective instruction?

7) Were the classroom facilities adequate?

8) Were there adequate supplies, materials, tools, equipment for demonstration and practice?

9) Did all equipment work properly?

10) Were the lesson plans helpful? How could they be improved?
d. Evaluating the instructor:

1) Is additional review needed for some of the lessons?
2) Did the students frequently get bored?
3) How can some topics be made more interesting?
4) Was "open" discussion possible?
5) Was the class too instructor-oriented?
6) Can some presentation methods be improved?

SUMMARY AND QUESTIONS

1. Summary of main points.
2. Class questions or comments.
UNIT 4
WORKSHOP PLANNING

Objectives: Inform enrollees of the procedures and assignments for the practice teaching workshops

OBJECTIVES
1. Brief explanation of the objectives of the unit of instruction.

PURPOSE OF WORKSHOPS
1. Provide enrollees an opportunity to apply principles previously taught by actually presenting part of one of the lesson plans.
2. Provide instructor trainer and other enrollees an opportunity to observe the principles being applied and to suggest ways and means to improve the presentation.
3. Provide instructor trainers and practice teachers with a means for assessing progress.
4. Purpose is not to embarrass anyone or put them "on the spot" but rather to better prepare each enrollee for his teaching task and to permit him to benefit from the experiences of other enrollees.

GENERAL PROCEDURES
1. Practice teaching workshops will be conducted part of each day on Tuesday, Wednesday and Thursday.
2. Various lessons or lesson segments have been chosen from the curriculum materials and are listed on the workshop assignment sheet.
3. Each enrollee will select from the list the lesson segment he would like to use for his practice teaching assignment.
4. Prior to the presentation, he will review the lesson segment selected and prepare for the presentation.
5. If the lesson plan segment he has selected is longer than 15 minutes, he should select from that segment a portion of the lesson which will not exceed 15 minutes in presentation.

6. In making his presentation, he should explain his objectives and then proceed to teach his lesson.

7. In giving his presentation, the enrollee should make use of any appropriate teaching technique thus far taught in the Institute.

8. After each presentation, there will be a 15-minute discussion period during which the instructor and enrollees will discuss strong and weak aspects of the presentation and suggest ways and means that the presentation might be improved. Enrollees acting as students will be provided with a checklist of aspects of the presentation to consider.

WORKSHOP ASSIGNMENTS—hand out assignment sheet; review the sheet with enrollees

1. The workshop assignment sheet contains 29 lessons or lesson segments from which enrollees may choose their practice teaching sessions; all but item ___ are available—item ___ will be used by the instructor in his demonstration lesson.

2. Workshop assignments come from Lessons 1 through 14; Lessons 15 through 20 are not included here since they represent review and practice lessons or examinations.

3. The following general rules will be used in making assignments:

   a. At least one enrollee will be assigned to each of the 14 lessons before an additional enrollee will be assigned to a lesson already chosen by another enrollee (even though he is choosing a different segment of that lesson to teach).

   b. Enrollees will teach the lessons in the order numbered on the sheet; that is, the first three numbers chosen will be the subjects of the practice teaching sessions scheduled for Tuesday afternoon and the last three will be the sessions scheduled for Thursday afternoon.

   c. For one session (item 25), the enrollee will need to prepare his own lesson segment—the actual lesson depends heavily on the presentation and review of a film on emergency childbirth.

4. Give enrollees 5 to 10 minutes to review the assignment sheet and decide on their selections.
5. Poll the class until each enrollee has been assigned a lesson segment for his practice teaching session.

6. At the completion of the assignments, indicate when each enrollee's presentation will be scheduled--Tuesday, Wednesday or Thursday (AM or PM).

7. Indicate that, while a very small amount of time for workshop preparation will be available on Tuesday morning, presentations will largely be prepared in the evening. Enrollees scheduled for Tuesday afternoon should prepare their presentations this evening--ask each of these enrollees to check with the teacher trainer at the end of the day.

PREPARATION AND PRESENTATION

1. Emphasize that enrollees are required to present a segment of the lesson requiring approximately 15 minutes of presentation--warn enrollees that time is difficult to judge and they should not try to cover too much.

2. Since time is limited, the instructor will give a signal when ____ minutes have elapsed. After the instructor's signal, the enrollee should complete his presentation within ____ minutes.

3. Prior to the presentation, the enrollee should review the lesson plan. Material should be presented essentially as suggested in the lesson plans and in accordance with the principles presented in the Instructor Training Institute--modified, of course, by the enrollee's own style of presentation.

4. Each enrollee should use the 4-step process in making his presentation:
   a. Preparation
   b. Presentation
   c. Application
   d. Evaluation--note that evaluation here will not include a test.

5. In preparing for the presentation, the enrollee should insert marginal notes in the lesson plan where applicable, underline points he wishes to emphasize and determine how he wishes to supplement his presentation with visual aids.

6. Regarding visual aids, use should be made of the chalkboard or any aids the enrollee wishes to prepare for himself.

   Note: Instructor should select a segment of a lesson plan and review briefly with the class what is involved in preparing to present that segment.
7. Emphasize that the purpose of the workshops is not to practice or evaluate CIM knowledge or skills but rather instructional skills.

DISCUSSION--hand out practice teaching workshop checklists

1. Each presentation will be followed by a 15-minute discussion during which the instructor and enrollees will suggest, as appropriate, ways and means for improving the presentation.

2. Checklists have been developed which identify the areas which should be considered for discussion.

3. Review the checklists in detail with the enrollees.

SUMMARY AND QUESTIONS

1. Summary of main points.

2. Class questions or comments.
UNIT 5

DEMONSTRATION AND CRITIQUE OF A 4-STEP LESSON

Objectives: Demonstrate to enrollees procedures to follow in presenting a 4-step lesson by presenting a lesson segment from the CIM course. Have students evaluate the presentation using the workshop checklist.

OBJECTIVES
1. Brief explanation of the objectives of the unit of instruction.

EVALUATION ASSIGNMENTS
1. Divide the class into four groups and assign one of the checklist sections to each group:
   a. Preparation--teacher and student
   b. Presentation
   c. Application
   d. Evaluation

2. Indicate that the group to which each checklist section is assigned will be responsible for critiquing the instructor on that section of the checklist.

3. All students will be expected to participate in the discussion of all sections of the checklist.

4. Discussion should center on the following:
   a. Techniques used in each of the four steps
   b. Good elements--what and why
   c. Inferior elements--what and why
   d. Suggestions for improvement
5. Assure students that, just because the instructor is giving the presentation, they should not feel inhibited in the discussion—the purpose is to give them an opportunity to observe a demonstration and to gain practice in using the workshop checklist.

INSTRUCTOR DEMONSTRATION

1. Instructor demonstration of a CIM 4-step lesson.

CRITIQUE

1. Each group critiques the demonstration using the section of the checklist to which it was assigned.
2. All students contribute to the critique as appropriate.

SUMMARY AND QUESTIONS

1. Summary of main points.
2. Class questions or comments.
3. Assurance by instructor that enrollees understand what is expected of them in the practice teaching workshop demonstrations and critiques.
UNIT 6

INSTRUCTIONAL AIDS

Objectives:

Discuss purpose and uses of instructional aids

Discuss advantages, disadvantages and hints for effectively utilizing:

- Chalkboards and chart pads
- Prepared charts
- Slides and film strips
- Overhead transparencies
- Films

OBJECTIVES

1. Brief explanation of objectives of the unit of instruction.

PURPOSE AND USES OF INSTRUCTIONAL AIDS

1. Instructional aids permit the instructor to appeal to both the senses of vision and hearing.

2. The combination of seeing and hearing yields more effective instruction than just hearing alone.

3. In addition to providing a means of varying presentation of subject matter, visual aids can be used to:
   a. Underscore main points—for example, using the chalkboard or a prepared flip chart to display signs of fractures.
   b. Assist in instruction of information that is difficult to describe in words—for example, use of sketches to show types of fractures.

4. Each individual instructor should feel free to utilize any aids available to him which will be helpful in his presentation.
   a. If a visual aid is relevant to the material and serves a purpose, use it.
b. If a visual aid is irrelevant and unnecessary, it will serve to divert the student's attention.

5. The instructor is advised that the visual aid is designed to aid the instructor not to substitute for him.

6. Visual aids should be developed around the verbal presentation; the verbal presentation should not be designed around the visual aid as is so often the case.

**FILM ("Visual Aids")**

1. Introduce, show, and critique film.

**GENERAL PRINCIPLES FOR USING INSTRUCTIONAL AIDS**

1. All training aids to be used in the lesson should be available and ready for use before the class starts.

2. The instructor should be thoroughly familiar with the contents of all visual aids used in his presentation.

3. The instructor should know how to operate all projection equipment or should assure that there is a capable person to operate it.

4. He should assure that extra bulbs are available for projection equipment.

5. He should assure that any training aids used are visible to all members of the class.

6. When emphasizing certain points, he should talk to the class and not to the training aid.

**CHALKBOARDS AND CHART PADS**

1. Chalkboards and chart pads are discussed together since their uses are similar.

2. The chalkboard is probably the best known visual aid:
   a. It is inexpensive and versatile.
   b. It permits spontaneity in presentation.
c. If a topic is being developed with the class, items can be listed and progress recorded—for example, in developing a list of the major types of shock.

d. Since erasing is simple, changes can be made easily.

e. Once material is erased, it is gone; thus, sufficient time must be provided for students to copy the material if the instructor wishes it copied.

3. The chart pad usually consists of an easel to which a large pad (34" x 23") of paper can be attached. A felt tipped marker or grease pencil is best for writing on a chart pad.

a. The chart pad is used in the same manner as the chalkboard.

b. Since material need not be erased, pages can be turned over, thus making review possible by turning back pages.

c. Pages can be torn off and displayed in the classroom if desired.

d. Pages can be prepared in advance—for example, a prepared list of the signs of fractures.

e. Their use in development of ideas with the class may prove difficult since it is impossible to erase and crossing out usually proves messy and distracting.

4. General hints for using chalkboards and chart pads are:

a. Do not write and talk at the same time. If you do, you will be talking to the visual aid and not to the class.

b. Write legibly and large enough for all to see—print if possible.

c. Write quickly so that you can give your attention to the class.

d. Try not to block anyone’s view as you write.

e. When referring to items on the board or chart, use a pointer, not your arm.

f. Avoid blocking the view of the board with your body.

PREPARED CHARTS

1. A chart is any poster or pre-prepared graphic device, such as a pre-prepared flip chart as discussed above.
2. Charts are permanent and portable and can be made of almost anything—photographs, drawings, graphs, diagrams.

3. Except for the fact that one does not normally write on charts, hints for effectively using charts are the same as those for using chalkboards and chart pads.

SLIDES AND FILMSTRIPS

1. Slides and filmstrip projectors project transparent pictures onto a screen. Slides are individual pictures; filmstrips are a series of pictures. Most slide projectors have remote control devices which permit slide changes as the instructor talks.

2. Charts, diagrams, pictures of all types and even on-the-scene photographs can be made into slides.

3. The instructor is advised against developing a "complete" slide series for his presentation. Slide presentations require a great deal of preparation and rehearsal. In addition, they minimize the opportunity for interaction between instructor and student.

4. When using slides:
   a. Darken the room slightly so that they can be easily seen.
   b. Use a pointer (not your hand) if you wish to refer to an image on the screen.
   c. For each slide, emphasize the area or points which you wish the student to attend to.
   d. Leave your slides on long enough for the group to study them (3-5 slides per minute). Too rapid succession of slides can be ineffective.
   e. Once you are finished with the slide, turn off the projector—the slide or projector light can be very distracting.

OVERHEAD TRANSPARENCIES

1. Although technically they are "slides," overhead transparencies are discussed separately here since they have several unique features.

2. Overhead transparencies are large slides for use with an overhead projector placed in the front of a lighted room.
a. The image is reflected on a screen above and behind the instructor.

b. Placement of the projector allows the instructor to see the transparency and continue to face the class.

c. If the instructor wishes to point to an area of the slide, he can do so by pointing directly to the area on the transparency; he does not have to turn around.

d. The instructor can write on the transparency, using color if desired. A felt pen or special pencil can be used to add details or mark points on the transparency during projection.

e. A series of overlays can be used to "build up" or "take apart" an image.

f. The rate of presentation of information can be controlled by covering the transparency with paper or cardboard, and exposing it when desired.

3. Uses of transparencies in the CIM course would be similar to uses of posters and prepared charts; they cannot be used to show photographs.

4. As with other slides:

   a. Emphasize the area or points which you wish the student to attend to.

   b. Leave your slide on long enough for the group to study it.

   c. Once you have finished with the slide, remove or cover it to avoid distractions due to the slide or the light.

FILMS

1. One film (Emergency-Childbirth) has been recommended for the CIM course. However, the instructor should be alert to new films in the field and should feel free to utilize any films available to him if he feels they will improve the effectiveness of his presentation. He is advised to select the film carefully in order to be certain it portrays what he wants.

2. Each film should be carefully previewed prior to use. The instructor should be certain of its contents.
3. When showing films:
   a. Introduce the film beforehand, explain what the film covers and is intended to show, let students know the specific points they should watch for.
   b. Show the film.
   c. After the film is over, discuss it in light of your objectives. Know the points you want to stress. Prepared questions help in starting the discussion. The discussion should provide the class with a better understanding of the points made in the film.

4. A general caution when using films--be sure that:
   a. The equipment is in working order before the class convenes.
   b. The projector is threaded.
   c. The screen is in place.
   d. The focus is adjusted.
   e. The sound is synchronized and adjusted.

