Published by

STATE FIRE TRAINING
PO Box 944246
Sacramento, CA 94244-2460

January 2010
TABLE OF CONTENTS

State Fire Training ........................................................................................................................................... i
  Mission Statement ........................................................................................................................................... i
  California Fire Service Training and Education System ............................................................................ i
Acknowledgments ............................................................................................................................................... i
Student Profile .................................................................................................................................................. iii
  Target Group ................................................................................................................................................ iii
  Prerequisites ............................................................................................................................................... iii
  Desired Attendance Time Frame ................................................................................................................... iii
Class Requirements and Space ....................................................................................................................... iv
  Classroom Equipment ................................................................................................................................ iv
  Materials ........................................................................................................................................................ iv
Introduction to the Instructor Guide ............................................................................................................... v
  Appendix A – Answer Keys .......................................................................................................................... vi
  Appendix B – Formative Tests .................................................................................................................... vi
Course Outline .............................................................................................................................................. vii
  Texts and References ................................................................................................................................. viii
  Calendar of Events .................................................................................................................................... viii
Student Progress Chart ............................................................................................................................... ix

LESSON PLANS

Orientation And Administration ...................................................................................................................... 1-1
Fire and Emergency Services Instruction As It Relates To Psychomotor Training ..................................... 2-1
Employing The Four-step Method Of Instruction As It Relates To Psychomotor Training ...................... 2-2
Presenting Psychomotor Instruction .............................................................................................................. 2-3
Safety Considerations For Psychomotor Instruction .................................................................................. 2-4
Managing The Learning Environment for Psychomotor Training ............................................................. 2-5
Key Components Of A Psychomotor Lesson ............................................................................................... 2-6
Adapting Psychomotor Lesson Materials ..................................................................................................... 2-7
Selecting And Using Training Aids .............................................................................................................. 2-8
Procedure Used For Evaluating Student Instructor Teaching Demonstrations ......................................... 2-9
Legal And Ethical Considerations As They Relate To Psychomotor Training ......................................... 2-10
Introduction To And Administration Of Performance Tests .................................................................... 3-1
Student Progress And Testing Feedback .................................................................................................... 3-2
State Fire Training

Mission Statement
The mission of State Fire Training is to enable the California fire service to safely protect life and property through education, training, and certification.

California Fire Service Training and Education System
The California Fire Service Training and Education System (CFSTES) was established to provide a single statewide focus for fire service training in California. CFSTES is a composite of all the elements that contribute to the development, delivery, and administration of training for the California fire service. The authority for the central coordination of this effort is vested in the Training Division of the California State Fire Marshal's Office with oversight provided by the State Board of Fire Services.

The role of CFSTES is one of facilitating, coordinating, and assisting in the development and implementation of standards and certification for the California fire service. CFSTES manages the California Fire Academy System by providing standardized curriculum and tests; accredited courses leading to certification; approved standardized training programs for local and regional delivery; administering the certification system; and publishing Certification Training Standards, Instructors Guides, Student Manuals, Student Supplements, and other related support materials.

This system is as successful and effective as the people involved in it are. It is a fire service system developed by the fire service, for the fire service... and we believe it is the best one in the country.

Acknowledgments
State Fire Training coordinated the development of the material contained in this guide. Before its publication, the Statewide Training and Education Advisory Committee (STEAC) and the State Board of Fire Services (SBFS) recommended this guide for adoption by the State Fire Marshal (SFM). This guide is appropriate for fire service personnel and for personnel in related occupations that are pursuing State Fire Training certification.
Special acknowledgement and thanks are extended to the following members of State Fire Training for their diligent efforts and contributions that made the final publication of this document possible.

Alicia Hamilton  
Fire Service Training Specialist III

The material contained in this document was compiled and organized through the cooperative effort of numerous professionals within, and associated with, the California fire service. We gratefully acknowledge these individuals who served as principal developers for this document.

<table>
<thead>
<tr>
<th>Richard Beckman</th>
<th>Ron Martin, Team Leader</th>
</tr>
</thead>
<tbody>
<tr>
<td>San Gabriel Fire Department</td>
<td>Contra Costa County FPD</td>
</tr>
<tr>
<td>Jim Brown</td>
<td>Gaudenz Panholzer</td>
</tr>
<tr>
<td>Monterey Fire Department</td>
<td>San Jose Fire Department</td>
</tr>
<tr>
<td>Bob Buell</td>
<td>Matt O'Donnell</td>
</tr>
<tr>
<td>Alameda Fire Department</td>
<td>Ebbetts Pass Fire Department</td>
</tr>
<tr>
<td>Mike Cahill</td>
<td>Lee Parker</td>
</tr>
<tr>
<td>Woodland Fire Department (Retired)</td>
<td>Modesto Fire Department</td>
</tr>
<tr>
<td>Jim Eastman</td>
<td>Bill Vandevort</td>
</tr>
<tr>
<td>Sacramento Metro FPD</td>
<td>Monterey Fire Department (Retired)</td>
</tr>
<tr>
<td>Mary Jennings</td>
<td></td>
</tr>
<tr>
<td>CFFJAC (Retired)</td>
<td></td>
</tr>
</tbody>
</table>

"We gratefully acknowledge the hard work and accomplishments of those before us who built the solid foundation on which this program continues to grow."
Student Profile

Target Group
Personnel preparing for a Company Officer, SFT Registered Instructor, or Certified Training Instructor position.

Prerequisites
Training Instructor 1A.

Desired Attendance Time Frame
None.
Class Requirements and Space

The characteristics of the classroom and support facilities have a great impact on the learning environment and the instructor's success or failure. For this course, it is advisable for the instructor to adhere as closely as possible to the following guidelines.

Classroom Equipment

- Writing board with markers/erasers
- Appropriate audiovisual equipment
- Appropriate audiovisual materials

Materials

Unit 1: Introduction
- Course outline
- Progress chart
- Calendar of Events
- Student Tracking Sheet

Unit 2: Instructional Methodology, Adaptation, And Delivery
- Group Activity 2-1-1: Coaching Opportunities
- Group Activity 2-7-1: Reviewing And Adapting A Psychomotor Lesson Materials
- Individual Activity 2-7-2: Adapting Psychomotor Lesson Materials #1
- Individual Activity 2-7-3: Adapting Psychomotor Lesson Materials #2
- Individual Activity 2-7-4: Psychomotor Teaching Demonstration #1
- Individual Activity 2-7-5: Psychomotor Teaching Demonstration #2
- Individual Activity 2-9-1: Evaluating A Student Instructor's Psychomotor Teaching Demonstration As The Primary Evaluator
- Individual Activity 2-9-2: Evaluating A Student Instructor's Psychomotor Teaching Demonstration As The Secondary Evaluator
- Group Activity 2-10-1: Legal And Ethical Concerns

Unit 3: Testing
- Individual Activity 3-1-1: Scoring A Performance Test
Introduction to the Instructor Guide

This publication is intended to serve as an instructor guide. For each topic identified in the course outline, a lesson plan has been developed that contains: a time frame, level of instruction, authority, behavioral objective, materials needed, method of instruction, references, preparation statement, lesson content, and end page. Suggested application methods have been identified throughout the lessons for you to use during your presentation.

- **Time Frame**: The estimated duration required for in-class presentation.
- **Level of Instruction**: Identifies the instructional level that the material was designed to fulfill. You have the latitude to increase the level based on available time, local conditions, and the students' apperceptive base.
- **Authority**: Keyed, when applicable, to the appropriate Certification Training Standard task.
- **Behavioral Objective**: The behavioral objective is a statement of the student's performance desired at the end of instruction. You must ensure that enough information is given in the presentation and/or activities to enable the student to perform according to the goal.
- **Materials Needed**: This should be a complete list of everything you will need to present the lesson, including visual aids, tests, etc.
- **References**: These are the specific references the curriculum development team used when developing the lesson plan. In addition, references may be listed as additional study aids for instructors to enhance the lesson -- books, manuals, bulletins, scripts, visual aid utilization plans and the like.
- **Preparation**: The motivational statement connects the student with the lesson plan topic through examples or illustrations relating to their occupation, injury, and even mortality. You will need to develop this statement to fit your target audience.
- **Lesson Content**: Includes information used in the four-step method of instruction.

### Cognitive Lesson Plans

<table>
<thead>
<tr>
<th>PRESENTATION</th>
<th>APPLICATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Everything you say or display</td>
<td>Student Participation</td>
</tr>
<tr>
<td>Content</td>
<td>• Questions</td>
</tr>
<tr>
<td>Instructor notes</td>
<td>• Activities</td>
</tr>
<tr>
<td></td>
<td>• Audiovisual Cues</td>
</tr>
</tbody>
</table>

### Psychomotor Lesson Plans

<table>
<thead>
<tr>
<th>OPERATIONS</th>
<th>KEY POINTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Specific actions to be performed by the students</td>
<td>The who, what, when, where, why, and how (the &quot;tricks of the trade&quot;)</td>
</tr>
<tr>
<td>Begin with a verb, followed by a noun</td>
<td>Safety practices</td>
</tr>
</tbody>
</table>
Appendix A – Answer Keys
• Formative tests with the answer key; instructor use only.

Appendix B – Formative Tests
• Formative test masters that must be copied for each student. Keep these in good condition to use for future classes.
Course Outline

Course Objectives: To provide the student with…

a) A variety of methods and techniques for training in accordance with the latest concepts in career education.

b) Information to select, adopt, organize, and utilize instructional materials appropriate for teaching psychomotor lessons.

c) Criteria and methods to evaluate teaching and learning efficiency.

d) An opportunity to apply major principles of learning through teaching demonstrations.