SUMMARY AND QUESTIONS:
1. Summary of main points.
2. Class questions or comments.
UNIT 7

LESSON PLANNING AND DEVELOPING INSTRUCTIONAL AIDS

Objectives: Provide each enrollee with the opportunity to develop a variety of instructional aids

Provide enrollees with assistance in planning their lesson segment for the practice teaching workshop

OBJECTIVES

1. Brief explanation of objectives of unit of instruction.

LESSON PLANNING AND VISUAL AID DESIGN AND CONSTRUCTION

1. Each enrollee will be assigned to one of the teacher trainers for review of his lesson plan segment prior to the practice teaching workshop.

2. Each enrollee will commence planning of his lesson segment.

3. Enrollees will design and construct various types of teaching aids to supplement information presented in the CIM lesson segment he has chosen for practice teaching. Instructional aids include the following types:
   a. Chart pad
   b. Chalkboard
   c. Transparencies
   d. Heavy paper signs
UNIT 8

TEACHING INFORMATION LESSONS

Objectives: Provide the enrollee with hints for effectively utilizing lecture/discussion techniques in developing student knowledge.

OBJECTIVES

1. Communication of knowledge may be achieved by several means; for example:
   a. Lecture
   b. Class discussion
   c. Use of instructional aids

2. In general, it is a good principle of teaching to utilize instructional aids when they will add to the effectiveness of the presentation.

3. However, there are instances where instructional aids are limited, completely unavailable, or inappropriate, and the instructor must rely on his personal qualities as a teacher in effectively communicating with the class.

4. It is, therefore, the purpose of this unit of instruction to provide the instructor with hints for utilizing lecture/discussion techniques in communicating with a class, that is, the instructor must rely primarily on his own qualities as a teacher rather than on visual aids.

INSTRUCTOR QUALITIES

1. Qualities of a good instructor go far beyond expert knowledge of the subject matter.
   a. He must impart this knowledge in a clear and interesting manner.
   b. He must control his students and at the same time maintain a good rapport with them; he should be courteous with his students.
   c. He must provide an effective learning environment.
2. Suggestions for the instructor include:

   a. Use language suitable to the group. Avoid complicated words where simple words will do.

   b. Be so well versed in the subject matter and familiar with the lesson plan that you are able to talk directly to the class, not read to it.

   c. Do not crate or mumble. Employ interesting, earnest, conversational tones and natural personal manner. Look into the faces of your students as if you were talking to them individually. Look from one to the other and not too much at your notes and desk.

   d. Exhibit a sense of humor in some way other than by using funny stories as illustrations. Phrase your remarks, where possible, in an interesting manner.

   e. Be in control of the class at all times. Assure that all students participate, and do not allow the class to be dominated by a few vocal students.

   f. Ask questions frequently and involve students in discussions.

   g. Use body action appropriately—personal mannerisms can be distracting; gestures can be effective.

OBTAINING CLASS PARTICIPATION

1. The course is designed to include as much class participation as possible. The instructor should:

   a. Ask members of the class to answer specific questions.

   b. Encourage students to ask questions or make comments.

   c. Stimulate discussion by posing situational examples or opening up a student question to the entire class.

2. When asking the class a question, the instructor should direct the question to the entire class, and then either select an individual to respond or permit a student who knows the answer to respond.

   a. When questions are directed to the entire class, all individuals in the class are required to think the answer through.
b. If the instructor selects an individual to respond, he is advised that shy students may become discouraged.

c. On the other hand, should the instructor permit any member of the class to respond, he may find that one or two individuals dominate the class.

d. The instructor should try both techniques and select the one that works best with his particular class.

3. The instructor should vary his questions. Examples of kinds of oral questions include those starting with the words "what," "why," "how," "is it true that," and "compare."

4. Hints for aiding the shy student and for controlling the overly vocal student.

HINTS FOR CONDUCTING INFORMATION LESSONS

1. Suggested procedures for imparting knowledge in information lessons include:

   a. State clearly at the beginning the major topic and objective of the lesson.

   b. Begin, if possible, by:

      1) Arousing some curiosity or developing a problematic attitude by means of question or problem.

      2) Giving the students some ideas of the main things to be gained from the lesson.

   c. Quickly survey the room for possible distraction, noises, and bad seating arrangements, and make appropriate adjustments, if possible.

   d. Adapt the pace of the lesson presentation to:

      1) The ability of the class to follow the material.

      2) The relative necessity for the students to reflect on what has been presented.

      3) The difficulty of the materials presented and the ability of the class to take notes, if notes need to be taken.
e. Cultivate a good time-sense. Avoid digression; it often serves as a distraction rather than an illustration. Keep your lesson on schedule.

f. Above all, always keep in mind these important points:

1) The objectives of the lesson.

2) The necessity for your students to be able to understand.

3) The necessity to be interesting, to be at ease, to be brief, to employ the proper pace, and to promote class participation.

SUMMARY AND QUESTIONS

1. Summary of main points.

2. Class questions or comments.
UNIT 9

PRACTICE TEACHING WORKSHOP
(3 enrollees)

OBJECTIVES

1. Brief explanation of objectives of the workshop.

PROCEDURES

1. Each enrollee with a practice teaching assignment will devote approximately 15 minutes to practice teaching.

2. Other enrollees will serve as "students" during the practice teaching session.

3. Each practice teaching session will be followed by a 15-minute critique in which the instructor and enrollees evaluate the presentation and suggest means for improving it, as appropriate.

4. Enrollees will indicate in their copies of the CIM Instructor's Lesson Plans examples of good teaching techniques learned from the lesson presentation and critique.

5. When all practice teaching workshops for a given CIM lesson have been completed, the instructor will review the entire lesson contents and discuss applicable teaching techniques.
UNIT 10

PRACTICE TEACHING WORKSHOP
(3 enrollees)

Objectives: Provide enrollees with an opportunity to teach segments of the CIM lesson plans

OBJECTIVES
1. Brief explanation of objectives of the workshop.

PROCEDURES
1. Each enrollee with a practice teaching assignment will devote approximately 15 minutes to practice teaching.
2. Other enrollees will serve as "students" during the practice teaching session.
3. Each practice teaching session will be followed by a 15-minute critique in which the instructor and enrollees evaluate the presentation and suggest means for improving it, as appropriate.
4. Enrollees will indicate in their copies of the CIM Instructor's Lesson Plans examples of good teaching techniques learned from the lesson presentation and critique.
5. When all practice teaching workshops for a given CIM lesson have been completed, the instructor will review the entire lesson contents and discuss applicable teaching techniques.
UNIT 11
DEVELOPING AND EVALUATING CIM SKILLS

Objective: Teach enrollees the basics of good practices in developing and evaluating CIM skills

Review CIM lessons devoted to skill development, application and evaluation

Provide enrollees with practice in developing checklists for skill evaluation

OBJECTIVES

1. Brief explanation of objectives of the unit of instruction.

SKILL DEVELOPMENT

1. Domains of learning. As discussed in the lesson on the teaching-learning process, teaching typically includes development of the following:

   a. Knowledge
   b. Skills
   c. Attitudes

2. CIM skills. The CIM course includes the development of many skills, for example, resuscitation, bandaging, splinting, moving patients, performing a patient examination—in fact, the entire course emphasis is on the practical aspects of managing the patient at the accident scene.

3. Four-step process. A simplified version of the application of the four-step process to skill development is as follows:

   a. Preparation: breaking the skill down into its component parts, that is, analyzing the skill in terms of its component tasks or steps.

   b. Presentation: instructor description and demonstration of the skill explaining each task or step as he performs it.
c. Application: student practice with the skill until it is performed to some specified degree of precision.


4. CIM skill lessons.
   a. CIM lessons in which a skill is introduced include the first three of the four steps: preparation, presentation and application.
   b. Other CIM lessons are devoted specifically to application.
   c. An evaluation of skills is made in the final skill examination; of course, informal evaluations of skills are made in all skill lessons.

CIM SKILL DEVELOPMENT LESSONS

1. Lesson coverage. The following CIM lessons are devoted to development of specific skills:
   a. Lesson 3, which covers airway care and pulmonary resuscitation.
   b. Lesson 4, which covers cardiopulmonary resuscitation.
   c. Lesson 5, in which bandaging of various body parts is covered.
   d. Lesson 6, which covers splinting of the extremities.
   e. Lesson 7, which includes bandaging of the skull and immobilizing the ribs and spine.
   f. Lesson 13, which covers techniques of moving patients from ground surfaces.
   g. Lesson 14, which includes performing a patient examination for life-threatening emergencies and injuries.

2. Technique. CIM skill lessons typically include the following:
   a. The need for and importance of the skill are explained.
   b. The pertinent background, that is, anatomy, physiology, causes of the condition, signs, symptoms, etc., are thoroughly discussed.
   c. Precautions are emphasized, as appropriate.
d. The skill is described and demonstrated by the instructor.

e. A separate section of each lesson is then devoted to student practice under supervision.

f. In general, the students work in small groups and practice on each other (for such skills as bandaging, splinting, etc.) or on a manikin (for such skills as resuscitation).

g. The instructor uses the practice period not only for perfection of the skill technique but also for review of main points covered in the lesson.

h. There is therefore a constant reinforcement of the technical content of the lesson as well as an opportunity to practice skills to some degree of perfection. The practice period of each lesson is not just a routine period devoted strictly to application of a given skill--rather, there is a constant interaction among instructor and students.

3. Elements of a good demonstration.

a. Have all equipment and supplies ready.

b. Know each step you want to explain and emphasize, that is, have a "lesson plan," "task analysis," or checklist.

c. Explain each step as you proceed. Tell the "why" as well as the "how."

d. Emphasize key points and precautions.

4. Complimenting and correcting the learner.

a. Avoid criticism, if possible; attempt to show how it could be done better.

b. Compliment before you correct.

c. Let the student correct himself if possible.

d. Don't overdo correcting in the practice session; speak to the student on an individual basis if he is having difficulty with a skill.

e. Encourage the student to improve.
CIM SKILL APPLICATION LESSONS

1. CIM lessons. The CIM course includes the following skill application lessons:
   c. Lesson 17. Field training I.
   d. Lesson 18. Field training II.

2. Additional practice. The preceding lessons have been designed specifically to provide the student with additional skill practice. Also scheduled in the course are four 1-hour quiz and review lessons in which students are given an opportunity to apply knowledge as well as practice certain skills previously taught in the course.

3. Lesson 15. Cardiopulmonary Resuscitation Practice
   a. As its title implies, this 1-hour lesson is devoted exclusively to providing the student with additional CPR practice.
   b. Since CPR is such a critical skill, it was considered especially important that sufficient time be provided for students to achieve perfection in performance with the manikin.
   c. Including the 1-1/2 hours of practice provided in Lesson 4, therefore, a total of 2-1/2 hours of course time is devoted to student practice in cardiopulmonary resuscitation.

4. Lesson 16. Situational Review
   a. This lesson technically does not provide skill practice in terms of hands-on experience with psychomotor or manipulative skills.
   b. It provides for an integration and review of course contents by providing a verbal analysis of various situations.
   c. It therefore probably more correctly should be considered an advanced stage of development of the cognitive process, that is, problem solving.
d. It is considered here under skill application since it requires the student to draw on all his emergency medical care training (skills and knowledge) in analyzing situational examples.

e. Review several examples with the class, emphasizing the following points:

1) They were designed to stimulate thought.

2) There are, therefore, not necessarily any right or wrong answers but sometimes several correct avenues of approach (although sometimes there is just one obvious correct answer).

3) Instructor must be alert to recognize possible correct responses and to ask probing questions.

4) Taking any one of the situations as an example, develop with the enrollees a discussion on possible answers to the questions posed.

5. Lessons 17 and 18. Field Training I and II

a. These two lessons are essentially identical in design; they were designed to be run in a field setting with simulated patients (other students) and using actual vehicles. The lessons can be conducted either indoors (as in a garage) or outdoors. Their purpose is to provide the student with practice in working in the confined environment of a motor vehicle.

b. Ten situations have been developed for the field training session.

Note: The instructor should use more or fewer situations if he desires. He should feel free to develop his own situations or to alter any prepared situation as appropriate.

c. For each situation, students work in groups of 10.

1) One student serves as the patient.

2) One student serves as the law enforcement officer.

3) The remaining eight students serve as bystanders.

d. "Patients" in the vehicle are all easily accessible. The vehicle is upright and the rescuer can use either right or left door to gain
access. The rescuer may want to move the front seat forward or backward to improve working space.

e. The "patient" will be briefed on his injuries/illness and will be told how to "perform" his role by the instructor. In general, it is expected that most role playing will be simple and pertinent to the injuries at hand; that is, a person with a fractured femur will have extreme pain at the fracture site.

f. The student serving as law enforcement officer should be told the nature of the illnesses/injuries with which he is dealing. All bystanders will also be informed of the illness/injury. The rescuer should proceed as follows:

1) Select the appropriate equipment and supplies needed to render emergency care.

2) Select bystanders to assist if necessary and direct their activities as appropriate.

3) For those bystanders selected to assist, explain precisely what they are to do. Remember that bystanders can be overly enthusiastic and therefore detrimental to the patient.

4) Decide whether the emergency care provided in the vehicle should be of an interim or permanent nature; that is, if a full splint is applied, will it be possible to get the patient out of the vehicle? An interim means of caring for the injury may be required until the patient is removed from the vehicle.

5) For all conscious patients, explain what he is doing and reassure the patient constantly. Remember that the patient will likely be frightened. Be calm.

6) Remove the patient from the vehicle.

Note: It is assumed in each of the situations that patients need to be moved at some time in order to gain access to other patients in the car.

Note: Removal from the vehicle may range from assisting a patient who is fully mobile to physically lifting the patient from the vehicle.

7) Complete emergency care procedures as necessary if procedures in the vehicle were of an interim nature.
8) Properly position the patient on a blanket. The patient should be positioned appropriately depending on the nature of his illness/injury. Consideration should be given to maintaining an airway as appropriate and preventing shock.

g. The eight students serving as bystanders should observe all actions and respond to all directions given by the law/enforcement officer. Depending on the nature of the illness/injury, some will be actively assisting the rescuer and some will be merely observing. Those selected to assist should pretend ignorance of emergency care procedures and follow all instructions of the law enforcement officer precisely. No horseplay should be tolerated.

h. The situations should be completed one at a time. If the instructor is running short of time, he may wish to run two situations concurrently if he feels he can provide adequate supervision.

i. At the completion of each situation, a general critique should be held. All ten students should participate in the critique. The following elements of the performance should be discussed:

1) The care provided within the vehicle, including the selection of appropriate equipment and supplies.

2) The manner used by the rescuer in reassuring patients as appropriate.

3) The directions given to bystanders whose help was enlisted.

4) The care with which the patient was moved from the vehicle.

5) The care provided outside the vehicle as appropriate.

6) The final positioning of the patient on the blanket depending on the nature of his illness/injury.

EVALUATING SKILLS

1. Final skill evaluation. In addition to informal evaluation of skills during all practice sessions, the course includes a 2-hour final evaluation of skills (Lesson 20).

2. Skills covered. Lesson 20 provides for evaluation of the following skills:
a. Bandaging the head, eye and extremity.

b. Cardiopulmonary resuscitation alone and as a member of a team.

c. Performing an examination of life-threatening problems and a systematic check of injuries.

d. Splinting a fracture of the upper extremity.

e. Splinting a fracture of the femur.

f. Immobilizing the neck and torso of a sitting patient on a short backboard.

g. Immobilizing a flail chest.

h. Bandaging a sucking chest wound.

3. Checklists. In order to assure that all students are evaluated in the same manner, the instructor should develop a checklist that identifies the principal characteristics of each skill.

4. Sample checklists. Display and discuss sample checklists for mouth-to-mouth pulmonary resuscitation and for bandaging.

5. Enrollee development of checklists. Divide class into groups of three or four enrollees each. Assign each group the task of developing a checklist for one of the CIM skills. Give the class 10 to 15 minutes to work on the checklist.

6. Enrollee presentation of checklist. Have each group write out its checklist on a transparency. A spokesman for each group should display and describe the checklist. Other class members should critique the checklist developed.

SUMMARY AND QUESTIONS

1. Summary of main points.

2. Class questions or comments.
UNIT 12

PRACTICE TEACHING WORKSHOP
(3 enrollees)

Objectives: Provide enrollees with an opportunity to teach segments of the CIM lesson plans.

OBJECTIVES

1. Brief explanation of objectives of the workshop.

PROCEDURES

1. Each enrollee with a practice teaching assignment will devote approximately 15 minutes to practice teaching.

2. Other enrollees will serve as "students" during the practice teaching session.

3. Each practice teaching session will be followed by a 15-minute critique in which the instructor and enrollees evaluate the presentation and suggest means for improving it, as appropriate.

4. Enrollees will indicate in their copies of the CIM Instructor's Lesson Plans examples of good teaching techniques learned from the lesson presentation and critique.

5. When all practice teaching workshops for a given CIM lesson have been completed, the instructor will review the entire lesson contents and discuss applicable teaching techniques.
UNIT 13

EVALUATING KNOWLEDGE

Objectives: Teach enrollees how to develop written tests to evaluate achievement of knowledge using:

- True-false items
- Multiple-choice items
- Matching items
- Completion items
- Essay items

Provide enrollees with general techniques for:

- Test construction, administration and scoring
- Interpretation of test results
- Utilization of test results

OBJECTIVES

1. Brief explanation of objectives of the unit of instruction.

2. Enrollees must learn to design their own written test items since there is no national standardized test for the CIM curriculum materials.

3. Enrollees will have an opportunity to practice test item construction in the evaluation workshop.

RELATION TO TRAINING OBJECTIVES

1. Emphasis of the lesson is toward evaluating behavioral changes in area of knowledge.

2. Training objectives are the reference points of evaluation.
   
   a. Ask a class member to give one knowledge objective from the CIM lesson plans.

   b. Ask same person how he could determine achievement of that objective.
ORAL VS. WRITTEN TESTS

1. Two types of tests may be used for evaluating achievement of knowledge:
   a. Oral tests
   b. Written tests

2. Oral testing is usually not feasible unless the class size is extremely small (1-5 people).
   a. Oral tests are very time consuming, but do permit in-depth responses.
   b. Oral testing can be somewhat subjective in that there is a tendency for the instructor to help.

3. Written tests are probably a more acceptable way of evaluating the learning of knowledge.
   a. They are usually paper-and-pencil type tests.
   b. They usually consist of several test items. Test items can be of two basic types:
      1) Recognition type--response is provided and learner must select which is the correct response.
      2) Supply type--learner must supply the response to a given statement, problem, question.

RECOGNITION TYPE TEST ITEMS

1. Description and illustration of the three most frequently used recognition type test items are:
   a. True-false items
   b. Multiple-choice items
   c. Matching items

2. True-False Test Items
   a. Advantages
      1) There can be a large number of items.
      2) A large content area can be surveyed.
      3) Scoring is rapid and easy.
4) Items are well adapted for testing situations where only two logical responses are possible.

b. Disadvantages

1) Unless item language is precise, there is chance for misinterpretation.

2) Guessing factor is 50/50. One would not recommend a test entirely composed of true-false items unless a right-wrong scoring system is used.

c. Suggestions for item construction

1) Avoid the use of specific determiners. It has been found that on most classroom tests, items which use the words 'only' - 'all' - 'no' - 'none' - 'always' - 'never' - etc., will generally be false. Items with words like 'could' - 'might' - 'can' - 'may' and 'generally' will usually be true.

2) Base true-false items upon statements that are absolutely true or false, without qualifications or exceptions.

3) Avoid negatively stated items when possible and all double negatives.

4) Avoid textbook statements.

5) Avoid making the true statements consistently longer than the false items, or vice versa.

6) Avoid complex sentence structure with many dependent clauses.

3. Multiple-Choice Test Items

a. Advantages

1) They yield a more reliable measure.

2) Effect of guessing is reduced.

3) Plausible incorrect alternatives can require fine discriminations.
4) They can provide valuable diagnostic information.

5) They are easy to score.

b. Disadvantages

1) Good items are difficult to construct.

2) Long statements increase reading time—can have fewer items in test.

3) It is more difficult to cover large amounts of content.

c. Suggestions for item construction

1) It is recommended that the stem be a direct question.

2) The stem should set up a clear, definite, explicit and singular problem.

3) Include in the stem any words that might otherwise be repeated in each response.

4) Avoid making the correct response systematically different from other responses.

5) If possible, the alternatives should be presented in some logical or systematic order.

6) Make all responses plausible and attractive to the less knowledgeable student.

7) The response option (none of the above) should be used with caution, if at all.

8) Each test item should stand alone. A former response should have no bearing on an item which follows it.

9) Randomly arrange the correct choice among the alternatives.

4. Matching Test Items

a. Advantages

1) Pictorial or symbolic material may be used.
2) Compact and efficient way of making a rapid survey of similar knowledges (symptoms, definitions, terminology).

b. Disadvantages

1) Not well adapted for measurement of higher order abilities.
2) Great care needed in development to avoid awkward arrangement of items.

c. Suggestions for item construction

1) Matching test items should be completed on a single page.
2) Use responses that are related but mutually exclusive.
3) Keep the number of items to be matched relatively small.
4) The number of possible responses should exceed the number of items to be matched by two or three.
5) The directions should clearly indicate the basis for matching.
6) Keep the statements in the response column short and present them in some logical order.

SUPPLY TYPE TEST ITEMS

1. Description and illustration of the two most commonly used types of supply type test items.

   a. Completion items
   b. Essay items

2. Completion Test Items

   a. Advantages

      1) Useful for checking on specific facts.
      2) "Natural" type of item--question-answer situation.
      3) Student must summarize in brief statement; easy to construct.
b. Disadvantages

1) Scoring is not completely objective.

2) Frequently items become only a matter of naming or listing.

c. Suggestions for item construction

1) Request short, definite, clear-cut and explicit answers. An indefinite question statement is likely to lead to scoring problems for instructors and response problems for students.

2) Avoid multi-mutilated statements. Preferably one response and no more than two in each test item.

3) If several correct answers are possible, equal credit should be given to each one.

4) In testing for comprehension of terms and knowledge of definitions, it is often better to provide the term and require a definition rather than provide a definition and require the term.

5) For completion items, it is generally recommended that blanks come near the end of the statement.

6) Minimize the use of textbook expressions. Causes students to memorize the exact wording of the text.

7) In general, direct questions are preferable to incomplete declarative sentences.

3. Essay Test Items

a. Advantages

1) Easy to prepare and administer.

2) Permit in-depth responses.

b. Disadvantages

1) Limited sampling of content.

2) Bluffing is possible.
3) Reliability usually quite low.
4) Very subjective and difficult to score.
5) Very time-consuming for student.
6) Very time-consuming to score.

c. Suggestions for item construction

1) Limit the problem which the question poses so that it will have the same meaning to most students.
2) Use words which will convey clear meaning to the student.
3) Prepare enough questions to sample the course content broadly, within a reasonable time limit.
4) Use an essay question for the purposes it best serves, i.e., organization, handling complicated ideas.
5) Prepare questions which require considerable thought, but which can be answered in relatively few words.
6) Determine in advance how much weight will be accorded each of the various elements expected in a complete answer.
7) Without knowledge of students' names, score each question for all students.
8) Require all students to answer all questions on the test.
9) Do not construct a test consisting of only one essay question.

TEST CONSTRUCTION, ADMINISTRATION AND SCORING

1. The design and construction of a written test involves several steps.
   a. Review instructional objectives--select those which involve cognitive learning.
   b. Examine course content relevant to objectives.
   c. List topics of subject matter related to each objective.
d. Determine which type of test item is best for subject matter topics.

e. Construct one or more test items for each instructional objective.

f. Sample content widely for comprehensiveness.

g. Assemble the test, first group by item types, then arrange so that related items are together.

h. Write clear directions for each type of item in test.

i. Construct the key.

j. Reproduce test for administration.

k. Administer test.

l. Score test.

INTERPRETATION OF TEST RESULTS

1. Raw test scores are rather meaningless in themselves. They must be transposed into some form of unit that has meaning to the student.

2. Percentages are frequently used as the form for reporting test scores. Scores reported in percentage form are relatively easily understood by most persons.

3. The instructor must examine the test results in terms of how well the students achieve the objectives of the lesson(s). He must decide the lowest passing score.

4. Scores at and above the minimum passing score receive a passing grade. Those below do not receive a passing grade.

5. Those not receiving a passing grade should be informed of the objectives that they have not yet achieved at the minimum performance level.

UTILIZATION OF TEST RESULTS

1. Analysis of test item failures for purposes of:

   a. Evaluating student achievement.
b. Evaluating the learning environment.

c. Evaluating the instructor.

2. Use of the test results to improve instruction.

SUMMARY AND QUESTIONS

1. Summary of main points.

2. Class questions or comments.
Objectives: Provide enrollees with an opportunity to teach segments of the CIM lesson plans.

OBJECTIVES

1. Brief explanation of objectives of the workshop.

PROCEDURES

1. Each enrollee with a practice teaching assignment will devote approximately 15 minutes to practice teaching.

2. Other enrollees will serve as "students" during the practice teaching session.

3. Each practice teaching session will be followed by a 15-minute critique in which the instructor and enrollees evaluate the presentation and suggest means for improving it, as appropriate.

4. Enrollees will indicate in their copies of the CIM Instructor's Lesson Plans examples of good teaching techniques learned from the lesson presentation and critique.

5. When all practice teaching workshops for a given CIM lesson have been completed, the instructor will review the entire lesson contents and discuss applicable teaching techniques.
UNIT 15

COURSE PLANNING CONSIDERATIONS

Objectives: Review the following course planning considerations:

- Student characteristics
- Instructor characteristics
- The facility
- The course
  - Class size
  - Course scheduling

Explain how the four-step process was applied to the
CIM Instructor's Lesson Plans

Explain how the four-step process was applied to the
CIM Instructor Training Institute

OBJECTIVES

1. Brief explanation of the objectives of the unit of instruction.

2. Indication to enrollee that he will find details for this session in the
   Course Guide.

COMPONENTS OF THE LEARNING ENVIRONMENT

1. Review the four components of the learning environment as discussed
   in a previous lesson, e.g.:

   a. Students
   b. Instructor
   c. Facility
   d. Course

2. Indication that each of these elements will be discussed in turn since
   they are the elements to be considered in course planning.
THE STUDENT

1. In the long term, students for this course are expected to be recruits with qualifications that conform to established jurisdictional requirements.

2. In the short term, it is expected that students will be law enforcement officers with varying lengths of service. It is also expected that several may have completed varying types of emergency medical care courses.

3. Therefore, although not designed as a refresher course, the course can initially serve for both new recruits and experienced officers.

4. It should be pointed out that the course need not be given only to law enforcement officers. As stated previously, it was designed for "first responders" to traffic accidents. As such, it is applicable to all individuals who might be the first person at an accident scene. In this regard, only the first lesson and the field training sessions refer specifically to law enforcement officers. These lessons could be easily adapted to other groups.

THE INSTRUCTOR

1. As stated previously, it was a contract directive that the course be designed to be given by a single instructor who is other than a physician.