Course Content: ............................................................................................................. 40:00

Unit 1: Introduction
1-1 Orientation And Administration................................................................................... 1:00

Unit 2: Instructional Methodology, Adaptation, And Delivery
2-1 Fire and Emergency Services Instruction As It Relates To Psychomotor Training.....1:00
2-2 Employing The Four-step Method Of Instruction As It Relates To Psychomotor Training ..................................................................................................................1:00
2-3 Presenting Psychomotor Instruction ........................................................................ 1:00
2-4 Safety Considerations For Psychomotor Instruction .............................................1:00
2-5 Managing The Learning Environment for Psychomotor Training ..........................1:00
2-6 Key Components Of A Psychomotor Lesson ......................................................0:30
2-7 Adapting Psychomotor Lesson Materials ............................................................1:30
2-8 Selecting And Using Training Aids ......................................................................1:00
2-9 Procedures Used For Evaluating Student Instructor Teaching Demonstrations ....1:00
2-10 Legal And Ethical Considerations As They Relate To Psychomotor Training .......1:30

Unit 3: Testing
3-1 Introduction To And Administration Of Performance Tests .................................1:30
3-2 Student Progress And Testing Feedback .............................................................1:00

Reviewing And Assembling Instructional Materials .................................................. 2:00
Student Instructor Teaching Demonstrations........................................................... 20:00
Formative Tests ........................................................................................................... 3:00
Summative Test .........................................................................................................1:00
Texts and References
- Fire and Emergency Services Instructor, IFSTA, Seventh Edition
- Effective Supervisory Practices, ICMA, Fourth Edition
- Developing Attitude Toward Learning, Robert F. Mager, 1968 Edition
- Overcoming Test Anxiety, Dennis H. Congos, University of Central Florida
- Telling Ain't Training, Harold D. Stolovitch and Erica J. Keeps, 2002 Edition
- The Instructor, Charles R. Allen
- The Rights of Firefighters, Will Aitchison, Third Edition

Calendar of Events
See Lesson Plan 1-1: Orientation and Administration
<table>
<thead>
<tr>
<th>TRAINING INSTRUCTOR 1B</th>
<th>BEGINNING DATE:</th>
<th>ENDING DATE:</th>
</tr>
</thead>
<tbody>
<tr>
<td>PROGRESS CHART</td>
<td>Activity 2-1-1</td>
<td>Activity 2-1-1</td>
</tr>
<tr>
<td></td>
<td>Activity 2-7-1</td>
<td>Activity 2-7-1</td>
</tr>
<tr>
<td>CLASS SIZE: Maximum 25 Students</td>
<td>Activity 2-7-2 Adaptation #1</td>
<td>Activity 2-7-2 Adaptation #1</td>
</tr>
<tr>
<td>16 Students = 1 Master Instructor</td>
<td>Activity 2-7-3 Adaptation #2</td>
<td>Activity 2-7-3 Adaptation #2</td>
</tr>
<tr>
<td>17-25 Students = 2 Master Instructors</td>
<td>Activity 2-7-4 Demo #1</td>
<td>Activity 2-7-4 Demo #1</td>
</tr>
<tr>
<td>or 1 Master Instructor/ Qualified Skills Evaluator</td>
<td>Activity 2-7-5 Demo #2</td>
<td>Activity 2-7-5 Demo #2</td>
</tr>
<tr>
<td>STUDENT IDENTIFICATION</td>
<td>Activity 2-9-1 Primary Eval #1</td>
<td>Activity 2-9-1 Primary Eval #1</td>
</tr>
<tr>
<td>1.</td>
<td>Activity 2-9-1 Primary Eval #2</td>
<td>Activity 2-9-1 Primary Eval #2</td>
</tr>
<tr>
<td>2.</td>
<td>Activity 2-9-2 Secondary Eval #1</td>
<td>Activity 2-9-2 Secondary Eval #1</td>
</tr>
<tr>
<td>3.</td>
<td>Activity 2-9-2 Secondary Eval #2</td>
<td>Activity 2-9-2 Secondary Eval #2</td>
</tr>
<tr>
<td>4.</td>
<td>Activity 3-1-1</td>
<td>Activity 3-1-1</td>
</tr>
<tr>
<td>CLASS SIZE: Maximum 25 Students</td>
<td>BEGINNING DATE:</td>
<td>ENDING DATE:</td>
</tr>
<tr>
<td>---------------------------------</td>
<td>----------------</td>
<td>-------------</td>
</tr>
<tr>
<td>16 Students = 1 Master Instructor</td>
<td></td>
<td></td>
</tr>
<tr>
<td>17-25 Students = 2 Master Instructors or 1 Master Instructor/Qualified Skills Evaluator</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**STUDENT IDENTIFICATION**

1. 
2. 
3. 
4. 
5. 
6. 
7. 
8. 
9. 
10. 
11. 
12. 
13. 
14. 
15. 
16. 
17. 
18. 
19. 
20. 
21. 
22. 
23. 
24. 
25. 

**ATTENDANCE**

<table>
<thead>
<tr>
<th>Day 1</th>
<th>Day 2</th>
<th>Day 3</th>
<th>Day 4</th>
<th>Day 5</th>
</tr>
</thead>
</table>

**SUMMATIVE TEST**

<table>
<thead>
<tr>
<th>Minimum 80% Required to Pass</th>
<th>PASS/FAIL</th>
</tr>
</thead>
</table>

1. 
2. 
3. 
4. 
5. 
6. 
7. 
8. 
9. 
10. 
11. 
12. 
13. 
14. 
15. 
16. 
17. 
18. 
19. 
20. 
21. 
22. 
23. 
24. 
25.
**Topic:**  
1-1: Orientation And Administration

**Time Frame:**  
1:00

**Level of Instruction:**  
Level I

**Authority:**  
None

**Behavioral Objective:**

- **Condition:** Given an oral evaluation
- **Behavior:** The student will define the course requirements
- **Standard:** To the instructor's satisfaction according to the information contained in *Training Instructor 1B Student Supplement, SFT, 2010 Edition, Pages 2-4*

**Materials Needed:**
- Writing board/pad with markers/erasers
- Appropriate audiovisual training aids and devices
- Student Progress Chart

**References:**
- Calendar of Events

**Preparation:**

Each instructor must develop a motivational statement on why the student should learn the upcoming material. The purpose is to establish relevancy of the lesson to the audience. The ACID BASE acronym can be used to help develop student motivation.

- **Attention (attract)**
- **Curiosity (arouse)**
- **Interest (create)**
- **Desire (stimulate)**
- **Begin**
- **Association**
- **Students**
- **Experience**

Cite examples or use related illustrations of near-miss incidents, injuries, or fatalities. Write this section “from the heart.” Be creative! Have fun with it or be serious, but remember the goal is to stimulate student motivation.
I. INTRODUCTIONS

A. Introduce self and other staff

B. Cite background
   1. Fire department experience
   2. Education and training
   3. Teaching history
   4. Contact information where instructor can be reached
      a) Phone number(s)
      b) Email
      c) Other

C. Facilities orientation
   1. Classroom location(s)
   2. Restrooms
   3. Food locations
   4. Smoking locations
   5. Break locations
   6. Telephones
      a) Cell phone use
      b) Radio/pager
   7. Parking
   8. Emergency procedures

D. Student introductions
NOTE: Provide slide to remind each student what information to include in the self-introduction.

1. Name
2. Department and rank
3. Years of experience
4. Current assignment
5. Reason(s) for taking Training Instructor 1B

Why do we have you introduce yourselves at the beginning of a class in this manner?

E. Reasons for student introductions
   1. Introduce self to class
   2. Become accustomed to speaking in front of a group
   3. Get more at ease and relaxed with new and unfamiliar atmosphere
   4. Networking purposes

II. COURSE DESCRIPTION
   A. Class hours
      1. 16 hours for lecture
      2. 20 hours teaching demonstrations
         a) Based on 16 students
      3. 4 hours for formative and summative tests
   B. Considerable work
      1. Numerous activities
      2. Substantial homework load
         a) May equal or exceed classroom hours
         b) All homework must be successfully completed to pass
   C. Lunch and break times
### III. CALENDAR OF EVENTS

**NOTE:** Refer to students to the Calendar of Events in their student supplement.

- A. Relates to the adaptation and application of psychomotor teaching materials
- B. Time frames
- C. There will be group discussions and activities throughout the class
- D. Each student is required to complete two 15-minute psychomotor teaching presentations
  1. Each based on an adapted lesson plan
- E. Each student is required to evaluate four student instructor teaching demonstrations, two of which will be graded
  1. Once as a Primary Evaluator
     a) Will lead a group critique
  2. Once as a Secondary Evaluator
     a) Complete an evaluation independently

**NOTE:** Review topics to be covered in each session.

### IV. COURSE REQUIREMENTS

- A. Attendance
  1. Must attend the entire course
  2. Excused absences may be considered for emergencies
- B. Classroom and group participation are required
- C. Required text
  1. *Fire and Emergency Services Instructor*, IFSTA, Seventh Edition
2. **Training Instructor 1B Student Supplement, SFT, 2010 Edition**
   a) Ancillary material not in the required IFSTA text
   b) All individual and group activities

V. **STUDENT EVALUATION**

A. Three formative tests
   1. Must complete all three tests
   2. Tests are not graded
      a) Each test will be reviewed and discussed as a group
   3. Students can keep their tests

B. Activities
   1. Students must successfully participate in all activities

C. Lesson plan adaptation
   1. Topic must be emergency service related
   2. Original lesson plan cannot be handwritten
   3. Graded for
      a) Content
      b) Spelling
      c) Grammar
      d) Punctuation

D. Adaptation rewrites
   1. Students failing the lesson plan adaptation assignment may submit an adaptation rewrite
   2. A single rewrite opportunity is allowed
   3. Rewrites must be accompanied by the original paperwork
   4. The adaptation rewrite will be evaluated by the Primary Instructor for meeting the passing standard
E. Teaching demonstrations

1. Each student must deliver two teaching demonstrations
   a) Each student must pass one of the two psychomotor teaching demonstrations
   b) If a student fails the first teaching demonstration, the second demonstration must be observed by the Primary Master Instructor
   c) Students who pass their first teaching demonstration may have another Master Instructor or qualified Skills Evaluator observe their second teaching demonstration

2. The Primary Instructor must approve each topic selected by students for their teaching demonstrations
   a) Emergency service related
   b) No duplication of lesson topics
   c) Selected teaching demonstrations will be posted on a master list

3. Students must furnish all materials required for their teaching demonstration

F. Summative test

1. Minimum 50-item test

2. Format will be either completion, short-answer, and/or multiple choice

3. Minimum 80% passing score in order to pass the class
   a) If a student fails the summative test, he or she fails the class and does not meet the prerequisite to attend the next Training Instructor class

4. Retaking a summative test
   a) The Primary Instructor may elect to administer a retake exam
b) Must be administered prior to returning the class materials to SFT
   1) Within 15 days of the class ending date

NOTE: Refer students to the Student Tracking Sheet in their student supplement.

G. Progress chart
   1. Uses student identification numbers instead of names
   2. Federal law prohibits publication of identifiable student grades
      a) Family Educational Rights and Privacy Act of 1974
Summary:

Present day demands on the fire service require that fire fighters receive the best possible training in all their duty areas. This course will assist you to become a person who can provide them with the effective training programs so necessary for their performance. No matter what your assignment, if you supervise others at any time, you are an instructor. Your efforts, if they are organized, will improve the fire service in general and your department in specific.

Instructors who know correct teaching techniques can standardize their department procedures, which in turn, improve the attitudes of personnel and the efficiency of the department. The ability of the fire fighters reflects directly on the training program and those who provide the day-to-day training.

If these course requirements seem challenging and the course material that has to be covered appears like a lot in a short period, you are right. Careful diligence is necessary for success. In addition, you should participate in the classroom exercises and group activities fully so you will obtain a greater understanding of the underlying principles being taught, and to be better prepared for the assignments you will be developing at home.