2. Assistants would be required only for supervising skill practice sessions when classes are large.

3. The lead instructor should have the following qualifications:
   a. He should be experienced in traffic accident emergency medical care services.
   b. He should be thoroughly knowledgeable in all topics and skills covered in the course.
   c. He should be familiar with all jurisdictional laws and procedures relative to handling the injured on the highway.
   d. He should be experienced in teaching all topics and skills covered in the course.

Note: In addition to the preceding qualifications, it is considered desirable for the instructor to have completed the 81-hour basic training program for emergency medical technicians or its equivalent,
4. Although not a course requirement, it is considered especially desirable for the instructor to have a "resource" physician, preferably an emergency department physician. Although such an individual would not be required to teach any topics and would not be formally associated with the course, he could consult with the instructor if medical questions arose that were beyond the capability of the instructor to answer.

FACILITY

1. Facilities for the course include a classroom and space for field training.

2. The classroom should be large enough to accommodate the expected number of students comfortably and to provide adequate space for skill practice in small groups.

3. For field training, a garage, armory or other space that would accommodate a vehicle would be adequate. Field training could also be conducted outdoors in a parking lot or other area that is protected from the general public.

THE COURSE

1. The course includes much more than just the curriculum package that has been handed out to enrollees.

2. The instructor must also do the following:
   a. Determine optimum class size.
   b. Schedule the course lessons.
   c. Prepare each lesson and obtain all necessary references, equipment and supplies.

3. Only class size and course scheduling will be discussed below since lesson preparation has been extensively covered in other lessons of this instructor training institute.

4. Class size
   a. Since the course emphasizes skill demonstration and practice and maximum student participation, the class size must of necessity be small.
b. For classroom lecture-discussion sessions, it is recommended that class size be limited to 20 students.

c. For practice periods and field training, class size will be limited by the availability of equipment and the availability of assistant instructors to supervise skill practice. In general, it is recommended that there be no more than 10 students for each instructor during practice periods.

d. If there are fewer instructors or equipment than recommended, additional time will be required for training--refer enrollees to the material and equipment requirements specified for each lesson and shown on Page 17 of the Course Guide.

COURSE SCHEDULING

1. The course has been designed in modular units so that it can be:

   a. Given one or more times per week in lessons lasting from 1 to 3 hours, or
   b. Organized into a 7- or 8-hour training day and given in a period of 5 or 6 days.

2. The course can therefore be interspersed with other training in a basic recruit course or given as a "specialist" type course in a sequential and compressed time frame.

3. Two sample schedules in the Course Guide (Pages 14 and 15) indicate two approaches to scheduling of lessons when the course is given in compressed time frames of 5 or 6 training days.

4. Each schedule shows a logical progression of lessons as follows:

   a. Introductory material--lessons providing an introduction to the course and overview of the human body and diagnostic signs.

   b. Life-threatening emergencies, wounds and fractures--lessons covering airway care and pulmonary resuscitation, cardio-pulmonary resuscitation, bleeding, shock, soft tissue injuries, and fractures to various body parts.

   c. Integration and review of course contents--lessons covering patient examination and triage (designed to integrate all signs, symptoms and means of examinations for various illnesses and injuries), two field training sessions, a verbal situational
review of various accident situations that attempt to integrate course knowledge, and additional practice on cardiopulmonary resuscitation.

d. Final written and practical examinations.

5. Go through each schedule indicating how the four-step process was applied within and between lessons.

a. Preparation

1) The first lesson "sets the scene" for the course by providing an overview of the training course and the rescuer's roles and responsibilities and legal aspects relative to emergency care at the accident scene.

2) Each additional lesson starts with a full discussion of the objectives of the lesson and the need for the specific training provided.

b. Presentation. Lessons utilize a variety of teaching techniques, for example:

1) Lecture
2) Discussion
3) Question and answer sessions
4) Demonstration
5) Student practice
6) Visual aids

c. Application

1) For each lesson in which a new skill is introduced, practice in that skill is provided.

2) During skill practice, a constant review of the main points of the lesson is conducted by the instructor through questions and answers.

3) In individual lessons, application of knowledge should be accomplished through a question and answer period.

4) Additional application of knowledge is provided through homework study of selected sessions in the Student Study Guide and subsequent review of this homework in the review and discussion sessions.
5) As discussed previously, additional practice with skills is provided for in lessons dealing with cardiopulmonary resuscitation, situational reviews and field training.

d. Evaluation

1) Students are evaluated informally during all class sessions.

2) Provision is made for final written tests of knowledge and practical evaluation of skills.

6. Additional comments on the four-step process relative to the current CIM Instructor Training Institute:

a. Preparation

1) The first lesson on Monday morning provided an overview of the institute and "set the scene" for the week's course.

2) Each lesson was introduced with a discussion of the objectives of the lesson.

b. Presentation. A variety of instructional techniques was used, for example:

1) Lecture-discussion sessions
2) Demonstration sessions
3) Visual aids
4) Workshops

c. Application

1) Each enrollee has had or will have a variety of opportunities to apply what he has learned through:

- Question and answer sessions within lessons
- Practice teaching workshops
- Developing simple instructional aids
- Developing checklists for skill evaluation
- Developing written test items--scheduled for Thursday afternoon
- Presenting written test items to the class--scheduled for Thursday afternoon

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Conducting a verbal evaluation of how well the class has assimilated institute principles--scheduled for Friday morning

2) In addition, selected enrollees have done the following:
   - Led the critique for a practice teaching session
   - Led the discussion on a CIM skill checklist

3) In summary, the prime purpose of this series of institutes is instructor training. In this regard:
   - Each enrollee will have three opportunities to "be in front of the class" in some sort of a teaching capacity.
   - Selected enrollees will have four or five opportunities to be "in front of the class."
   - In addition to the teaching opportunities provided, each enrollee has had or will have an opportunity to develop some of the "tools" of the teaching trade, for example, visual aids, skill checklists, and written test items.

d. Evaluation

1) Each enrollee's practice teaching session is critiqued.
2) Enrollee's skill checklists and written test items are critiqued.
3) Enrollee's assimilation of institute principles will be evaluated by other enrollees on Friday morning.

e. Summary. Although the preceding comments refer to the present institute and not to CIM training, it was felt that a review of how the four-step process was applied to the development of this institute would assist enrollees in their future teaching efforts.

SUMMARY AND QUESTIONS

1. Summary of main points.
2. Class questions or comments.
UNIT 16

PRACTICE TEACHING WORKSHOP
(3 enrollees)

Objectives: Provide enrollees with an opportunity to teach segments of the CIM lesson plans

OBJECTIVES

1. Brief explanation of objectives of the workshop.

PROCEDURES

1. Each enrollee with a practice teaching assignment will devote approximately 15 minutes to practice teaching.

2. Other enrollees will serve as "students" during the practice teaching session.

3. Each practice teaching session will be followed by a 15-minute critique in which the instructor and enrollees evaluate the presentation and suggest means for improving it, as appropriate.

4. Enrollees will indicate in their copies of the CIM Instructor's Lesson Plans examples of good teaching techniques learned from the lesson presentation and critique.

5. When all practice teaching workshops for a given CIM lesson have been completed, the instructor will review the entire lesson contents and discuss applicable teaching techniques.
UNIT 17
WORKSHOP: DEVELOPING WRITTEN TESTS

Objectives: Provide each enrollee with the opportunity to develop a variety of written test items and checklists for skill evaluation.

OBJECTIVES
1. Brief explanation of objectives of the unit of instruction.

TEST ITEM DEVELOPMENT
1. Each enrollee should be provided with transparencies.
2. Each enrollee should develop test items that satisfy the objectives of the CIM lesson segment he presented to the class.
3. The sampling of test items should include as many of the following types as possible:
   a. True-false
   b. Multiple choice
   c. Matching
   d. Completion
   e. Essay
4. He should write these test items on transparencies for subsequent viewing and discussion by the class.

TEST ITEM PRESENTATION AND DISCUSSION
1. Each student should present and display his test items to the class on the overhead projector.
2. All enrollees should discuss and evaluate the test items according to the principles presented in the earlier unit of instruction.
UNIT 18
ASSIMILATION PLANNING

Objectives: Make enrollee assignments for Unit 19 and explain procedures to be followed in conducting that unit.

OBJECTIVES

1. Brief explanation of objectives of the unit of instruction.

ASSIGNMENTS FOR ASSIMILATION UNIT (UNIT 19)

1. Referring to the Assimilation Assignment Sheet, the instructor should assign one or more of the institute sessions or subsessions to each enrollee.

PROCEDURES

1. Enrollees are not to review the institute materials themselves; rather their responsibility is to determine if the class has assimilated the material.

2. Their performance in Unit 19 should be considered similar to the evaluation part of a 4-step lesson—all evaluation should be oral.

3. Each enrollee should take no more than 5 minutes to assess class assimilation of contents of the institute session or subsession assigned to him.

4. The instructor should make sure that each enrollee thoroughly understands what he is to do in Unit 19.
UNIT 19

ASSIMILATION OF INSTITUTE PRINCIPLES

Objectives: Provide each enrollee with an opportunity to evaluate whether selected principles taught at the institute have been assimilated by the class.

OBJECTIVES
1. Brief explanation of objectives of the unit of instruction.
2. Remind enrollees that each is to spend no more than five minutes on his particular section.

ENROLLEE EVALUATION
1. Each enrollee orally questions his class members to determine if selected institute principles have been assimilated.
2. The instructor should remain in the front of the class for this session, since he is expected to be "on and off stage" frequently.
3. The instructor is also responsible for covering all topics not assigned to a student.
4. At the completion of each student's "presentation," the instructor should reemphasize all major points, and add anything that the student may have omitted.
5. While each enrollee is evaluating the class, the instructor should help him only if he needs help, that is, if he accepts an incorrect or questionable statement from another class member.
UNIT 20
FORMS COMPLETION AND CERTIFICATE PRESENTATION

Objectives:

1. Obtain information on the enrollee and his CIM training program plans.
2. Obtain enrollee comments and opinions on the value of the institute and their suggestions for improving the institute.
3. Have enrollees complete reimbursement forms.
4. Award institute completion certificates.

OBJECTIVES

1. Brief explanation of objectives of the unit.

CIM TRAINING PROGRAM

1. Enrollee completion of CIM training program information form.

INSTITUTE EVALUATION

1. Enrollee completion of evaluation forms.
2. Enrollee comments on institute, as appropriate.

REIMBURSEMENT FORM

1. Review of procedures for forms completion.
2. Enrollee completion of forms.

AWARD OF COMPLETION CERTIFICATES

1. Distribution of NHTSA CIM Instructor Training Institute completion certificates.

Time: 1-1/2 hr.
APPENDIX D

Institute Forms and Handouts

- Workshop Assignments
- Workshop Checklist
- Assimilation Assignment Sheet
- Reimbursement Form
- CIM. Training Program Information Form
- Institute Evaluation Form
<table>
<thead>
<tr>
<th>Enrollee</th>
<th>Lesson Segment</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1. Roles and responsibilities (Lesson 1, pp. 1-2 to 1-3)</td>
</tr>
<tr>
<td></td>
<td>2. Diagnostic signs (Lesson 2, pp. 2-6 to 2-9)</td>
</tr>
<tr>
<td></td>
<td>3. The Respiratory System, Signs of Adequate and Inadequate Breathing and Maintaining an Open Airway (Lesson 3, pp. 3-4 to 3-9)</td>
</tr>
<tr>
<td></td>
<td>4. Pulmonary Resuscitation (Lesson 3, pp. 3-9 to 3-11)</td>
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<tr>
<td></td>
<td>5. The Laryngectomee (Lesson 3, pp. 3-15 to 3-16)</td>
</tr>
<tr>
<td></td>
<td>6. The Heart and Signs of Cardiac Arrest (Lesson 4, pp. 4-3 to 4-4)</td>
</tr>
<tr>
<td></td>
<td>7. Cardiopulmonary Resuscitation (Lesson 4, pp. 4-4 to 4-6)</td>
</tr>
<tr>
<td></td>
<td>8. Shock (Lesson 5, pp. 5-4 to 5-7)</td>
</tr>
<tr>
<td></td>
<td>9. Bleeding (Lesson 5, pp. 5-7 to 5-9)</td>
</tr>
<tr>
<td></td>
<td>10. Injuries to Tissues and Internal Organs (Lesson 5, pp. 5-9 to 5-14)</td>
</tr>
<tr>
<td></td>
<td>11. General Concepts of Fractures and Dislocations (Lesson 6, pp. 6-4 to 6-7)</td>
</tr>
<tr>
<td></td>
<td>12. General Principles of Splinting (Lesson 6, pp. 6-7 to 6-9)</td>
</tr>
<tr>
<td></td>
<td>13. Splinting the Upper Extremity (Lesson 6, pp. 6-9 to 6-11)</td>
</tr>
<tr>
<td></td>
<td>14. Splinting the Lower Extremity (Lesson 6, pp. 6-12 to 6-13)</td>
</tr>
<tr>
<td></td>
<td>15. Injuries to the Head (Lesson 7, pp. 7-6 to 7-8)</td>
</tr>
<tr>
<td></td>
<td>16. Injuries to the Spine (Lesson 7, pp. 7-8 to 7-10)</td>
</tr>
<tr>
<td></td>
<td>17. Injuries to the Chest and Pelvis (Lesson 7, pp. 7-10 to 7-11)</td>
</tr>
<tr>
<td></td>
<td>18. Heart Conditions and Stroke (Lesson 8, pp. 8-2 to 8-5)</td>
</tr>
<tr>
<td></td>
<td>19. Diabetes and Epilepsy (Lesson 8, pp. 8-5 to 8-8)</td>
</tr>
<tr>
<td>Enrollee</td>
<td>Lesson Segment</td>
</tr>
<tr>
<td>---------</td>
<td>----------------</td>
</tr>
<tr>
<td>_______</td>
<td>20. Ingested Poisons, Inhaled Poisons, Bites and Stings (Lesson 9, pp. 9-2 to 9-4)</td>
</tr>
<tr>
<td>_______</td>
<td>21. Alcohol (Lesson 9, pp. 9-4 to 9-6)</td>
</tr>
<tr>
<td>_______</td>
<td>22. Drugs (Lesson 9, pp. 9-6 to 9-9)</td>
</tr>
<tr>
<td>_______</td>
<td>23. Burns (Lesson 10, pp. 10-3 to 10-5)</td>
</tr>
<tr>
<td>_______</td>
<td>24. Exposure to Heat and Cold (Lesson 10, pp. 10-5 to 10-8)</td>
</tr>
<tr>
<td>_______</td>
<td>25. Emergency Childbirth (Lesson 11--enrollee selects and prepares his own lesson)</td>
</tr>
<tr>
<td>_______</td>
<td>26. Gaining Access to the Patient (Lesson 12, any 15-minute segment)</td>
</tr>
<tr>
<td>_______</td>
<td>27. Moving Patients (Lesson 13, any 15-minute segment)</td>
</tr>
<tr>
<td>_______</td>
<td>28. Patient Examination (Lesson 14, pp. 14-5 to 14-9)</td>
</tr>
<tr>
<td>_______</td>
<td>29. Triage (Lesson 14, pp. 14-9 to 14-10)</td>
</tr>
</tbody>
</table>
CRASH INJURY MANAGEMENT
PRACTICE TEACHING WORKSHOP CHECKLIST

<table>
<thead>
<tr>
<th>Points to be Considered</th>
<th>Remarks</th>
</tr>
</thead>
</table>

**TEACHER PREPARATION**

1. Did he appear to have everything planned—to know what he was doing?
2. Were equipment and materials in readiness?

**STUDENT PREPARATION**

1. Was the group put at ease? Was this done naturally or was it overdone?
2. Did he give an introduction to his topic? Was it clear? Did everyone know the objectives of the unit of instruction?

**PRESENTATION**

1. Was the presentation clear, understandable, complete?
2. Did the instructor jump about or backtrack?
3. Could you follow the steps?
4. Were all key points brought out sharply?
5. Did the instructor know his subject?
6. Did he use any available visual aids effectively?

**APPLICATION**

1. Did he involve the class in his presentation by having the learners respond to questions or explain key points?
2. Did he compliment and correct the learner as appropriate?

**EVALUATION**

1. Did the instructor achieve his objective?
2. Did the instructor help the learner achieve his objective?
ASSIMILATION ASSIGNMENT SHEET

CIM COURSE DESCRIPTION

1. Purpose of course
2. Relationship to other emergency medical care training
3. Course coverage

CIM COURSE DOCUMENTS

1. For each document--Course Guide, Instructor's Lesson Plans and Student Study Guide--
   a. Purpose
   b. Intended user
   c. General content

TEACHING-LEARNING PROCESS

1. Definitions of teaching and learning
2. Senses through which we learn
3. Domains of learning and order of development
4. Cone of experience
5. Components of the learning environment
6. Phases in the teaching-learning process
   a. Preparation
   b. Presentation
   c. Application
   d. Evaluation

INSTRUCTIONAL AIDS

1. Purposes and uses of instructional aids
2. Hints for using:
   a. Chalkboards and chart pads
   b. Prepared charts
   c. Slides and film strips
   d. Overhead transparencies
   e. Films
TEACHING INFORMATION LESSONS

1. Qualities of a good instructor
2. Questioning techniques
3. Hints for conducting information lessons

DEVELOPING AND EVALUATING CIM SKILLS

1. The four-step process applied to skill development
   a. Preparation--task analysis
   b. Presentation--instructor description and demonstration
   c. Application--student practice to some degree of perfection
   d. Evaluation--design and use of skill checklists

EVALUATING KNOWLEDGE

1. Recognition test items--advantages, disadvantages and suggestions for item construction
   a. True false test items
   b. Multiple-choice test items
   c. Matching test items

2. Supply type test items--advantages, disadvantages and suggestions for item construction
   a. Completion test items
   b. Essay test items

COURSE PLANNING CONSIDERATIONS

1. Student qualifications
2. Instructor qualifications
3. Facility
4. Class size
5. Course scheduling
REIMBURSEMENT FORM

Name: __________________________
Address: _________________________

Institute location: __________________

Dates: from ______ to ______

AIR TRAVEL

Home to Airport: Limousine/taxi
Car (____ miles at 10¢/mile)

Air Economy: (supported by receipt)

Airport to Hotel: Limousine/taxi

Hotel to Airport: Limousine/taxi

Airport to Home: Limousine/taxi
Car (____ miles at 10¢/mile)

GROUND TRAVEL

Home to Hotel: (____ miles at 10¢/mile)

Hotel to Home: (____ miles at 10¢/mile)

Tolls: (supported by receipt)

To and from classes: (____ miles at 10¢/mile)
[at selected sites only]

SUBSISTENCE

Hotel: Room, supported by receipt (max.: 5 days)

Plus $10.00 per day (max.: 5 days)

TOTAL

LOCAL COMMUTERS ONLY:

Subsistence: $2.50 per day (max.: 5 days)

To and from classes: (____ miles at 10¢/mile)

TOTAL

APPROVED: ________________________
Institute Instructor

(Enrollee signature)

A. M. Cleven D-7
CIM TRAINING PROGRAM INFORMATION FORM

1. Do you currently teach an emergency medical care course?
   — Yes   No
   If "yes:" Name of course:
   Length of course (in hours):
   Who are your students (please be specific, that is, "local police department," "state police recruits")?

2. Do you currently feel that you are qualified to teach the CIM course?
   — Yes   No
   If "yes," please list all training you have taken that you believe qualifies you to teach the CIM course:
<table>
<thead>
<tr>
<th>Course Taken</th>
<th>Location</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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</tr>
</tbody>
</table>
   If "no," please indicate below your specific needs before you feel you will be qualified:
   _____ Additional medical knowledge or skills; please specify
   _____ Certification by Heart Association as CPR instructor
   _____ Other, please specify

3. Are there other individuals in your organization who are qualified to teach the CIM course?
   — Yes   No
   If "yes," how many are there?
4. Do you feel your organization will use the CIM course in its future teaching efforts?

- [ ] All of it
- [ ] Some of it
- [ ] None of it
- [ ] Don't know

5. If you expect that your organization will use all or some of the CIM course, do you feel that you will personally be involved in CIM training?

- [ ] Yes
- [ ] No
- [ ] Don't know
CIM INSTITUTE EVALUATION

The purposes of this institute were to introduce you to the NHTSA Crash Injury Management curriculum package and to provide you with some of the fundamentals of teaching. In order to assist us in improving this and future series of institutes, we would appreciate your answering the questions below.

Curriculum Package

____ Yes _____ No  Was the information presented on the design and development of the CIM training program adequate?

If "no," what was missing?

____ Yes _____ No  Would you like to have had more emphasis on some of the documents or lessons?

If "yes," which ones?

____ Yes _____ No  Would you like to have had less emphasis on some of the documents or lessons?

If "yes," which ones?

Teaching Methodology

____ Yes _____ No  Was the information presented on teaching methodology adequate?

If "no," what was missing?
Teaching Methodology - cont'd

_____ Yes _____ No  Would you like to have had more emphasis in some teaching areas?

If "yes," what areas?

_____ Yes _____ No  Would you like to have had less emphasis in certain teaching areas?

If "yes," what areas?

Institute Planning and Facilities

_____ Yes _____ No  Did you know what was expected of you prior to the start of the institute, that is, did the Dunlap memo to you fully explain institute coverage and procedures?

If "no," what was missing or unclear?

If you did not receive the memo, check here _____

_____ Yes _____ No  Were the classroom facilities adequate?

If "no," please explain.

_____ Yes _____ No  Were the lodgings adequate?

If "no," please explain.
**Institute Content Rating**

Please rate the institute topic coverage, the workshops and the entire institute program according to their value to you by placing an "x" in one of the four boxes at the left below.

<table>
<thead>
<tr>
<th>Topic Coverage</th>
<th>Somewhat Valuable</th>
<th>Quite Valuable</th>
<th>Very Valuable</th>
</tr>
</thead>
<tbody>
<tr>
<td>Design and use of the CIM documents</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Domains of learning--knowledge, skills, attitude</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The 4-step process--preparation, presentation, application, evaluation</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Designing and using instructional aids</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Qualities of a good instructor</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Questioning techniques</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Developing CIM skills</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Use of checklists for skill evaluation</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Developing written test items</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Institute Workshops</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Lesson planning and developing instructional aids</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Developing written tests</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Practice teaching workshop--your own</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Practice teaching workshop--other enrollees</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Entire Institute</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The institute as a whole</td>
<td></td>
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</tbody>
</table>

**Additional Comments**

Please add any additional comments that will help clarify your ratings or will assist us in improving our institutes.
APPENDIX E

Enrollment Memoranda

- Memorandum to NHTSA regions
- Memorandum to states
- Preferred enrollment form
- Open enrollment form
- Memorandum to enrollees
MEMORANDUM

DATE: 15 February 1974

TO: Regional Administrator
NHTSA Region

FROM: A. M. Cleven
Dunlap and Associates, Inc.

SUBJECT: Initiation of Enrollment for "Instructor Training Institutes for NHTSA Curriculum Package: Emergency Medical Services--Crash Injury Management for Traffic Law Enforcement Officers" (Contract No. DOT-HS-4-00847)

Paragraphs:
1. Purpose of Memorandum
2. Background
3. Purpose of Instructor Training Institutes
4. Sites and Dates of Institutes
5. Procedures for Enrollment
6. Distribution of Attachments

Attachments:
1. "Crash Injury Management Instructor Training Institute"--description of the institute, the curriculum package, enrollment procedures, and forms for submitting names of instructor candidates--one set of materials for each state in the region
2. Crash Injury Management Course Guide--one for each state in the region

1. Purpose of Memorandum. This memorandum is submitted for purposes of initiating the enrollment process for a series of five institutes which will train instructors to teach the new NHTSA curriculum package: "Crash Injury Management for Traffic Law Enforcement Officers." The memorandum includes a set of attachments for distribution to each state in your region.

2. Background. During 1973, NHTSA supported the development of a training program in emergency medical care for first responders to traffic accidents.
Such individuals are expected to be traffic law enforcement officers patrolling the roadway in patrol vehicles. The study resulted in a 40-hour course and a curriculum package consisting of three documents: a Course Guide developed to aid the training administrator in planning the course, detailed Instructor's Lesson Plans for each lesson unit, and a Student Study Guide designed as an exercise book to assist students in reviewing information presented in class. The 40-hour Crash Injury Management course was based on the previously developed 81-hour NHTSA course entitled "Basic Training Program for Emergency Medical Technician--Ambulance."

3. **Purpose of Instructor Training Institute.** In order to assist states in making the Crash Injury Management training program operational, NHTSA is supporting the conduct of five regional instructor training institutes. Each institute will be five days in length and will include 30 hours of instructor training. The program will have a dual purpose: 1) to explain the curriculum package in detail to potential instructors, and 2) to train potential instructors in the methodology of teaching pertinent to the curriculum package. The institute emphasis is on the methodology of teaching and not on techniques of emergency care.

4. **Sites and Dates of Institutes.** The site of each of the five regional institutes has been selected and a starting date scheduled to accommodate a variety of conditions. Among these are: 1) distances from selected students (15 at each site), 2) schedule of the host training facility and equipment availability, 3) reservations for lodgings, and 4) availability of instructor trainers. In most cases, institutes will be held in a suburb of the metropolitan area listed on the "preferred" enrollment form (see attachments). Transportation to and from the airport and the place of lodging is available.

5. **Procedures for Enrollment**

   a. Fifteen enrollees will be accepted at each site for a total national enrollment of 75 instructor candidates. It is intended to accept as enrollees only individuals: 1) who have completed the 81-hour "Basic Training Program for Emergency Medical Technician--Ambulance" or its equivalent, and 2) who will be actively involved as on-line instructors of emergency care training in their respective jurisdictions.

   b. Each of the 50 states plus Puerto Rico and the District of Columbia have been assigned to one of the five institutes on the basis of proximity of the state to the institute site. One opening will be reserved for each state at its assigned institute site. The candidate nominated by his state for this assigned opening will be known.
as the state's "preferred" candidate. His place at the assigned institute will be reserved until March 11.

c. The remaining 23 institute openings (75 total minus 52 "preferred" enrollees) and any "preferred" enrollment openings not claimed by March 11 will be filled by "open" enrollment candidates. Each state may submit as many candidates for "open" enrollment as it wishes. "Open" enrollees will be accepted on a first-come, first-served basis with the exception, of course, that an attempt will be made to distribute available seats equitably among interested states. They will be assigned to the closest institute site at which there is a vacancy.

d. Candidates are considered accepted as enrollees only upon receipt of confirmation by Dunlap and Associates, Inc.

e. The institute site to which each state in your region has been assigned is listed below. As stated above, one opening has been reserved at that site for the state's "preferred" candidate. Additional openings at each institute site will be filled by "open" enrollment candidates.

6. Distribution of Attachments. A set of attachments is provided for distribution to the Governor's Highway Safety Representative of each state in your region.
Description of Curriculum

NHTSA sponsored the development, documentation and pilot test of a training program in crash injury management. The course was developed to provide training in emergency medical care for first responders to traffic accidents. Such individuals are expected to be law enforcement officers patrolling the nation's highways and roads in patrol vehicles. They are therefore not emergency medical technicians who serve as drivers and attendants on ambulances, nor are they rescuers equipped with sophisticated extrication equipment.