Should you have problems at any time, contact me at a break period or after class. Because of the amount of work and the pace of this course, you cannot afford to fall behind in the lectures, class participation and activities, or homework assignments.

Evaluation:

The student will complete the oral evaluation at a time determined by the instructor.

Assignment:

## Calendar of Events

<table>
<thead>
<tr>
<th>DAY</th>
<th>TOPIC</th>
<th>TITLE</th>
<th>TIME</th>
<th>ACTIVITY</th>
<th>EVALUATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-1</td>
<td>Orientation And Administration</td>
<td>1:00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2-1</td>
<td>Fire and Emergency Services Instruction As It Relates To Psychomotor Training</td>
<td>1:00</td>
<td>2-1-1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2-2</td>
<td>Employing The Four-step Method Of Instruction As It Relates To Psychomotor Training</td>
<td>1:00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2-3</td>
<td>Presenting Psychomotor Instruction</td>
<td>1:00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2-4</td>
<td>Safety Considerations For Psychomotor Instruction</td>
<td>1:00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2-5</td>
<td>Managing The Learning Environment for Psychomotor Training</td>
<td>1:00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2-6</td>
<td>Key Components Of A Psychomotor Lesson</td>
<td>0:30</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2-7</td>
<td>Adapting Psychomotor Lesson Materials</td>
<td>1:30</td>
<td>2-7-1, 2-7-2, 2-7-3</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Day 1 Total** 8:00

<table>
<thead>
<tr>
<th>DAY</th>
<th>TOPIC</th>
<th>TITLE</th>
<th>TIME</th>
<th>ACTIVITY</th>
<th>EVALUATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>2-8</td>
<td>Selecting And Using Training Aids</td>
<td>1:00</td>
<td></td>
<td></td>
<td>Formative Test 1</td>
</tr>
<tr>
<td>2-9</td>
<td>Procedure Used For Evaluating Student Teaching Presentations</td>
<td>1:00</td>
<td>2-9-1, 2-9-2</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Student Instructor Teaching Demonstrations</td>
<td>3:00</td>
<td>2-7-4, 2-7-5, 2-9-1, 2-9-2</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Day 2 Total** 8:00

<table>
<thead>
<tr>
<th>DAY</th>
<th>TOPIC</th>
<th>TITLE</th>
<th>TIME</th>
<th>ACTIVITY</th>
<th>EVALUATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>2-10</td>
<td>Legal And Ethical Considerations As They Relate To Psychomotor Training</td>
<td>1:30</td>
<td>2-10-1</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Student Instructor Teaching Demonstrations</td>
<td>5:30</td>
<td>2-7-4, 2-7-5, 2-9-1, 2-9-2</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Day 3 Total** 8:00
<table>
<thead>
<tr>
<th>DAY</th>
<th>TOPIC</th>
<th>TITLE</th>
<th>TIME</th>
<th>ACTIVITY</th>
<th>EVALUATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Day 4</td>
<td>3-1</td>
<td>Introduction To And Administration Of Performance Tests</td>
<td>1:00</td>
<td>Formative Test 3</td>
<td></td>
</tr>
<tr>
<td></td>
<td>3-2</td>
<td>Student Progress and Testing Feedback</td>
<td>1:00</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Student Instructor Teaching Demonstrations</td>
<td>4:30</td>
<td>2-7-4, 2-7-5 2-9-1, 2-9-2</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Day 4 Total</td>
<td>8:00</td>
<td></td>
</tr>
<tr>
<td>Day 5</td>
<td></td>
<td>Student Instructor Teaching Demonstrations</td>
<td>7:00</td>
<td>2-7-4, 2-7-5 2-9-1, 2-9-2</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>1:00</td>
<td>Summative Test</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Day 5 Total</td>
<td>8:00</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Course Total</td>
<td>40:00</td>
<td></td>
</tr>
</tbody>
</table>
**Topic:**
2-1: Fire And Emergency Services Instruction As It Relates To Psychomotor Training

**Time Frame:**
1:00

**Level of Instruction:**
Level II

**Authority:**
2008 Training Instructor CTS #1: Describe Instructional Delivery Elements And Methods

**Behavioral Objective:**

**Condition:**
Given an activity and a summative test

**Behavior:**
The student will describe the role of psychomotor skills training, the relationship of the application step in the four-step method of instruction, and the role of coaching in psychomotor skills training

**Standard:**
With a minimum 80% accuracy on the summative test according to the information contained in Fire and Emergency Services Instructor, IFSTA, Seventh Edition, Pages 141-144, 180-181, and 191-195 and successfully completing Group Activity 2-1-1

**Materials Needed:**
- Writing board/pad with markers/erasers
- Appropriate audiovisual training aids and devices
- Group Activity 2-1-1: Coaching Opportunities

**References:**
- Fire and Emergency Services Company Officer, IFSTA, Fourth Edition, Pages 263 and 272-278
- Fire and Emergency Services Instructor, IFSTA, Seventh Edition, Pages 141-144, 180-181, and 191-195

**Preparation:**
Each instructor must develop a motivational statement on why the student should learn the upcoming material. The purpose is to establish relevancy of the lesson to the audience. The ACID BASE acronym can be used to help develop student motivation.

- **Attention (attract)**
- **Curiosity (arouse)**
- **Interest (create)**
- **Desire (stimulate)**
- **Begin**
- **Association**
- **Students**
- **Experience**

Cite examples or use related illustrations of near-miss incidents, injuries, or fatalities. Write this section "from the heart." Be creative! Have fun with it or be serious, but remember the goal is to stimulate student motivation.
I. PSYCHOMOTOR SKILLS DEVELOPMENT
   A. Students apply the presented information through
      1. Activities that require thinking
         a) The psycho part of psychomotor
      2. Activities that require manipulative skills
         a) The motor part of psychomotor

   B. Psychomotor domain describes the application of knowledge to skills performance

II. THE ROLE OF PSYCHOMOTOR SKILLS TRAINING
   A. Psychomotor refers to skills involving knowledge learned through the senses that is applied to physical movement

   B. Learning in the psychomotor domain progresses through successive steps, from simple to complex
      1. Step 1: Observation
         a) Witness the motor activity as it is demonstrated by the instructor
      2. Step 2: Imitation
         a) Replicate or imitate the demonstrated motor activity in a step-by-step process

If the cognitive domain defines the students' ability to apply knowledge, what does the psychomotor domain define?

In what way is the psychomotor skills learning process similar to the cognitive learning process?
3. Step 3: Adaptation  
   a) Modify and personalize the motor activity

4. Step 4: Performance  
   a) Perfect the activity through repeated practice until the steps become habit

5. Step 5: Perfection  
   a) Improve the performance until it is flawless and artful

C. The instructional process  
1. Instructors first demonstrate the skill correctly as students watch  
2. Students develop a sense for performing the motions and mentally prepare to practice  
3. Students practice  
   a) Imitating the instructor’s motions  
4. The instructor guides the students  
   a) Feedback  
   b) Correct mistakes  
   c) Reinforce correct performance  

5. Through continued practice and positive reinforcement, students develop correct techniques and become proficient in the performing the skill  
   a) Skill becomes a habit  
   b) Performance is automatic

D. Student learning  
1. Students learn at different rates
2. They often have different levels of ability when they start the learning process
3. Some may need or want to observe longer than others in the same class or training session

III. THE ROLE OF COACHING IN PSYCHOMOTOR SKILLS TRAINING

A. Coaching process
   1. Observation
   2. Evaluation
   3. Suggestions for improvement

B. To the fire and emergency services instructor, coaching involves the following two tasks
   1. Correctly demonstrate a skill
   2. Provide the verbal directions a student needs to achieve the same results

IV. THE APPLICATION STEP OF THE FOUR-STEP METHOD OF INSTRUCTION

A. Most learning takes place during the application step

B. Instructor provides opportunities for learning
   1. Activities
   2. Exercises
   3. Discussions
   4. Work groups
   5. Skill practices
   6. Practical training evolutions
   7. Similar learning activities
<table>
<thead>
<tr>
<th>PRESENTATION</th>
<th>APPLICATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>C. Purpose is to reinforce the student’s learning</td>
<td></td>
</tr>
<tr>
<td>D. Application can be combined with presentation</td>
<td></td>
</tr>
<tr>
<td>E. Typically related to performing the operations or steps of a task</td>
<td></td>
</tr>
<tr>
<td>1. But skills do not refer solely to activity steps of using equipment</td>
<td></td>
</tr>
</tbody>
</table>

**NOTE:** Refer students to Group Activity 2-1-1: Coaching Opportunities in their student supplement.

**CLASS ACTIVITY:**
Complete Group Activity 2-1-1.
Summary:
Training evolutions and other exercises and activities are an important tool in teaching psychomotor skills in the fire and emergency services. Through training evolutions and other exercises, instructors provide students with the opportunity to apply, reinforce, practice, and correct the skills that are basic to all fire and emergency services operations. Instructors must always pay careful attention to safety and follow proper procedures when conducting psychomotor training.

Evaluation:
The student will complete the activity and summative test at a time determined by the instructor.

Assignment:
Review your notes and read Fire and Emergency Services Instructor, IFSTA, Seventh Edition, Pages 141-144, 180-181, and 191-195 in order to prepare yourself for the upcoming test. Study for our next session.
GROUP ACTIVITY 2-1-1: COACHING OPPORTUNITIES

**Time Frame:** 0:15

**Materials Needed:**
- None

**Introduction:** This activity provides the students the opportunity to think about and discuss instances they have had or missed for coaching as either a supervisor or a subordinate.

**Directions:**
1. Think about opportunities you have had or missed for coaching as either a supervisor or a subordinate.
2. You have 1 minute for this step.
3. Share your thoughts with the student next to you.
4. You have 2 minutes each to complete this step.
5. Be prepared to discuss your thoughts with the class.
Topic: 2-2: Employing The Four-step Method Of Instruction As It Relates To Psychomotor Training

Time Frame: 1:00

Level of Instruction: Level II

Authority: 2008 Training Instructor CTS #2: Describe And Demonstrate The Development Of Instructional Materials

Behavioral Objective:

Condition: Given a summative test

Behavior: The student will describe the four-step method of instruction and identify methods of instruction that increase student learning

Standard: With a minimum 80% accuracy on the summative test according to the information contained in Fire and Emergency Services Instructor, IFSTA, Seventh Edition, Pages 193-196

Materials Needed:
- Writing board/pad with markers/erasers
- Appropriate audiovisual training aids and devices

References:
- Fire and Emergency Services Instructor, IFSTA, Seventh Edition, Pages 193-196
- The Instructor, Charles R. Allen, Pages 147-163

Preparation: Each instructor must develop a motivational statement on why the student should learn the upcoming material. The purpose is to establish relevancy of the lesson to the audience. The ACID BASE acronym can be used to help develop student motivation.