The major responsibility of the first person at the scene will be to stabilize the patient's condition and care for him until local ambulance emergency medical care support arrives. The course therefore covers life-threatening emergencies, crash-induced injuries, and illnesses or conditions that might either cause or result from an accident. The course emphasizes practical skills and includes field training in which students can practice in a confined environment similar to what they might experience at the traffic accident scene.

The study resulted in a 40-hour course and a curriculum package consisting of the following documents: a Course Guide developed to aid the training administrator in planning the course, detailed Instructor's Lesson Plans for each of the 20 lesson units, and a Student Study Guide designed as an exercise workbook to assist students in reviewing information presented in class. A copy of the Course Guide is attached.

Description of Instructor Training Institutes

In order to assist states in making the Crash Injury Management (CIM) training program operational, NHTSA is supporting the conduct of five regional instructor training institutes. Each institute will be five days in length and will include 30 hours of instructor training. The program will have a dual purpose: 1) to explain the curriculum package in detail to potential instructors, and 2) to train potential instructors in teaching methodology pertinent to the curriculum package.

The course will include sessions on the design, development and use of the CIM curriculum package, the teaching-learning process as applied to the CIM
course, teaching information lessons, developing CIM skills, developing and using appropriate instructional aids; and developing measures for evaluating CIM knowledge and skills. Each instructor candidate will present a lesson segment of the CIM course to the class. The institute emphasis is on the methodology of teaching and not on techniques of emergency care. A copy of the tentative schedule for the institute is attached.

Two instructors will teach at each of the five institutes. An educator from Central Connecticut State College will lead all sessions devoted to educational methodology. An instructor from Dunlap and Associates, Inc., will lead all sessions concerned with design, development and use of the CIM curriculum package.

Enrollees will be reimbursed for travel and living expenses. Enrollees will submit a reimbursement voucher on the last day of the institute and will be reimbursed by mail within two weeks after submission of the voucher. Reimbursement will be permitted for costs of the most practical means of travel and for actual costs of the accommodation in which the enrollee is lodged while attending the institute. The enrollee will also be given a daily allowance for food.

Procedures for Enrollment

1. Fifteen enrollees will be accepted at each site for a total national enrollment of 75 instructor candidates. It is intended to accept as enrollees only individuals: 1) who have completed the 81-hour "Basic Training Program for Emergency Medical Technician--Ambulance" or its equivalent, and 2) who will be actively involved as on-line instructors of emergency care training in their respective jurisdictions.

2. Each of the 50 states plus Puerto Rico and the District of Columbia have been assigned to one of the five institutes on the basis of proximity of the state to the institute site. One opening will be reserved for each state at its assigned institute site. The candidate nominated by his state for this assigned opening will be known as the state's "preferred" candidate. His place at the assigned institute will be reserved until March 11.

3. A place has been reserved for the "preferred" candidate at the following institute:

   Location:
   Dates:
4. The remaining 23 institute openings (75 total minus 52 "preferred" enrollees) and any "preferred" enrollment openings not claimed by March 11 will be filled by "open" enrollment candidates. Each state may submit as many candidates for "open" enrollment as it wishes. "Open" enrollees will be accepted on a first-come, first-served basis with the exception, of course, that an attempt will be made to distribute available seats equitably among interested states. "Open" enrollees will be assigned to the closest institute site at which there is a vacancy.

5. Enrollment forms for "preferred" and "open" candidates are attached. Only one "preferred" enrollment form should be submitted from any one state. If several "open" enrollment candidates wish to apply, the "open" enrollment form should be duplicated and one form should be submitted for each candidate.

6. Application for enrollment should be mailed in the enclosed envelope directly to:

   A. M. Cleven
   Dunlap and Associates, Inc.
   One Parkland Drive
   Darien, Connecticut 06820

7. Confirmation of enrollment will be made by Dunlap and Associates, Inc., directly to the "preferred" or "open" candidate. No candidate should be considered accepted until direct confirmation from Dunlap and Associates, Inc., is received. Upon acceptance, the enrollee will also receive detailed instructions regarding arrangements and reimbursement procedures for the institute site to which he is assigned.

Attachments:  
1. CIM Course Guide
2. CIM Tentative Institute Schedule
3. "Preferred" enrollment application form
4. "Open" enrollment application form
5. Return envelope
APPLICATION FOR ENROLLMENT: CRASH INJURY MANAGEMENT INSTRUCTOR TRAINING INSTITUTE

Institute Site and Date

Location: ___________________________ Dates: ___________________________

Applicant Name and Address

Name: ____________________________________________

Job function: ______________________________________

Place of employment: _______________________________

Business address: (Street & No.) _______________________

(City) (State) (Zip)

Business phone: ________________________________

Applicant Experience

____ Yes  ____ No Have you completed the 81-hour Basic Training Program for Emergency Medical Technician—Ambulance?

If "yes," please give the following:

Course location: ___________________________ Date completed: __________________

Name of training administrator: _______________________

If "no," please list below any emergency care courses you have completed that singly or in combination make your training equivalent to that provided by the 81-hour course. (Use reverse side if more space is required.)

Name of course: ___________________________ Date completed: __________________

__________________________________________

__________________________________________

__________________________________________

Applicant Training Plans

____ Yes  ____ No Are you currently scheduled to be an instructor in emergency medical care?

If "yes," please indicate the name of the course, when you expect your training to begin, and where you will be giving the course:

Name of course: ___________________________ Date: __________________

Location: ________________________________

Signature: _________________________________
RETURN TO:  
A. Cleven  
Dunlap & Assoc., Inc.  
1 Parkland Dr.  
Darien, CT 06820  

APPLICATION FOR ENROLLMENT:  
CRASH INJURY MANAGEMENT  
INSTRUCTOR TRAINING INSTITUTE  

Applicant Name and Address  
Name:  
Job function:  
Place of employment:  
Business address:  
Business phone:  

Applicant Experience  
____ Yes  ____ No  Have you completed the 81-hour Basic Training Program for Emergency Medical Technician—Ambulance?  
If "yes," please give the following:  
Course location:  Date completed:  
Name of training administrator:  
If "no," please list below any emergency care courses you have completed that singly or in combination make your training equivalent to that provided by the 81-hour course. (Use reverse side if more space is required.)  

Name of course:  Date completed:  

Applicant Training Plans  
____ Yes  ____ No  Are you currently scheduled to be an instructor in emergency medical care?  
If "yes," please indicate the name of the course, when you expect your training to begin, and where you will be giving the course:  
Name of course:  Date:  
Location:  

Signature:  

MAKE MULTIPLE COPIES OF THIS FORM IF MORE THAN ONE APPLICANT'S NAME IS SUBMITTED. SUBMIT ONE FORM FOR EACH APPLICANT.
DATE: 11 March 1974

TO: Attendees, Crash Injury Management Instructor Training Institute--New Britain, Connecticut

FROM: A. M. Cleven
Dunlap and Associates, Inc.

SUBJECT: Institute Arrangements

Date and Place of Institute

A place has been reserved for you to attend the CIM Instructor Training Institute being given at Central Connecticut State College, New Britain, Connecticut, from April 1 through April 5, 1974. This is the first of five such regional institutes to be given throughout the United States.

The Institute will be conducted daily from 8:30 a.m. to 4:30 p.m., except for Friday when classes will end at noon. Classes will meet in Room 401, The Elihu Burritt Library, Well Street, New Britain, Connecticut.

Lodgings

A block of rooms has been reserved at the Howard Johnson's Motel in New Britain for Institute attendees. The cost of single accommodations is $15.00 per day plus tax. If you wish to stay at the motel, please make your own reservations by contacting Mr. Robert Hadani, Howard Johnson's Motel, 65 Columbus Boulevard, New Britain, Connecticut, telephone: 203-224-9161, prior to March 20, 1974. When making your reservations, indicate that you are attending the Dunlap and Associates Crash Injury Management Instructor Training Institute. Enrollees desiring transportation to the Institute on Monday, April 1, should assemble in the lobby of the motel at 8:15 a.m.

Air Travel Facilities

Those traveling by air will arrive at Bradley Field which serves Hartford, Connecticut. Limousine service is available from Bradley to the Hilton Hotel in Hartford where a taxi may be obtained for travel to the motel in New Britain.
Institute Purpose and Coverage

The Department of Transportation recently supported the development of a training program in crash injury management. The course was designed to provide training in emergency medical care for first responders to traffic accidents. Such individuals are expected to be law enforcement officers patrolling the nation's highways and roads in patrol vehicles. A copy of the Course Guide which describes the course is attached to this memorandum. Please bring it to the Institute with you.

The purpose of the Institute is twofold: 1) to explain the crash injury management course in detail and describe all course documents, and 2) to train potential instructors how to teach the course. The Institute emphasis is on the methodology of teaching and not on techniques of emergency care. A copy of the tentative schedule for the Institute is attached.

Institute Instructors

The Institute will be taught by two instructors. An educator from Central Connecticut State College will lead all sessions on teaching methodology. An instructor from Dunlap and Associates will lead all sessions concerned with the design, development and use of the crash injury management course and course documents.

Reimbursement Policies

Reimbursement policies are given below:

Transportation

Attendees will be reimbursed for one of the following, whichever is cheaper or more convenient:

1) Air travel—economy class, supported by receipt

or 2) Ground travel—10¢ per mile plus tolls, supported by receipt (no car rentals)

Travel to and from airports and Institute classes will also be reimbursed—no car rentals.

Hotel

Actual cost of accommodations up to a maximum of the price indicated on Page 1 of this memorandum—supported by receipt—maximum of 5 days.

18€

E-11
Subsistence

$10.00 for each day of attendance at the Institute—maximum of 5 days.

For local commuters to the Institute, reimbursement will be as follows:

$2.50 for subsistence—maximum of 5 days

10¢ per mile for travel to and from classes

Forms for reimbursement will be available at the Institute; each attendee will submit a travel voucher on the last day of the Institute. Payment will be made directly to the enrollee within two weeks from receipt of reimbursement form and supporting receipts (hotel and air travel as appropriate).

Attendance Confirmation

Kindly complete the attached form and return it in the enclosed envelope.

AMC
Atts.
I will attend the scheduled Institute.

☐ I am unable to attend the scheduled Institute. The following individual will attend in my place:

Name: ____________________________
Title: ____________________________
Address: __________________________
Phone: ____________________________

__________________________________
Signature

Please fill out the name, state, and either the attendance option or the name and details of the substitute.
TENTATIVE SCHEDULE
CRASH INJURY MANAGEMENT INSTRUCTOR TRAINING INSTITUTE
(Class size: 15 enrollees)

MONDAY

8:30 1. INSTITUTE OVERVIEW: objectives, scope and procedures

2. THE CIM COURSE: course development procedures, Instructor's Lesson Plan document and contents of each of the 20 lessons, and design and use of the Student Study Guide document

11:45

1:00 3. TEACHING-LEARNING PROCESS: definitions of teaching and learning, domains of learning, and phases in the teaching-learning process

4:00 4: WORKSHOP PLANNING: assignment of CIM lessons to enrollees for practice teaching

5. INSTRUCTOR DEMONSTRATION OF 4-STEP LESSON: demonstration of a CIM lesson and critique using the practice teaching evaluation form

TUESDAY

6. INSTRUCTIONAL AIDS: advantages, disadvantages and hints for effectively utilizing instructional aids

7. LESSON PLANNING AND DEVELOPING INSTRUCTIONAL AIDS: enrollees plan their practice teaching lessons and develop simple instructional aids appropriate to the lessons

8. TEACHING INFORMATION LESSONS: effective development of student knowledge

9. PRACTICE TEACHING WORKSHOP: 3 enrollees teach sections from CIM lessons 1, 2, and 3 and are critiqued

WEDNESDAY

10. DEVELOPING AND EVALUATING CIM SKILLS: the 4-step process applied to skill development in the CIM course, techniques of skill evaluation, and design and conduct of CIM lessons 15, 16, 17, 18, and 20

11. PRACTICE TEACHING WORKSHOP: 3 enrollees teach sections from CIM lessons 4, 5, and 6 and are critiqued

12. EVALUATING KNOWLEDGE: advantages, disadvantages and suggestions for test item construction for CIM lesson 19

13. PRACTICE TEACHING WORKSHOP: 3 enrollees teach sections from CIM lessons 7 and 8 and are critiqued

THURSDAY

14. PRACTICE TEACHING WORKSHOP: 3 enrollees teach sections from CIM lessons 9, 10, and 11 and are critiqued

15. COURSE PLANNING: review of the CIM Course Guide document

16. PRACTICE TEACHING WORKSHOP: 3 enrollees teach sections from CIM lessons 12, 13 and 14 and are critiqued

17. WORKSHOP: DEVELOPING EVALUATION DEVICES: Each enrollee develops and presents to the class a selection of test items for the CIM lesson he taught and a checklist for evaluating one CIM skill (for use in CIM lessons 19 and 20)

18. ASSIMILATION OF INSTITUTE PRINCIPLES: each enrollee conducts a verbal evaluation of the class to determine if selected institute principles have been assimilated

FRIDAY

19. FORMS COMPLETION: institute evaluation, reimbursement form, CIM program plans

20. CERTIFICATE PRESENTATION: presentation of NHTSA CIM Instructor Training Institute completion certificates

21. ASSESSMENT OF INSTITUTE PRINCIPLES: each enrollee builds knowledge application test, teaches sections from CIM lessons 19 and 20 and is critiqued

22. EVALUATING KNOWLEDGE: advantages, disadvantages and evaluation of student knowledge

23. PRACTICE TEACHING WORKSHOP: 3 enrollees teach sections from CIM lessons 21, 22, and 23 and are critiqued

24. INSTRUCTOR DEMONSTRATION OF 4-STEP LESSON: demonstration of a CIM lesson and critique using the practice teaching evaluation form