Attention (attract) Begin
Curiosity (arouse) Association
Interest (create) Students
Desire (stimulate) Experience

Cite examples or use related illustrations of near-miss incidents, injuries, or fatalities. Write this section "from the heart." Be creative! Have fun with it or be serious, but remember the goal is to stimulate student motivation.
### I. THE FOUR-STEP METHOD OF INSTRUCTION

A. Teaching based on four progressive steps
   1. Preparation
   2. Presentation
   3. Application
   4. Evaluation

### II. PREPARATION (STEP 1)

A. Consists of two parts
   1. Preparing the instructor
   2. Preparing the student

B. Preparing the instructor
   1. Evaluate the audience
      a) Knowing the target audience helps the instructor teach to the appropriate level and depth of lesson information
   2. Research skill or topic and gather references learning material
   3. Create or review a lesson plan
   4. Create a safe and comforting learning environment

C. Preparing the students to learn
   1. Establish an ACID BASE
2. Prepare the mind of the learner by creating
   a) **Attention**
   b) **Curiosity**
   c) **Interest**
   d) **Desire**

3. Create a foundation for learning by
   a) **Begin**
   b) **Associating**
   c) **Students and**
   d) **Experiences with lesson content**

D. How instructors accomplish preparation
1. Introduce the skill or topic
2. Gain the students' attention
3. State the learning objectives
4. Stimulates motivation within the student by stating the reason the information is important
5. Prepare students to listen for key points by briefly stating the main topics that are presented

Can you think of any other preparational statements an instructor could make to generate interest and motivation?

6. Generate curiosity
   a) Ask rhetorical questions
   b) Ask questions that cause students to relate personal experiences to the topic

7. Create attention by telling personal experience, analogy, or topic-related story
<table>
<thead>
<tr>
<th>PRESENTATION</th>
<th>APPLICATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>8. Generate desire by citing the benefits associated with mastering lesson knowledge and skills</td>
<td></td>
</tr>
<tr>
<td>9. Create interest to new concepts, procedures, and equipment</td>
<td></td>
</tr>
<tr>
<td>10. Create continuity by reviewing previous lessons</td>
<td></td>
</tr>
<tr>
<td>a) Determine student knowledge by conducting a diagnostic pretest</td>
<td></td>
</tr>
</tbody>
</table>

### III. PRESENTATION (STEP 2)

**A. Purpose**

1. New information and skills are presented and demonstrated

**B. Presentation techniques**

1. Instructor presents the instructional information using an orderly, sequential outline
2. Presentation can be combined with the most important step, student application
3. Instructor presents
   a) Cognitive knowledge
   b) Psychomotor skills are demonstrated through illustrated lecture followed by guided practice
   c) Concepts and procedures
4. Instructor promotes motivation to help students

**C. Tested methods for presenting psychomotor lesson presentation**

1. Select appropriate presentation style by determining
   a) Target audience

1) Target the depth or level of learning that will ensure student success

---

SLIDE: 2-2-8

How would you alter your lesson delivery for a different target audience skill level?
<table>
<thead>
<tr>
<th>PRESENTATION</th>
<th>APPLICATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>b) Subject and desired outcomes</td>
<td></td>
</tr>
<tr>
<td>1) What do you want students to be able to do after the lesson is completed</td>
<td></td>
</tr>
<tr>
<td>2. Present skills demonstrations</td>
<td></td>
</tr>
<tr>
<td>a) Always promote safety and use of protective equipment</td>
<td></td>
</tr>
<tr>
<td>b) Remember students learn by seeing and mirroring the instructor's behaviors</td>
<td></td>
</tr>
<tr>
<td>c) Instructor must have mastery of the psychomotor skill being presented</td>
<td></td>
</tr>
<tr>
<td>1) Consistency in the flow of class, in statements, and different techniques</td>
<td></td>
</tr>
<tr>
<td>2) Have instructors meet and agree on psychomotor skill delivery methods before testing</td>
<td></td>
</tr>
<tr>
<td>3. Use appropriate training aids and props</td>
<td></td>
</tr>
<tr>
<td>a) Use the same tools, equipment, and methods the students will be using</td>
<td></td>
</tr>
<tr>
<td>b) Stress operational safety</td>
<td></td>
</tr>
<tr>
<td>4. Explain operations</td>
<td></td>
</tr>
<tr>
<td>5. Emphasize key points</td>
<td></td>
</tr>
<tr>
<td>6. Explain concepts, philosophies, principles, and their implications</td>
<td></td>
</tr>
<tr>
<td>7. Proceed from</td>
<td></td>
</tr>
<tr>
<td>a) The known to the unknown</td>
<td></td>
</tr>
<tr>
<td>b) From the simple to the complex</td>
<td></td>
</tr>
<tr>
<td>8. Use textbooks and other reference materials</td>
<td></td>
</tr>
</tbody>
</table>

What are some difficulties associated with using multiple instructors?

How can these problems be overcome?

SLIDE: 2-2-10
9. Apply active learning principles by using instructional activities that involve students in doing and thinking about what they are doing

10. Summarize key points and concepts at the end of the presentation
   a) Ask if students have any questions or need to see the skill demonstrated again

11. Require students to take notes or answer oral questions after lesson

IV. APPLICATION (STEP 3)

A. Purpose
   1. Provides students with the opportunity to apply learned psychomotor skills to practical situations through
      a) Activities
      b) Exercises
      c) Discussions
      d) Work groups
      e) Skill practices
      f) Practical training
      g) All these activities help reinforce student learning

   2. Most student learning takes place during the application step, making this step critically important

   Why is the application step considered to be the most important?

SLIDE: 2-2-12
3. Have student demonstrate the psychomotor skill
   a) Provides for safety as students perform under supervision
4. Actively involve the students in the learning process
5. Provide the opportunity to practice and master critical skills in a nonemergency learning environment
   a) Complex psychomotor tasks could take weeks or months for students to master

<table>
<thead>
<tr>
<th>PRESENTATION</th>
<th>APPLICATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>B. Creative, organized, and tested methods for presenting and practicing practical skills</td>
<td></td>
</tr>
<tr>
<td>1. Have students perform the task or activity under supervision</td>
<td></td>
</tr>
<tr>
<td>2. Observe performance closely</td>
<td></td>
</tr>
<tr>
<td>3. Check and correct errors</td>
<td></td>
</tr>
<tr>
<td>4. Instill correct habits in students</td>
<td></td>
</tr>
<tr>
<td>5. Check key points and safety points</td>
<td></td>
</tr>
<tr>
<td>6. Develop interactive discussions based on</td>
<td></td>
</tr>
<tr>
<td>a) Theory</td>
<td></td>
</tr>
<tr>
<td>b) Decision making</td>
<td></td>
</tr>
<tr>
<td>c) Skills application</td>
<td></td>
</tr>
<tr>
<td>d) Conduct periodic skills tests</td>
<td></td>
</tr>
<tr>
<td>e) Assign projects and activities</td>
<td></td>
</tr>
<tr>
<td>f) Assign problems for students to resolve</td>
<td></td>
</tr>
</tbody>
</table>

SLIDE: 2-2-13

Why is it important to correct student errors immediately?
### V. EVALUATION (STEP 4)

#### A. Purpose
1. To evaluate the learning process
2. To evaluate student learning
3. To evaluate teaching effectiveness

#### B. Tested methods for evaluating the learning process
1. Have students perform tasks unassisted
2. Conduct performance testing
3. Ask prepared questions
4. Have students demonstrate and explain tasks
5. Have students observe and critique other students' performances
6. Conduct summative examinations
7. Evaluate student notebooks, projects, assignments and activities
8. Have students complete course and instructor evaluation forms
9. Have instructors complete course evaluation forms

What happens when the evaluation step is left out of the learning process?

#### C. Without the evaluation step, the instructor cannot determine if learning has taken place
Summary:
The most common form of learning in fire and emergency services is the psychomotor domain. Students observe an instructor demonstrating a psychomotor skill before they imitate what they have seen. With the wide range of fire-fighting skills involved in training, safety must be built into the instructional delivery. A method to organize and deliver psychomotor instruction is a necessity. The four-step method of instruction is a valid and accepted method of developing and delivering cognitive and psychomotor learning. Using the four-step method, the instructor can safely demonstrate and teach the student skills that will lead to individual student skills proficiency.

The four-step method of instruction is a tested and effective method of presenting instruction. It leads the instructor through four well defined but flexible steps that ensures that 1) the student is motivated to learn, 2) the instructional content is organized, 3) the student gets the opportunity to apply the psychomotor skill he or she learned, and 4) the student is evaluated so that the instructor can determine if learning took place and the student has a sense of accomplishment. Every instructor must understand the purpose and importance of each step to become effective in the delivery of instruction.

Evaluation:
The student will complete the summative test at a time determined by the instructor.

Assignment:
Review your notes and read Fire and Emergency Services Instructor, IFSTA, Seventh Edition, Pages 193-196 in order to prepare yourself for the upcoming test. Study for our next session.
Topic: 2-3: Presenting Psychomotor Instruction

Time Frame: 1:00

Level of Instruction: Level II

Authority: 2008 Training Instructor CTS #3: Describe And Demonstrate The Presentation Of Psychomotor And Cognitive Lesson Plans

Behavioral Objective:

Condition: Given a summative test

Behavior: The student will describe the demonstration method used to deliver psychomotor skills and identify the advantages and disadvantages of the demonstration method for the delivery of psychomotor skills

Standard: With a minimum 80% accuracy on the summative test according to the information contained in Fire and Emergency Services Instructor, IFSTA, Seventh Edition, Pages 143, 151-152, 222, 224-227, 277, and 282-284

Materials Needed: • Writing board/pad with markers/erasers
• Appropriate audiovisual training aids and devices

References: • Fire and Emergency Services Company Officer, IFSTA, Fourth Edition, Pages 272-276
• Fire and Emergency Services Instructor, IFSTA, Seventh Edition, Pages 143, 151-152, 222, 224-227, 277, and 282-284
• The Instructor, Charles R. Allen, Pages 169-174

Preparation: Each instructor must develop a motivational statement on why the student should learn the upcoming material. The purpose is to establish relevancy of the lesson to the audience. The ACID BASE acronym can be used to help develop student motivation.

Attention (attract) Begin
Curiosity (arouse) Association
Interest (create) Students
Desire (stimulate) Experience

Cite examples or use related illustrations of near-miss incidents, injuries, or fatalities. Write this section "from the heart." Be creative! Have fun with it or be serious, but remember the goal is to stimulate student motivation.
I. PRESENTING PSYCHOMOTOR LESSON DELIVERY

A. Demonstrations of psychomotor skills consist of
   1. An illustrated lecture
   2. A guided practice
   3. An unguided performance of a skill the student will be expected to use on the job

B. Uses for practical training evolutions
   1. Individual
   2. Single-unit
   3. Multi-unit
   4. Multi-agency

II. ILLUSTRATED LECTURE

A. What is called lecture in most classrooms is really an illustrated lecture
   1. A presentation method that provides information directed toward the students’ senses of sight and hearing

B. Instructor may use visual aids
   1. PowerPoint® presentations
   2. Illustrations on dry-erase boards or chalkboards
   3. Drawings, photographs, slides, or transparencies
   4. Videotapes or films
   5. Models and any other aids to clarify details or processes

C. Instructors sometimes improperly use the illustration method as a substitute for a demonstration
1. Illustrations may show a picture of a piece of equipment, but it does not show the student how to use or operate the equipment.
2. Illustrations can supplement a demonstration but cannot take its place.

What is the most commonly used learning domain used in fire and emergency services training?

**SLIDE: 2-3-5**

**III. THE PSYCHOMOTOR LEARNING DOMAIN**

A. The most commonly used form of learning is the psychomotor (skills) domain, typically referred to as hands-on learning.

1. Psychomotor refers to skills involving knowledge learned through the senses that is applied to physical movement.

2. Learning in the psychomotor domain progresses through successive steps, from simple to complex, as follows:

   a) Step 1: Observation
      1) Witness the motor activity as it is demonstrated by the instructor.

   b) Step 2: Imitation
      1) Replicate or imitate the demonstrated motor activity in a step-by-step process.

   c) Step 3: Adaptation
      1) Modify and personalize the motor activity.

   d) Step 4: Performance
      1) Perfect the activity through repeated practice until the steps become habit.

**SLIDE: 2-3-6**
e) Step 5: Perfection
   1) Improve the performance until it is flawless and artful

3. These psychomotor skills are developed, taught, and passed on through the demonstration method

IV. DEMONSTRATION METHOD OF INSTRUCTION

A. The act of showing how to do something or how something operates or acts
B. A basic means for teaching manipulative skills, physical principles, and mechanical functions
C. It can be used effectively to show the operation of tools, equipment, or materials
D. The demonstration method is used to illustrate
   1. How to perform a task that students are expected to learn
   2. Repeated in the application step of the four-step method of instruction

E. The instructor demonstrates a task while explaining how and why it is performed
F. This method communicates to both sight and hearing senses

1. Student may retain 50% of this task by seeing and hearing lesson alone

G. When students practice the skill, they use psychomotor skills and add the sense of touch to their learning experiences
1. Student may retain 90% of this task if they say each step out loud as they perform the skill

V. ADVANTAGES OF THE DEMONSTRATION METHOD

A. Participants receive feedback immediately

B. Instructors readily observe a change in behavior
   1. Can easily determine whether learning objectives have been met

C. Students have a high level of interest when participating

D. Carefully supervised, students learn psychomotor skills correctly in a safe environment giving them confidence to perform the same skills on the job

VI. DISADVANTAGES OF THE DEMONSTRATION METHOD

A. Instructors must plan for extensive preparation and cleanup times
   1. Careful lesson planning is important because assembly and practice can use much of the instructional time

B. Large groups of students require extra
   1. Equipment for practice
   2. Additional instructors
      a) For supervision
      b) Coaching
      c) To ensuring that safety procedures are followed

SLIDE: 2-3-9

How can instructors ensure student feedback is a positive experience?

SLIDE: 2-3-10

What is a disadvantage of having a large class or complex evolution?
<table>
<thead>
<tr>
<th>PRESENTATION</th>
<th>APPLICATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>C. Skills that must be performed or practiced outside depend on the weather</td>
<td>What should an instructor have in case of inclement weather?</td>
</tr>
<tr>
<td>1. Instructors must have a contingency plan available in the event of inclement weather</td>
<td></td>
</tr>
</tbody>
</table>

**VII. PSYCHOMOTOR SKILLS PROFICIENCY AND SAFETY**

A. Many students want to be able to perform a skill quickly when they first learn it

B. Instructors must stress safety in every step of each skill demonstrated
   1. Demonstration
   2. Application (practice time)
   3. Evaluation
   4. Skill and speed only come with practice

C. Students trying to perform a new skill without carefully learning the steps or developing coordination are putting their safety at risk

**VIII. DEMONSTRATION GUIDELINES**

A. To use the demonstration method effectively, instructors should carefully address two critical areas
   1. Preparing for a psychomotor demonstration
   2. Demonstrating the psychomotor skill
B. Preparing for a psychomotor demonstration

1. Know clearly what skill is to be demonstrated and its learning objective
2. Be proficient in every step of the demonstration by practicing in advance with all instructors who will be involved
3. Acquire all equipment and accessories, ensure that they work, and arrange them for use
4. Arrange the room or demonstration area so that all participants can see and hear the demonstration
   a) Student learning retention is 50% for students that see and hear psychomotor demonstration

C. Guidelines for demonstrating psychomotor skills

1. Begin by linking new information with the students' current knowledge
2. Explain what the demonstration will show the group how to do
3. Explain why the skill is important
4. Demonstrate the skill once at normal speed
5. Repeat the demonstration step-by-step while explaining each step slowly
6. Repeat the demonstration again while a student or a group of students explains each step
   a) Student retention can be raised to 90% when students say while doing psychomotor skills
7. Consider using a video camera and large-screen monitor
   a) When the group is large
   b) Allows students to see process up close or observe small details

8. Allow students the opportunity to ask questions and clarify any misunderstandings

9. Ask for a student to demonstrate the skill while explaining the steps
   a) Give reassurance by coaching and guiding the student through the process of performing the skill
   b) Coaching and positive reinforcement reduces stress and increases performance
   c) Offer suggestions or corrections during the demonstration

10. Provide the opportunity for students to practice under supervision
    a) Allow them to supervise and correct each other as they become skilled
    b) Students often feel more comfortable practicing with a peer
    c) Closely monitor student activities when students practice potentially dangerous skills for the first time
11. Reassemble the group and demonstrate the skill
   a) One more time at normal speed
   b) And/or one more time slowly as the group explains the steps as a summary
   c) Relate the skill to the learning objective and performance on the job

IX. INSTRUCTOR DEMONSTRATION OF PSYCHOMOTOR SKILLS

   A. Provide an explanation of the skill
      1. Why it is important
      2. How it relates to other skills
      3. How many people are required to perform it
      4. When it should be performed
   B. The explanation is followed by a demonstration of the skill performed at a normal rate of speed
   C. The skill is performed again slowly with the instructor explaining each step

   1. Students should be encouraged to ask questions during the step-by-step portion of the demonstration
   2. This slow speed demonstration may be repeated several times until students can verbalize the steps to the instructor before the instructor performs them
   3. Students are then ready to practice the skills themselves

   D. The slow speed demonstration is the transition between the presentation and application steps
      1. Students practice the steps while being guided and coached by instructors
         a) Students work in small groups
b) Students continuing to practice the skill as they critique and coach each other
c) During a practice session instructor may need to demonstrate the entire skill
d) Instructor should show the skill again at the end of session

E. Instructor must show skill steps correctly and in sequence
F. Students should be encouraged to practice skills
   1. During rest breaks
   2. During free time
   3. At the beginning of the next training session
G. When students have perfected the skills, they are ready for evaluation
   1. The more complex the skill, the longer the training session before the evaluation step

X. BENEFITS OF PRACTICAL TRAINING EVOLUTIONS

A. Used for individual, single-unit, multi-unit, and multi-agency training
   1. An opportunity for personnel and units from various agencies, organizations, and jurisdictions to train together for potential joint operations

B. Fulfill the following two primary requirements for the emergency services organization
   1. Fulfill the written requirements for psychomotor training found in
      a) NFPA standards
      b) OSHA regulations
<table>
<thead>
<tr>
<th>PRESENTATION</th>
<th>APPLICATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>c) Mandated by professional associations and local jurisdictions</td>
<td></td>
</tr>
<tr>
<td>2. Permit students to apply the knowledge and practice the skills they have learned in the classroom</td>
<td>[SLIDE: 2-3-20]</td>
</tr>
<tr>
<td>[C. For entry-level fire fighters]</td>
<td></td>
</tr>
<tr>
<td>1. Practical training evolutions permit the application of knowledge and skills learned under near realistic conditions</td>
<td></td>
</tr>
<tr>
<td>[D. For experienced fire fighters]</td>
<td></td>
</tr>
<tr>
<td>1. Live-fire and other technical training evolutions provide opportunities to develop additional skills and increase skill-performance levels</td>
<td></td>
</tr>
<tr>
<td>E. Realistic practical training evolutions promote enthusiasm, morale, and team spirit</td>
<td>[SLIDE: 2-3-21]</td>
</tr>
<tr>
<td>[XI. CONSIDERATIONS WHEN PREPARING PRACTICAL TRAINING EVOLUTIONS]</td>
<td></td>
</tr>
<tr>
<td>A. Location for the type of training evolution</td>
<td></td>
</tr>
<tr>
<td>B. Evolution planning and control requirements</td>
<td></td>
</tr>
<tr>
<td>C. Safety and health considerations</td>
<td></td>
</tr>
<tr>
<td>D. Instructor preparation</td>
<td></td>
</tr>
<tr>
<td>[1. It is the key to a successful teaching experience]</td>
<td></td>
</tr>
<tr>
<td>[XII. TASK OR SITUATIONS APPLICABLE TO PRACTICAL TRAINING EVOLUTIONS]</td>
<td></td>
</tr>
<tr>
<td>A. The list of practical training evolutions mirrors the list of tasks generally performed by personnel in fire and emergency services organizations</td>
<td></td>
</tr>
</tbody>
</table>
B. Practical training evolutions are intended to provide training in the following types of tasks or situations

1. Fire suppression
   a) Interior
   b) Exterior
   c) Flammable liquids

2. Technical training
   a) Vehicle and apparatus operations
   b) Hazardous materials
   c) Technical rescue
   d) Emergency medical training
   e) Counterterrorism operations
   f) Disaster management

C. A practical training evolution is the final step in a process that many fire and emergency services training organizations have used for years

D. This process can be visualized as a staircase that leads the student to the completion of the training course or curriculum

E. Each step depends on the successful completion of the previous step

F. At the same time the stress that the student feels increases just as the stress at an emergency incident increases

Is stress always a bad thing?