4:30
APPENDIX F

Enrollee Roster
James P. Gravius, Jr.
Brookfield Police Department
Grays Bridge Road
Brookfield, Connecticut 06805
(203) 775-2576

Mario A. Garofalo
State Trooper
Connecticut State Police Department
100 Washington Street
Hartford, Connecticut
(203) 393-2612

Joseph R. Polio
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New Haven Dept. of Police Service
157 Church Street
New Haven, Connecticut 06510
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Norman E. Lamothe
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Department of Police Services
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Old Saybrook, Connecticut 06475
(203) 388-3308

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Field Instructor - Coordinator
Delaware State Fire School
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(302) 678-4773

John P. Rossiter
Firefighter, Rescue Squad
Wilmington Bureau of Fire
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Wilmington, Delaware 19801
(302) 658-6641, Ext. 548

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Highway Safety Mgmt. Specialist
NHTSA, 817-B Federal Bldg.
31 Hopkins Plaza
Baltimore, Maryland 21201
(301) 962-3877

Patrick J. Bucher
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Maryland State Police Academy
Pikesville, Maryland 21208
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Emergency Health Services
Division of Public Health
61 South Spring Street
Concord, New Hampshire 03301
(603) 271-3187

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Dover Police Department
48 Locust Street
Dover, New Hampshire 03820

Daniel L. Dempsey
Sergeant, Asst. Troop Commander
New Hampshire State Police
Troop E, Box 75
Moultonboro, New Hampshire 03254

George L. Johnson
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Bureau of Emergency Health Services
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Michigan State Police
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Corporal
Missouri State Highway Patrol Law
Enforcement Academy
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Central Missouri State University
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(219) 432-2502

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Darby and Manoa Roads
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Lonnie Carl Holbrook
State Trooper - First Aid Instructor
Oregon State Police
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Marion Valburg
Training Coordinator
Board on Police Standards and Training
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Jerry Montgomery
Director
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F-10
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O. L. Sanderson  
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Wyoming Highway Patrol  
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(307) 347-2822
APPENDIX G

Institute Evaluation Summaries
CIM INSTITUTE EVALUATION

The purposes of this institute were to introduce you to the NHTSA Crash Injury Management curriculum package and to provide you with some of the fundamentals of teaching. In order to assist us in improving this and future series of institutes, we would appreciate your answering the questions below.

Curriculum Package

15  Yes  ____  No  Was the information presented on the design and development of the CIM training program adequate?
If "no," what was missing?

4  Yes  11  No  Would you like to have had more emphasis on some of the documents or lessons?
If "yes," which ones?
(See attached sheet for comments)

1  Yes  13  No  Would you like to have had less emphasis on some of the documents or lessons?
If "yes," which ones?
(See attached sheet for comments)

Teaching Methodology

15  Yes  ____  No  Was the information presented on teaching methodology adequate?
If "no," what was missing?
Teaching Methodology - cont'd

5  Yes  9  No  Would you like to have had more emphasis in some teaching areas?
If "yes," what areas?
(See attached sheet for comments)

1  No answer

1  Yes  13  No  Would you like to have had less emphasis in certain teaching areas?
If "yes," what areas?
(See attached sheet for comments)

Institute Planning and Facilities

14  Yes  0  No  Did you know what was expected of you prior to the start of the institute, that is, did the Dunlap memo to you fully explain institute coverage and procedures?
If "no," what was missing or unclear?
If you did not receive the memo, check here 1

6  Yes  9  No  Were the classroom facilities adequate?
If "no," please explain.
(See attached sheet for comments)

11  Yes  0  No  Were the lodgings adequate?
4  Not applicable  (local commuters)  If "no," please explain.
# Institute Content Rating

Please rate the institute topic coverage, the workshops and the entire institute program according to their value to you by placing an "x" in one of the four boxes at the left below:

<table>
<thead>
<tr>
<th>No answer</th>
<th>Somewhat valuable</th>
<th>Quite valuable</th>
<th>Very valuable</th>
</tr>
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<td>Institute Workshops</td>
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Design and use of the CIM documents
Domains of learning--knowledge, skills, attitude
The 4-step process--preparation, presentation, application, evaluation
Designing and using instructional aids
Qualities of a good instructor
Questioning techniques
Developing CIM skills
Use of checklists for skill evaluation
Developing written test items
Lesson planning and developing instructional aids
Developing written tests
Practice teaching workshop--your own
Practice teaching workshop--other enrollees
The institute as a whole

x = one attendee rated these two sessions on the line between "somewhat valuable" and "quite valuable"

## Additional Comments

Please add any additional comments that will help clarify your ratings or will assist us in improving our institutes.

(See attached sheet for comments)
COMMENTS

Curriculum Package

Provide more emphasis on: (N = 4)

- Course and Student Guides
- Lessons—how they are set up
- Teaching-learning process, Teacher's Guide and Student Guide
  (No explanation given).

Provide less emphasis on: (N = 1)

- CPR

Teaching Methodology

Provide more emphasis on: (N = 5)

- Preparation of training aids—audio/visual; more time on practice teaching sessions
- Visual aids
- Teaching of skills within the time framework
- Field training
- Teaching aids and methods of application

Provide less emphasis on: (N = 1)

- Evaluation of student teaching assignments

Institute Planning and Facilities

Classroom facilities were not adequate because: (N = 9)

- No ventilation—found myself moving around in my seat in order to keep my mind on the class
- A larger classroom would have been more adequate
- Too small for size of class—comfort; too warm and inaccessible to facilities
- Small and not adequate for a good learning situation
- Too small
- Too small—crowded
- Too small
- Inadequate room ventilation
- A little small

20°

G-5
I think we wasted a lot of time on evaluation of student presentations. We placed very little emphasis on skill demonstrations. To the police officer, skills will be important. If you reduce the time spent on evaluation, you can devote it to skills.

I think more time should have been used for developing teaching ability.

The teacher-trainer was fantastic!

I feel the teacher-trainer is an excellent instructor and, through his dynamic efforts, the course was very successful. Also, it is very obvious that the curriculum expert knows his material and he and his associates have put together an excellent package. I feel this course can be given in 4 days instead of 5.

Not sure it is necessary to adhere to a college campus as a prerequisite setting as opposed to a good motel facility. Fundamental teaching methodology well-done by the teacher-trainer.
The purposes of this institute were to introduce you to the NHTSA Crash Injury Management curriculum package and to provide you with some of the fundamentals of teaching. In order to assist us in improving this and future series of institutes, we would appreciate your answering the questions below.

Curriculum Package

16 Yes 12 No  
Was the information presented on the design and development of the CIM training program adequate?
If "no," what was missing?

14 Yes 12 No  
Would you like to have had more emphasis on some of the documents or lessons?
If "yes," which ones?

(See attached sheet for comments)

Yes 16 No  
Would you like to have had less emphasis on some of the documents or lessons?
If "yes," which ones?

Teaching Methodology

16 Yes 12 No  
Was the information presented on teaching methodology adequate?
If "no," what was missing?
Teaching Methodology - cont'd

3 Yes 13 No  Would you like to have had more emphasis in some teaching areas?

If "yes," what areas?

(See attached sheet for comments)

1 Yes 15 No  Would you like to have had less emphasis in certain teaching areas?

If "yes," what areas?

(See attached sheet for comments)

Institute Planning and Facilities

15 Yes 1 No  Did you know what was expected of you prior to the start of the institute, that is, did the Dunlap memo to you fully explain institute coverage and procedures?

If "no," what was missing or unclear?

(See attached sheet for comments)

If you did not receive the memo, check here ___

15 Yes 1 No  Were the classroom facilities adequate?

If "no," please explain.

(See attached sheet for comments)

10 Yes 5 No  -Were the lodgings adequate?

1 Not applicable (local commuter)  If "no," please explain.

(See attached sheet for comments)

210

G-8
Institute Content Rating

Please rate the institute topic coverage, the workshops and the entire institute program according to their value to you by placing an "x" in one of the four boxes at the left below.

<table>
<thead>
<tr>
<th>No answer</th>
<th>Somewhat valuable</th>
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<tr>
<td><strong>Topic Coverage</strong></td>
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<td>Design and use of the CIM documents</td>
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<td>Domains of learning--knowledge, skills, attitude</td>
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<td>11</td>
<td>The 4-step process--preparation, presentation, application, evaluation</td>
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<td>11</td>
<td>Qualities of a good instructor</td>
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<td>Practice teaching workshop--other enrollees</td>
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<td><strong>Entire Institute</strong></td>
<td>x</td>
<td>2</td>
<td>13</td>
</tr>
</tbody>
</table>

x = one attendee rated the entire institute on the line between "somewhat valuable" and "quite valuable".

Additional Comments

Please add any additional comments that will help clarify your ratings or will assist us in improving our institutes.

(See attached sheet for comments)

*At the request of the enrollees a workshop on developing written tests was replaced by a discussion on the conduct of practical tests, that is, tests of skills.

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G-9
COMMENTS

Curriculum Package

Provide more emphasis on: (N = 4)

- I feel that some recommendations which are listed in the Course Guide were treated too lightly
- Visual aids
- Methods of testing
- Student application phase and writing questions

Teaching Methodology

Provide more emphasis on: (N = 3)

- Principles of learning as they relate to instructors
- Construction of written and practical tests
- Student application and preparation of visual aids

Provide less emphasis on: (N = 1)

- (No explanation given)

Institute Planning and Facilities

What was missing or unclear in the Dunlap memo: (N = 1)

- Complete explanation of the course

Classroom facilities were not adequate because: (N = 1)

- Instruction area for usage of visual aids and other equipment was not large enough

Lodgings were inadequate because: (N = 5)

- Rooms were not on a par to other places I've stayed for the same prices
- Did not like hotel--moved to another
- Hotel rooms are not equipped for study areas. Ventilation not adequate. Food service was good or adequate. Service personnel - O.K. until checkout time. Would not accommodate us by allowing early checkout. Could not get room receipt early. Suggest other accommodations be considered for next institute in Lansing.
For the price, could have been modern. The hotel is an older building which has had some attempt to refurbish it, but not thoroughly enough. If I had had my own transportation, I would have stayed someplace else.

Additional Comments (N = 11)

I feel that many of the lessons that the students gave in 15 minutes needed more time for introductions, lesson objectives and evaluation. The body of the lesson can easily be given in 15 minutes. Perhaps an additional 10 minutes for each student should be given for objectives and evaluation techniques.

The teacher-trainer is to be commended for his excellent job. I felt he made the institute. He was sincere in all aspects of his instruction and showed great interest in each individual student.

The entire course was very valuable to me as a future instructor. The most valuable was the group participation in the teaching workshops. I would like to have had more detailed instruction and material for use in developing visual aids. They are a very important part of the teaching process.

The availability of more tools or equipment to use as teaching aids. More time is needed to comprehend materials.

I feel instructors were more of a benefit to me in their presentation, preparation, application and evaluation of material than in any other classes I have attended.

The instructors were very well prepared and imparted a great many ideas which will be put into practice by myself and, from the comments of others, they will too.

The entire course was well thought out and presented extremely well. The instructors kept my attention almost the entire time (this is very unusual when I am in a classroom setting) not only with the way they made their presentation, but also with the material that was presented.

Would like to see a textbook to go with the CIM course or develop a student workbook to go with CIM course.

I have had years of experience as an instructor and still I learned and enjoyed the methods as presented. Your personnel did an exceptionally good job of administering the affairs of the institute. Their interest was evident—thus adding to the success of the institute.
Set the classes up where there would be a 10 minute break every hour and one 15 minute break in the A.M. and P.M. We went too long at times without a break. The schedule called for us to start at 8:30, break for lunch at 11:45, start at 1:00 and end at 4:30. Almost each day, we did not go out to lunch until after 12:00; one day as late as 12:20 and then we had to start back at 1:00. **Never** did we stop at 4:30; we went past 5:00 P.M. twice. Each of the lesson plans given us are set up to show actual time and elapsed time with breaks shown throughout. Surely the instructors should practice what they preach. I don't want to sound too critical of the institute—it was an excellent school and the instructors were very personable and well qualified. I would and will recommend the institute to others. The general atmosphere of the institute, the surrounding facilities and the personnel involved were most cohesive. I have no complaints in that area. I appreciate the opportunity to attend and participate.

Don't let the very valuable column deceive you—I mean it was very educational. This is the type of school I prefer to attend. I have received much knowledge from the school. The instructors were great. Usually they try to impress on you how smart they are. The instructors had one thing for sure in their mind. They wanted us to learn and not one time did either one of them try to impress on the group how smart they were. The curriculum expert knew the EMT course from front to back and it stuck out like a sore thumb but he never directly tried to act like it. The teacher trainer knew hardly anything about first aid or the EMT course—but he sure showed me a lot of new teaching techniques, and when he criticized other student instructors, I learned a lot. I can't explain what I have learned but I know I will be a much better instructor in the present than I have been in the past. Thank you. I appreciate it very much. The rest of the group was good too—mixed in job classification—but great bunch of interested people.
CIM INSTITUTE EVALUATION

The purposes of this institute were to introduce you to the NHTSA Crash Injury Management curriculum package and to provide you with some of the fundamentals of teaching. In order to assist us in improving this and future series of institutes, we would appreciate your answering the questions below.

Curriculum Package

15 Yes 13 No Was the information presented on the design and development of the CIM training program adequate?
If "no," what was missing?