1. Stress is not always bad
2. This process provides the student not only with increasingly complexity of skills and combination of skills but also the physical and emotional stress that a real incident creates
**Summary:**

The psychomotor domain is the most used learning domain in the fire and emergency services. All members are expected to learn and maintain psychomotor skills. To teach psychomotor skills, the instructor must practice each task to perfection and be familiar with the demonstration method to show the students step-by-step what is expected before they perform the skill in the application step of the lesson. From student observation to skills perfection, safety must be stressed from the beginning of the lesson through the end of student evaluations.

Psychomotor training is essential for providing safe and efficient fire and emergency services to the public. Therefore, they are key elements in any fire and emergency services organization's training program. Planning, preparation, and practice are essential to a successful skills demonstration. The instructor who is not proficient in the delivery of psychomotor skills will lose credibility with students and waste valuable training time by having to repeat or correct skill steps.

The safety of the student, the instructor, and public that we protect depend on fire and emergency services personnel learning and performing psychomotor skills under stressful and dangerous conditions. The ranges of psychomotor skills taught are from simple to complex.

**Evaluation:**

The student will complete the summative test at a time determined by the instructor.

**Assignment:**

Review your notes and read Fire and Emergency Services Instructor, IFSTA, Seventh Edition, Pages 143, 151-152, 222, 224-227, 277, and 282-284 in order to prepare yourself for the upcoming test. Study for our next session.
Topic: 2-4: Safety Considerations For Psychomotor Training

Time Frame: 1:00

Level of Instruction: Level II

Authority: 2008 Training Instructor CTS# 4: Describe The Instructor's Role, Responsibilities, And Obligations

Behavioral Objective:

**Condition:** Given a summative test

**Behavior:** The student will describe causes of injury and the safety considerations for psychomotor training

**Standard:** With a minimum 80% accuracy on the summative test according to the information contained in Fire and Emergency Services Instructor, IFSTA, Seventh Edition, Pages 35-42, 45-47, 53-56, and 285-293

Materials Needed:
- Writing board/pad with markers/erasers
- Appropriate audiovisual training aids and devices

References:

Preparation: Each instructor must develop a motivational statement on why the student should learn the upcoming material. The purpose is to establish relevancy of the lesson to the audience. The ACID BASE acronym can be used to help develop student motivation.

- **Attention (attract)** Begin
- **Curiosity (arouse)** Association
- **Interest (create)** Students
- **Desire (stimulate)** Experience

Cite examples or use related illustrations of near-miss incidents, injuries, or fatalities. Write this section "from the heart." Be creative! Have fun with it or be serious, but remember the goal is to stimulate student motivation.
I. TRAINING-RELATED CASUALTIES
   A. Training-related **fatalities** have risen in recent years
      1. 10% of all annual fire fighter line-of-duty deaths (LODD) occur during training
      2. Leading causes
         a) Heart attacks
         b) Traumatic injuries
      3. Most of these fatalities occurred during psychomotor evolutions
   B. Training-related **injuries** have increased dramatically in recent years

**NOTE:** The Fire and Emergency Services Instructor, IFSTA, Seventh Edition, does not include any current statistics. *Look up current data before delivering this presentation.*

   1. For example, in 2006, approximately 7,600 injuries or 9% occurred during training
   2. Leading types of injuries
      a) Strain/sprain – 48%
      b) Wound/cut/bleeding/bruise – 20%

II. ENSURING STUDENTS' SAFETY

   A. Provide a safe training environment
   B. Teach safe operational practices and safety-related topics
   C. Fulfill duties of an incident safety officer during training evolutions
D. Be a role model by adhering to safety policies and practices

E. Be familiar with training regulations
   1. Local
   2. State/provincial
   3. Federal safety

F. Ensure safety is provided during practice evolutions so students may practice technical skills without distraction

III. SAFETY POLICIES AND PROCEDURES

A. Should be based on NFPA safety standards

1. NFPA 1403: Standard on Live Fire Training Evolutions
2. NFPA 1584: Standard on the Rehabilitation Process for Members During Emergency Operations and Training Exercises

B. Instructors should be familiar with local safety policies and procedures and their applications

C. Include the use and application of all appropriate safety policies
   1. Compliance with agency’s Injury Illness Prevention Program (IIPP)
   2. Emphasis on safety procedures for skill performance
3. Use of all appropriate PPE
4. Practice skills on the training ground as they are performed at an emergency incident

IV. SAFE TRAINING SCENARIO PLANNING

A. Planning for safety in training scenarios involves two analysis processes

1. Task analysis
   a) A detailed review of each physical task or job
   b) Each task is divided into steps
   c) Should also list required safety equipment

2. Hazard/risk analysis
   a) Identifies potential problem areas and is the foundation for a risk-management plan
   b) Part of the organization’s hazard/risk analysis
   c) The Training Division reviews all activities that may result in a risk to personnel

3. Results of both analyses are used to develop safe training procedures
4. Level of realism must balance with level of risk to safety and health of students
   a) In all cases, safety takes precedence over realism
   b) Safety must be a key component of the evolution

B. Incident Action Plan (IAP)

1. A specific IAP is unique to the incident or scenario
   a) IAP establishes the strategic goals and tactical objectives
1) Confined Space Rescue Operations training would include a written permit with the IAP
2) The primary strategic goal of all IAPs is life safety

2. Consider the following requirements for each IAP and scenario
   a) Reevaluate each IAP and scenario for potential safety violations
   b) Correct or eliminate any violations found
   c) Communicate the IAP to students and instructors

C. Training site inspection and maintenance
   1. Facilities
   2. Apparatus
   3. Tools and props
   4. Personal protective equipment
   5. Inspections may be performed by
      a) Organization's personnel
      b) Third-party certification organization
      c) External vendors or maintenance companies

   1) Hydraulic tools
   2) Ladder testing
V. SAFETY CONCERNS DURING TRAINING

A. Physical and psychological stress

1. Students
   a) Fatigue
   b) Feeling of failure

2. Instructors
   a) Fatigue
   b) Frustration
      1) Verbal or nonverbal

3. Other participants
   a) Injury from equipment operations
   b) Lack of concentration

B. Changes in weather conditions

1. Wind direction and velocity
   a) Affects ladder and aerial evolutions

2. Temperature and humidity
   a) Plan training evolutions when weather is not a distraction or health hazard
   b) Be prepared to alter the training plans

C. Unusual fire behavior

D. Failure of PPE or respiratory protection equipment

E. Audible alarms

What are some weather conditions that would alter a training evolution?

What are two types of audible alarms you might hear during a training evolution?
1. Personal alert safety system (PASS) devices
2. Low-pressure alarms on respiratory protection equipment
3. Loss of water pressure or volume

VI. HIGH-HAZARD TRAINING

A. Conditions during training can change rapidly and unexpectedly
   1. Instructors must continually monitor training activities

B. NFPA 1500, Standard on Fire Department Occupational Safety and Health Program requires a designated Incident Safety Officer (ISO) during high-hazard training evolutions

C. Presence of an ISO does not relieve all instructors of the obligation to monitor the training with safety in mind

D. Instructors should notify the designated Incident Commander (IC) and ISO of all safety issues

E. Steps should be taken to rapidly decrease the risk and protect the students from further risks
Summary:
Many things need to be considered when planning and performing psychomotor training. Safety should always be our primary concern. In order to provide safe, realistic training for skills that are inherently dangerous requires the instructor to plan and prepare the training site and scenario. The safety and quality of your training relies on your preparation.

This lesson has identified what you need to do to make your psychomotor training safe. You know you need to prepare your training site and your scenario, and the process for providing for safety.

Evaluation:
The student will complete the summative test at a time determined by the instructor.

Assignment:
Review your notes and read Fire and Emergency Services Instructor, IFSTA, Seventh Edition, Pages 35-42, 45-47, 53-56, and 285-293 in order to prepare yourself for the upcoming test. Study for our next session.
**Topic:** 2-5: Managing The Learning Environment For Psychomotor Training

**Time Frame:** 1:00

**Level of Instruction:** Level II

**Authority:** 2008 Training Instructor CTS# 6: Describe The Elements Of The Learning Environment

**Behavioral Objective:**

*Condition:* Given a summative test

*Behavior:* The student will describe the elements of the learning environment and the steps for planning psychomotor training

*Standard:* With a minimum 80% accuracy on the summative test according to the information contained in Fire and Emergency Services Instructor, IFSTA, Seventh Edition, Pages 35-41, 101-116, and 213-215

**Materials Needed:**
- Writing board/pad with markers/erasers
- Appropriate audiovisual equipment
- Appropriate audiovisual materials

**References:**
- Fire and Emergency Services Company Officer, IFSTA, Fourth Edition, Page 276-280
- 2007 NFPA 1403: Standard on Live Fire Training Evolutions

**Preparation:** Each instructor must develop a motivational statement on why the student should learn the upcoming material. The purpose is to establish relevancy of the lesson to the audience. The ACID BASE acronym can be used to help develop student motivation.

- **Attention (attract)** Begin
- **Curiosity (arouse)** Association
- **Interest (create)** Students
- **Desire (stimulate)** Experience

Cite examples or use related illustrations of near-miss incidents, injuries, or fatalities. Write this section "from the heart." Be creative! Have fun with it or be serious, but remember the goal is to stimulate student motivation.
I. TRAINING LOCATIONS

A. The most obvious place to perform simple training evolutions is at the fire station
   1. Apparatus rooms
   2. Large indoor classrooms
   3. Living rooms or dormitories
   4. Parking lots/driveways

B. Other training locations
   1. Remote sites or acquired structures
      a) Appropriate permission to gain access and train must be obtained in advance from the property owners or their agents
   2. Permanent and mobile facilities
   3. Instructional facilities with classrooms and fixed props

II. INSTRUCTIONAL FACILITIES

A. Instructional facilities cover a wide range of designs and types

1. Training towers
2. Skid pads/driving courses
3. Entanglement
4. Live-fire simulators
5. Aircraft fire-fighting centers
6. Swift-water facilities

Where can fire service training take place?

What types of instructional facilities are currently in use?

SLIDE: 2-5-1
SLIDE: 2-5-2
SLIDE: 2-5-3
B. Training does not have to be expensive
   1. Many departments use very simple facilities
      a) Single station fire departments use what is available to accomplish training needs

C. Permanent facilities
   1. Classrooms with audiovisual aids
   2. Varied structured training props
   3. Driving courses
   4. Industrial complexes
   5. Parking garages

D. Mobile units
   1. Burn/flashover trailers
   2. Haz-mat training units
   3. Auto extrication trailers
   4. Mobile classrooms with audiovisual aids

E. Acquired structures
   1. Usually in deteriorating conditions and scheduled to be demolished
   2. Often donated to the fire department for live-fire training purposes

   3. Special hazards
      a) Unsafe building conditions
      b) Human waste
      c) Environmental hazards
F. Each facility may be designed and used for a wide variety of training evolutions and must be managed accordingly for safety
   1. Safety is the primary concern during any and all practical training evolutions

### III. PSYCHOMOTOR PLANNING FACTORS

A. Many factors contribute to a safe and effective learning experience and must be considered
   1. Safety
   2. Learning objectives
   3. Justifications
   4. Supervision
   5. Resources/logistics
   6. Weather
   7. Legal requirements
   8. ICS-NIMS
   9. Exposures
   10. Evaluations/critiques

B. Controlling an evolution
   1. Supervising
      a) Provide direct supervision over participants to ensure that the correct skills are used safely during the evolution
   2. Monitoring
      a) Observe the progress of the evolution to ensure that all lesson objectives are performed and accomplished
3. Teaching
   a) Use the evolution to teach by including related or new information for students when appropriate

4. Managing
   a) Apply the elements of ICS-NIMS to control the evolution as though it was an actual emergency situation

IV. TRAINING ENVIRONMENT
A. Training Division is responsible for providing a safe training environment for all instructors and students

B. Source for safety requirements
   1. National laws
   2. State/provincial laws
   3. Local ordinances
   4. Government rules and regulations
   5. National standards

   a) NFPA
      1) 1403: Standard on Live Fire Training Evolutions
      2) 1500: Standard on Fire Department Occupational Safety and Health

   6. Organizational policies and procedures
   7. Case law

C. Instructor must ensure that the requirements are implemented before, during, and after training is provided to students

Which national standards address live-fire training and occupational safety?
V. IDENTIFY INFRASTRUCTURE REQUIREMENTS

A. Location
   1. Provides adequate space for training
   2. Easily accessible
   3. Remote from other occupancies that may be affected by live burns

B. Adequate water supply

   a) Requires volume and pressure to support
      1) Number of attack and backup hoselines used
      2) Need for potable (suitable for drinking) water
      3) Need to supply sprinkler and water spray systems with necessary volume and pressure
      4) Need to supply water for other types of exercises that may take place at the site

C. Fuel source
   1. Flammable or combustible liquid
   2. Liquefied petroleum gas (LPG)
   3. Natural gas piped to the burn building or props from a main supply

D. Breathing air supply
   1. Spare bottles
   2. Portable compressors
   3. Supplied air
E. Apparatus staging, approach, and operational area
   1. Parking for units not involved in the training
      a) Short travel routes to the training area
      b) Park as though it is at an incident
      c) Surfaces capable of supporting the weight of apparatus
      d) Exit routes for apparatus
   2. Apparatus and machine noise
      a) Use hearing protection during training operations
      b) Turn off vehicle and machinery motors when instructors are giving instructions and procedures
      c) When some noise cannot be controlled, use microphones and speaker systems so that students can properly hear instructors

F. Communications system
   1. Radio frequency dedicated for the training or two-way communication devices with limited range
      a) All personnel engaged in the training exercise must have contact with one another
      b) Communication loop must include incident safety officer and the individual assigned to the fuel shutoff valve control

G. Weather monitoring equipment
   1. Used to determine the wind affect on burning materials and foam streams and plan attack tactics that could be enhanced/supported by the prevailing wind
### H. Environmental controls

1. Use of natural gas or environmentally friendly fuels
2. Use of nonporous concrete surfaces to prevent soil contamination
3. Protocols to determine the effect of weather
4. Noise pollution controls
   - a) Mandatory hearing protection

### I. Equipment decontamination

1. Contaminated wastewater is piped to the water-decontamination system

### J. Water-decontamination systems

1. Use oil separators
2. Contain contaminated water in a pond that separates the oil from the water through natural processes (ponding)
3. Add hydrocarbon-eating bacteria to the water to destroy the oil (bacterial breakdown)

### K. Weather conditions

1. Climate-related factors
   - a) Temperature
     - 1) Too hot (red flag)
     - 2) Too cold (hypothermia)
   - b) Wind
     - 1) Too windy (ladder or aerial use)
   - c) Precipitation
     - 1) Slippery surfaces
   - d) Humidity
     - 1) Overheat while wearing PPE
2. Instructors cannot control these factors, but they should attempt to provide some means to lessen the effects on students

   a) Provide rehabilitation for students who are exposed to temperature extremes (hot or cold) or high humidity
   b) Institute heat illness prevention methods

L. Terrain

   1. Affects the location and use of aerial apparatus and ground ladders as well as access to the site and the direction of water runoff
      a) The initial inspection should determine areas that may create a safety or operational issue
      b) Mark those areas appropriately
      c) Inform students of any potential danger areas and areas that are off-limits

M. Vehicle traffic on public streets

   1. When possible, limit or prohibit public access to the training area
   2. Follow policies that regulate the use of safety cones and vests during training to enforce their use at emergency incidents

   If it is too difficult to manage the traffic, what other resource should be considered?

N. Light levels

   1. Exterior light can affect both teaching and safety
   2. When the light is bright, students may not be able to see details because of reflected glare

   What can we do to protect the students from weather?

   SLIDE: 2-5-12
### VI. ENVIRONMENTAL LAWS AND CODES

A. Provide training within the limitations of national, state, and local environmental laws in addition to building and fire codes and zoning ordinances

### VII. ACCESS

A. Whether training takes place at a training facility or remote site, access to the training area must be considered
   1. Exit routes
   2. Direction of traffic flow
   3. Control zones
   4. Site map

B. This consideration is especially important when units remain in-service during the training

C. Whenever possible, provide at least two means of access

---

<table>
<thead>
<tr>
<th>PRESENTATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>3. When the light is low, shadows may conceal important details</td>
</tr>
<tr>
<td>4. Select a location and time of day that reduces the distractions caused by high or low light</td>
</tr>
<tr>
<td>O. Site space</td>
</tr>
<tr>
<td>1. Instructors should consider space required</td>
</tr>
<tr>
<td>a) When the space is too small, both training and safety are compromised</td>
</tr>
<tr>
<td>P. Exposures</td>
</tr>
<tr>
<td>1. The locations of exposed buildings and people need to be considered when live-fire training takes place</td>
</tr>
<tr>
<td>2. Identify exposures and consider wind direction and velocity as well as terrain and water runoff routes</td>
</tr>
</tbody>
</table>

SLIDE: 2-5-13

SLIDE: 2-5-14
Summary:
Instructors who manage psychomotor training must understand that it is a three-dimensional, complex and dynamic environment. Instructional factors vary from types of training facilities to the weather conditions and the students' knowledge base, all must be evaluated. The risks to students and instructors rise with the complexity of the training evolutions involved.

Evaluation:
The student will complete the summative test at a time determined by the instructor.

Assignment:
Review your notes and read Fire and Emergency Services Instructor, IFSTA, Seventh Edition, Pages 35-41, 101-116, and 213-215 in order to prepare yourself for the upcoming test. Study for our next session.
**Topic:** 2-6: Key Components Of A Psychomotor Lesson

**Time Frame:** 0:30

**Level of Instruction:** Level II

**Authority:** 2008 Training Instructor CTS #8: Describe and Demonstrate The Review And Adaptation Of Prepared Instructional Materials

**Behavioral Objective:**

*Condition:* Given a summative test

*Behavior:* The student will describe the key components of the instructional materials related to psychomotor lessons

*Standard:* With a minimum 80% accuracy on the summative test according to the information contained in Fire and Emergency Services Instructor, IFSTA, Seventh Edition, Pages 196-200, 323, 328, and 341

**Materials Needed:**

- Writing board/pad with markers/erasers
- Appropriate audiovisual training aids and devices

**References:**

- Fire and Emergency Services Instructor, IFSTA, Seventh Edition, Pages 196-200, 323, 328, and 341

**Preparation:** Each instructor must develop a motivational statement on why the student should learn the upcoming material. The purpose is to establish relevancy of the lesson to the audience. The ACID BASE acronym can be used to help develop student motivation.

  - **Attention (attract)**  
  - **Curiosity (arouse)**  
  - **Interest (create)**  
  - **Desire (stimulate)**

  - **Begin**
  - **Association**
  - **Students**
  - **Experience**

  Cite examples or use related illustrations of near-miss incidents, injuries, or fatalities. Write this section "from the heart." Be creative! Have fun with it or be serious, but remember the goal is to stimulate student motivation.
## I. KEY COMPONENTS OF A PSYCHOMOTOR LESSON PLAN

<table>
<thead>
<tr>
<th>PRESENTATION</th>
<th>APPLICATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>SLIDE: 2-6-1</td>
<td>SLIDE: 2-6-2</td>
</tr>
</tbody>
</table>

### A. Topic
- B. Time frame
- C. Level of instruction
- D. Authority
- E. Performance objectives
- F. Materials needed
- G. Prerequisites
  1. Example
    a) Students must be SCBA qualified before participating in a live burn
- H. References
- I. Preparation

### J. Lesson outline

1. Presentation
   a) Use a skills sheet when teaching a new skill
      1) Existing SFT materials use the term "job breakdown"

2. Application
   a) The most important step

### K. Evaluation

1. Test instrument based on your skills sheet
2. Must match your learning objectives
II. SKILLS SHEET

A. Purpose
   1. Provides sequence and detail
      a) Step by step operations for completing a task
   2. Breaks down a task
      a) Operational step
         1) Smallest step
         2) Production order
         3) Also known as "performance units"
      b) Key points
         1) Safety related
         2) Knowledge units
         3) Information that aids the student in performing an operation
         4) Gasket, swivel, and threads

B. Skills sheet format
   1. Task title
   2. Page divided into two columns
      a) Left column lists the Operations
         1) Use action verbs
      b) Right column lists the Key Points
         1) Cautions and warnings
         2) Safety factors
         3) Essential conditions
         4) Who, when, where, why, how

If the operation is to inspect the female coupling, what could be some key points?

SLIDE: 2-6-6
### III. TEST INSTRUMENT

**A. Components of a test instrument**
1. Performance objectives
2. Rating factors
   a) Performance accuracy
   b) Time standard
   c) Care in handling tools and equipment
3. Clear directions
4. Many different correct formats

**B. Using a test instrument**
1. Try it on other instructors
2. Use more than one evaluator
3. Establish administration procedures
4. Practice administration procedures
Summary:
Being prepared for your teaching demonstration will provide you with the best opportunity for success. We have identified the key components of a psychomotor lesson plan, skills sheet and test instrument. We have verified your materials to make sure you have everything you need to be successful performing your demonstration.

Evaluation:
The student will complete the summative test at a time determined by the instructor.