2 Yes 13 No Would you like to have had more emphasis on some of the documents or lessons?
If "yes," which ones?
(See attached sheet for comments)

15 Yes 15 No Would you like to have had less emphasis on some of the documents or lessons?
If "yes," which ones?

Teaching Methodology

15 Yes 15 No Was the information presented on teaching methodology adequate?
If "no," what was missing?
Teaching Methodology - cont'd

7 Yes 8 No Would you like to have had more emphasis in some teaching areas?
If "yes," what areas?
(See attached sheet for comments)

Yes 15 No Would you like to have had less emphasis in certain teaching areas?
If "yes," what areas?

Institute Planning and Facilities

14 Yes No Did you know what was expected of you prior to the start of the institute, that is, did the Dunlap memo to you fully explain institute coverage and procedures?
If "no," what was missing or unclear?
If you did not receive the memo, check here 1

12 Yes 3 No Were the classroom facilities adequate?
If "no," please explain.
(See attached sheet for comments)

13 Yes No Were the lodgings adequate?
2 Not applicable (local commuters) If "no," please explain.
### Institute Content Rating

Please rate the institute topic coverage, the workshops and the entire institute program according to their value to you by placing an "x" in one of the four boxes at the left below.

<table>
<thead>
<tr>
<th>Topic Coverage</th>
<th>Useless</th>
<th>Somewhat Valuable</th>
<th>Quite Valuable</th>
<th>Very Valuable</th>
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</thead>
<tbody>
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<td>11</td>
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<tr>
<td>The 4-step process -- preparation, presentation, application, evaluation</td>
<td>2</td>
<td>13</td>
<td></td>
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<tr>
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<td>Questioning techniques</td>
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<td>6</td>
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<tr>
<td>Developing CIM skills</td>
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<tr>
<td>Use of checklists for skill evaluation</td>
<td>5</td>
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<td>Developing written test items</td>
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<tr>
<td>The institute as a whole</td>
<td>2</td>
<td>13</td>
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</tr>
</tbody>
</table>

### Additional Comments

Please add any additional comments that will help clarify your ratings or will assist us in improving our institutes.

(See attached sheet for comments)
COMMENTS

Curriculum Package

Provide more emphasis on: (N = 2)

- Testing
  (No explanation given)

Teaching Methodology

Provide more emphasis on: (N = 7)

- Verbal questioning techniques. I would have thought some medical oriented pretest might help. I wish we could have cut the actual presentations to about 8 - 10 minutes and reviewed the TV tapes as a class. I have been involved in this situation before and even the students that "blow it" generally take the TV re-run in good humor.
- Student presentation
- Presentation and evaluation of students
- I enjoyed instructional aids. Would have liked more time in this area.
- Development of technique as related to voice and mannerisms
- Practical presentation of lesson (practice teaching)
  (No explanation given)

Institute Planning and Facilities

Classroom facilities were not adequate because: (N = 3)

- Room too small
- Actual classroom was a little small--too cramped
- Too crowded

Additional Comments (N = 6)

- I have had many courses in teacher education but none could compare with this one; it was outstanding.
Objective achieved. I am much better prepared to instruct the CIM course.

Quite satisfied overall; I was however hoping to develop my personal skills. Very interesting--appreciated the opportunity and hope to be in on future ones. The only reason that I have not checked "very valuable" all the way is because I have had some of the material before.

Thanks.

Thank you; and y'all come back y'hear?

The institutes and the instructors achieved the objectives.

Fantastic.
CIM INSTITUTE EVALUATION

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Curriculum Package

15 Yes  No  Was the information presented on the design and development of the CIM training program adequate?

If "no," what was missing?

5 Yes  10 No  Would you like to have had more emphasis on some of the documents or lessons?

If "yes," which ones?

(See attached sheet for comments)

1 Yes  14 No  Would you like to have had less emphasis on some of the documents or lessons?

If "yes," which ones?

(See attached sheet for comments)

Teaching Methodology

15 Yes  No  Was the information presented on teaching methodology adequate?

If "no," what was missing?
Teaching Methodology - cont'd

6 Yes 9 No Would you like to have had more emphasis in some teaching areas?

If "yes," what areas?

(See attached sheet for comments)

2 Yes 13 No Would you like to have had less emphasis in certain teaching areas?

If "yes," what areas?

(See attached sheet for comments)

Institute Planning and Facilities

13 Yes No Did you know what was expected of you prior to the start of the institute, that is, did the Dunlap memo to you fully explain institute coverage and procedures?

If "no," what was missing or unclear?

If you did not receive the memo, check here

12 Yes 3 No Were the classroom facilities adequate?

If "no," please explain.

(See attached sheet for comments)

14 Yes No Were the lodgings adequate?

1 Not applicable (local commuter) If "no," please explain.

(See attached sheet for comments)
Institute Content Rating

Please rate the institute topic coverage, the workshops and the entire institute program according to their value to you by placing an "x" in one of the four boxes at the left below.

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<td>Institute Workshops</td>
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<tr>
<td>Entire Institute</td>
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Design and use of the CIM documents
Domains of learning—knowledge, skills, attitude
The 4-step process—preparation, presentation, application, evaluation
Designing and using instructional aids
Qualities of a good instructor
Questioning techniques
Developing CIM skills
Use of checklists for skill evaluation
Developing written test items
Lesson planning and developing instructional aids
Developing written tests
Practice teaching workshop—your own
Practice teaching workshop—other enrollees
The institute as a whole

Additional Comments

Please add any additional comments that will help clarify your ratings or will assist us in improving our institutes.

(See attached sheet for comments.)
COMMENTS

Curriculum Package

Provide more emphasis on: (N = 5)

- Shock, need for continuity
- Shock
- CPR
- Student Study Guide
  (No explanation given)

Provide less emphasis on: (N = 1)

(No explanation given)

Teaching Methodology

Provide more emphasis on: (N = 6)

- #13, test construction; #17, developing written tests
- Evaluating knowledge; practice teaching
  (No explanation given)
- Application
- I would like to see a little more emphasis on the testing phase
  of the training program--how to develop a valid test
  (No explanation given)

Provide less emphasis on: (N = 2)

- Teaching-learning process
- Overhead transparencies

Institute Planning and Facilities

Classroom facilities were not adequate because: (N = 3)

- Seating arrangement not as good as could have been (due to
  room). This made use of training aids hard.
- Needed a larger facility so that proper presentation and use
  of visual aids could be accomplished
  (No explanation given)

Additional Comments (N = 8)

- The classroom should be located at or very near to the lodging
  facility!

G-21
I feel only after a week (5 days) that I have learned very much, and with practice can use what I was taught. Overall--Very Good!

Excellent

I personally would like to have had the opportunity to practice teach other times to see if the workshop aided in my presentation.

When seating enrollees, keep the first names of individuals separate by seating properly. (Enrollee was sitting next to person with same first name.)

I feel that workshops of this nature are extremely valuable not only from the standpoint of the exchange of ideas among the participants but it acts as a refresher and a reminder of the proper teaching techniques. I always come away feeling better prepared to conduct good valid training sessions. I always learn something. Sort of a rejuvenation process.

One additional Dunlap staff and/or education consultant would enhance all sessions. The teacher-trainer was the most valuable asset of the institute.

I feel the institute was excellent and that the material covered was excellent. Particularly for those people with little formal educational background.
CIM INSTITUTE EVALUATION

The purposes of this institute were to introduce you to the NHTSA Crash Injury Management curriculum package and to provide you with some of the fundamentals of teaching. In order to assist us in improving this and future series of institutes, we would appreciate your answering the questions below.

Curriculum Package

<table>
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</table>

Was the information presented on the design and development of the CIM training program adequate?

If "no," what was missing?

<table>
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<th>Yes</th>
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</table>

Would you like to have had more emphasis on some of the documents or lessons?

If "yes," which ones?

(See attached sheet for comments)

<table>
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<th>Yes</th>
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</table>

Would you like to have had less emphasis on some of the documents or lessons?

If "yes," which ones?

(See attached sheet for comment)

Teaching Methodology

<table>
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<th>Yes</th>
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<td>16</td>
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</table>

Was the information presented on teaching methodology adequate?

If "no," what was missing?

*Actual number = 17; one individual failed to submit the evaluation form.

Denver
Enrollees = 16*
### Teaching Methodology - cont'd

<table>
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<tr>
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<th>Yes</th>
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<td><strong>4</strong></td>
<td>Yes</td>
<td>12 No</td>
</tr>
</tbody>
</table>

Would you like to have had *more* emphasis in some teaching areas?

If "yes," what areas?

(See attached sheet for comments)

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<th>Yes</th>
<th>No</th>
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<tr>
<td><strong>1</strong></td>
<td>Yes</td>
<td>15 No</td>
</tr>
</tbody>
</table>

Would you like to have had *less* emphasis in certain teaching areas?

If "yes," what areas?

(See attached sheet for comment)

### Institute Planning and Facilities

<table>
<thead>
<tr>
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<th>Yes</th>
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<tr>
<td><strong>14</strong></td>
<td>Yes</td>
<td>1 No</td>
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</table>

Did you know what was expected of you prior to the start of the institute, that is, did the Dunlap memo to you fully explain institute coverage and procedures?

If "no," what was missing or unclear?

(See attached sheet for comment)

If you did not receive the memo, check here **1**

<table>
<thead>
<tr>
<th></th>
<th>Yes</th>
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<tr>
<td><strong>10</strong></td>
<td>Yes</td>
<td>6 No</td>
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</table>

Were the classroom facilities adequate?

If "no," please explain.

(See attached sheet for comments)

<table>
<thead>
<tr>
<th></th>
<th>Yes</th>
<th>No</th>
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<td><strong>14</strong></td>
<td>Yes</td>
<td>No</td>
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</table>

Were the lodgings adequate?

<table>
<thead>
<tr>
<th></th>
<th>Not applicable</th>
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<tr>
<td><strong>2</strong></td>
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If "no," please explain.
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### Additional Comments

Please add any additional comments that will help clarify your ratings or will assist us in improving our institutes.

(See attached sheets for comments)
COMMENTS

Curriculum Package

Provide more emphasis on: (N = 3)
- Student Study Guide
- More on CIM instead of teacher training
- More in-depth emphasis on Instructor's Manual

Provide less emphasis on: (N = 1)
- (No explanation given)

Teaching Methodology

Provide more emphasis on: (N = 4)
- All, but time was limited
- Oral evaluation of students
- Textbooks in addition to classroom. I feel that the well chosen participants are able and willing to absorb more.
- Source documents; developing lesson plans

Provide less emphasis on: (N = 1)
- Objectives

Institute Planning and Facilities

Dunlap memo inadequately explained institute because: (N = 1)
- I thought I was to take the course so I could teach. That is, the full 40 hrs.

Classroom facilities were not adequate because: (N = 6)
- More room - different screen placement
- Air circulation
- Was quite crowded
- Room too small. Inadequate ventilation.
- Too small
Additional Comments (N = 8)

The entire week's workshop was very well done. The objectives of the workshop were accomplished. Students' reactions were very positive. Well done!
The teacher-trainer is an exceptional teacher. I would urge you to use him often in your programs if possible.
I felt the Institute was well worth the time spent. I will take much useful information back with me. Both instructors were excellent!
I have taught Red Cross First Aid for 10 years and have given emergency medical care to a number of people in situations ranging from a gunshot wound through the head to a minor abrasion. It is my opinion that CIM is so much better than first aid that an appropriate comparison would be that of a "Model A" Ford to a new Maserati. Note: Suggested name for graduates: Crash Injury Technicians = CIT
Outstanding learning experience. The teachers were very knowledgeable and knew how to get the most from the students.
I believe this workshop was most valuable in addition to the above (Institute Content Rating) because it gave us a chance to find out a few ideas from other departments and how they handle problems. I think there should be more but in other sections of the country involving personnel from a wider range of localities. Thank you for a wonderful experience.
The instructors were knowledgeable and helpful to all students. This is outstanding. Very helpful.
APPENDIX H

Institute Follow-Up Letter
Dear

The Instructor Training Institute for Crash Injury Management was certainly a most enjoyable and stimulating experience for me due primarily to the cooperation and desire to improve evidenced by all participants. In particular, I appreciated the opportunity to exchange ideas regarding emergency medical care and training techniques for the CIM course.

You may recall my mentioning that, under our present contract, there are funds available to provide a limited amount of follow-up services to Institute attendees. Such services might include: 1) assisting you in initiating a CIM training program, e.g., helping you plan the program or adapt the curriculum to suit the needs of your organization, 2) assisting you in developing and implementing instructor training programs in your area, or 3) some combination of the preceding services.

Such services can be provided at no cost to you or your department but we are limited in the number of requests to which we can respond by the time and money remaining in the contract. If you have need for follow-up services, kindly let me know as soon as possible so that I can efficiently schedule and respond to as many requests as possible. For your convenience, I have included a form for you to complete and a return envelope.

Regardless of the present contract, if I or my associates can assist you in any way at any time, feel free to call us, as we are most interested in maintaining our involvement in law enforcement and emergency medical care training.

I look forward to visiting you when I am in your area and trust you will do the same if you are in Connecticut.

Most sincerely,

Joseph T. Fucigna
Executive Vice President

(signature)

Enc.
Please Complete and Mail to:

Joseph T. Fucigna
Dunlap and Associates, Inc.
One Parkland Drive
Darien, Connecticut 06820

☐ I do not anticipate the need for any follow-up services.

☐ Please call me to discuss the possibility of providing follow-up services in the following areas:

☐ Assisting in initiating the CIM training program.

☐ Assisting in developing a **local capability** to provide instructor training similar to that provided at the recent Institute.

☐ Some combination of the preceding.

☐ Other (describe briefly).

Name: ________________________________

Address: ________________________________

(City) ___________________ (State) ______ (Zip) _____________

Telephone: ____________________________