Assignment:
Review your notes and read Fire and Emergency Services Instructor, IFSTA, Seventh Edition, Pages 196-200, 323, 328, and 341 in order to prepare yourself for the upcoming test. Study for our next session,
 Topic: 2-7: Adapting Psychomotor Lesson Materials

Time Frame: 1:30

Level of Instruction: Level II

Authority: 2008 Training Instructor CTS # 8: Describe And Demonstrate The Review And Adaptation Of Prepared Instructional Materials

Behavioral Objective:

Condition: Given activities and a summative test

Behavior: The student will describe the principles of psychomotor lesson material modification and adapt lesson materials for two psychomotor lesson plans

Standard: With a minimum 80% accuracy on the summative test according to the information contained in Fire and Emergency Services Instructor, IFSTA, Seventh Edition, Pages 282, 339-344, 402-405, Training Instructor 1B Student Supplement, SFT, 2010 Edition, Pages 13-14, and successfully completing Group Activity 2-7-1 and Individual Activities 2-7-2, 2-7-3, 2-7-4, and 2-7-5

Materials Needed:

- Writing board/pad with markers/erasers
- Appropriate training aids and devices
- Group Activity 2-7-1: Reviewing And Adapting Psychomotor Lesson Materials
- Individual Activity 2-7-2: Adapting Psychomotor Lesson Materials #1
- Individual Activity 2-7-3: Adapting A Psychomotor Lesson Materials #2
- Individual Activity 2-7-4: Psychomotor Teaching Demonstration #1
- Individual Activity 2-7-5: Psychomotor Teaching Demonstration #2

References:

- Fire and Emergency Services Company Officer, IFSTA, Fourth Edition, Page 270
- Fire and Emergency Services Instructor, IFSTA, Seventh Edition, Pages 282, 339-344, and 402-405
Preparation: Each instructor must develop a motivational statement on why the student should learn the upcoming material. The purpose is to establish relevancy of the lesson to the audience. The ACID BASE acronym can be used to help develop student motivation.

- **Attention (attract)**
- **Begin**
- **Curiosity (arouse)**
- **Association**
- **Interest (create)**
- **Students**
- **Desire (stimulate)**
- **Experience**

Cite examples or use related illustrations of near-miss incidents, injuries, or fatalities. Write this section "from the heart." Be creative! Have fun with it or be serious, but remember the goal is to stimulate student motivation.
I. PSYCHOMOTOR LESSON MATERIALS
   A. Psychomotor lesson plan
   B. Materials needed to demonstrate and perform the skill
   C. Skills sheet
   D. Test instruments

Why might an instructor need to adapt a psychomotor lesson?

II. REASONS FOR ADAPTING PSYCHOMOTOR LESSON MATERIALS
   A. Time is not available to present the lesson completely
      1. Adaptation may include dividing the topic into smaller components and creating a brief review of the topics
      2. Audiovisual aids that are required to teach the lesson may not be available
         a) An alternate teaching method or approach may need to be created to replace the missing training aid
   B. Lesson plans may be outdated and not accurately represent the current process or policy
      1. Lesson plans may need to be rewritten
      2. Instructor should have administrative approval
      3. Modification must meet the current situation
   C. Environmental conditions may prevent the presentation of the lesson plan as originally intended
      1. Inclement weather may force the instructor to modify the practical training evolutions
         a) Training may be moved into an apparatus bay or other enclosed space
D. When adaptations are made, the instructor should document
   1. The reason for modifications
   2. Types of modifications
   3. The result of the modifications

E. When the lesson plan is part of a certification program or course, the instructor should consult with the Training Division before making any modifications that could jeopardize certification.

III. ADAPTING PSYCHOMOTOR LESSON MATERIALS

NOTE: Refer students to the Psychomotor Lesson Materials Checklist and Group Activity 2-7-1: Reviewing And Adapting Psychomotor Lesson Materials in their student supplement.

This is a guided discussion to the entire class in adapting this 30-minute lesson plan into a 15-minute lesson plan.

CLASS ACTIVITY:
Complete Group Activity 2-7-1.

SLIDE: 2-7-4

What should an instructor consider when adapting a lesson plan to a different allotted time period?

1. Knowledge and experience level (the apperceptive base) of students
2. Application may be altered
   a) Number of times instructor demonstrates
   b) Number of times student performs
C. Identify the expected performance outcomes
   1. Analyze the job to identify all of the expected job performances
      a) Evaluate level of instruction
      b) Evaluate student behavioral objective

D. Evaluate testing criteria

   1. Adequately measures behavioral objectives
   2. Valid and reliable
   3. Practical to administer
   4. Student ability
      a) Not above or below the student's ability

E. Adapt learning objectives (student behavioral objectives)
   1. Based on students' needs
   2. What the student has to be able to do at the end of the lesson
   3. Attainable

F. Evaluate materials needed
   1. Adapt to available resources
   2. Adapt to instructional environment
   3. Adapt to class size

G. Evaluate preparation
   1. Prepare students to learn by establishing an ACID BASE

---

<table>
<thead>
<tr>
<th>PRESENTATION</th>
<th>APPLICATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>C. Identify the expected performance outcomes</td>
<td>What are some considerations when adapting the testing criteria?</td>
</tr>
<tr>
<td>1. Analyze the job to identify all of the expected job performances</td>
<td></td>
</tr>
<tr>
<td>a) Evaluate level of instruction</td>
<td></td>
</tr>
<tr>
<td>b) Evaluate student behavioral objective</td>
<td></td>
</tr>
<tr>
<td>D. Evaluate testing criteria</td>
<td></td>
</tr>
<tr>
<td>1. Adequately measures behavioral objectives</td>
<td></td>
</tr>
<tr>
<td>2. Valid and reliable</td>
<td></td>
</tr>
<tr>
<td>3. Practical to administer</td>
<td></td>
</tr>
<tr>
<td>4. Student ability</td>
<td></td>
</tr>
<tr>
<td>a) Not above or below the student's ability</td>
<td></td>
</tr>
<tr>
<td>E. Adapt learning objectives (student behavioral objectives)</td>
<td>SLIDE: 2-7-5</td>
</tr>
<tr>
<td>1. Based on students' needs</td>
<td></td>
</tr>
<tr>
<td>2. What the student has to be able to do at the end of the lesson</td>
<td></td>
</tr>
<tr>
<td>3. Attainable</td>
<td></td>
</tr>
<tr>
<td>F. Evaluate materials needed</td>
<td>What does the acronym ACID stand for?</td>
</tr>
<tr>
<td>1. Adapt to available resources</td>
<td></td>
</tr>
<tr>
<td>2. Adapt to instructional environment</td>
<td></td>
</tr>
<tr>
<td>3. Adapt to class size</td>
<td></td>
</tr>
<tr>
<td>G. Evaluate preparation</td>
<td></td>
</tr>
<tr>
<td>1. Prepare students to learn by establishing an ACID BASE</td>
<td></td>
</tr>
</tbody>
</table>
2. Prepare the mind of the learner by creating
   a) **Attention**
   b) **Curiosity**
   c) **Interest**
   d) **Desire**

3. Create a foundation for learning by
   a) **Begin**
   b) **Associating**
   c) **Students and**
   d) **Experiences with lesson content**

H. Evaluate presentation
   1. Use a skills sheet to demonstrate the skill
      a) Emphasizing safety
   2. You must demonstrate as you expect your students to perform and be tested
   3. Ensure information is related to department specific
      a) Standard operating procedures (SOPs)
      b) Standard operating guidelines (SOGs)
      c) Equipment

I. Evaluate application method
   1. Students saying while doing
   2. Students continue to practice until they are ready to be evaluated
   3. Instructor may demonstrate again to reinforce correct skills

What does the acronym BASE stand for?

What is the best method for student retention?
J. Adapt evaluation
   1. Consistent to changes in behavioral objectives and content
   2. Consistent with demonstration
   3. Department policies and performance guidelines

IV. SKILLS SHEET
   A. Consistent with changes in behavioral objectives and lesson plan content
   B. Page is divided into columns
      1. Left column
         a) List the psychomotor skills
            1) Known as operations or performance units
         b) List the operations in sequence
            1) Starting with an action verb
      2. Right column
         a) List the pieces of knowledge that, if omitted, the operation could not be safely or accurately performed
            1) Known as key points or knowledge units
               • Cautions
               • Warnings
               • Safety factors

V. TEST INSTRUMENT
   A. Consistent with level of instruction
   B. Appropriate with students apperceptive base
   C. Changes in materials used
   D. Change in location or test site
VI. MATERIALS NEEDED

A. Examples

1. Adapting a skills sheet written for 2½" hose for use now with 1¾" hose is an example of adapting a skills sheet.

2. You may adapt a skills sheet to a new hydraulic tool manufacturer's specification.

3. If there are fundamental differences in the operations and key points, you are probably creating a new lesson plan and skills sheet.

NOTE: Refer students to Individual Activity 2-7-2: Adapting Psychomotor Lesson Materials #1 and Individual Activity 2-7-3: Adapting Psychomotor Lesson Materials #2 in their student supplement.

Be sure you have approved all the topics selected by the students before they begin adapting the lesson. Review the directions, assign a due date for each, and discuss the assignments with the students.

NOTE: Refer students to Individual Activity 2-7-4: Psychomotor Teaching Demonstration #1, Individual Activity 2-7-5: Psychomotor Teaching Demonstration #2, the Sample Passing Student Instructor Evaluation and the Sample Failing Student Instructor Evaluation.

Be sure you have reviewed each lesson plan adaptation prior to the student's presentation. Inspect all tools, equipment, and props the students will use during the teaching demonstration to ensure they are safe and operational.
## PRESENTATION

Review with the students. Provide each student with the date and approximate time they will complete each cognitive teaching demonstration. Allow 30 minutes for set-up, presentation, and evaluation for each student.

## HOMEWORK:

Prepare for Individual Activity 2-7-4 and 2-7-5.
Summary:
Adapting psychomotor lesson materials is a very real possibility. You may be fortunate enough to have current and complete training materials in your department, but even with the best training materials, you may be required to adapt your lesson plan, test instruments, or the equipment you will use to fit your students’ needs. In this lesson, we will be focusing on adapting psychomotor lesson plans, skills sheets, test instruments, and materials needed. We will discuss some of the conditions which may force you to adapt materials and how you may use different formats to accomplish your terminal objectives.

Even with the best training materials, many things can influence your need to adapt psychomotor lesson plans. Equipments changes, personnel experience level or your training location may require you to adapt an otherwise useable lesson plan. Be aware of fundamental differences to the skill, which would require you to write a new lesson plan.

Evaluation:
The student will complete the activities and summative test at a time determined by the instructor.

Assignment:
GROUP ACTIVITY 2-7-1: REVIEWING AND ADAPTING PSYCHOMOTOR LESSON MATERIALS

**Time Frame:** 0:30

**Materials Needed:**
- Psychomotor Lesson Materials Checklist
- Student Adaptation Worksheets
- Pen or pencil

**Introduction:** This activity provides the students the opportunity to adapt existing psychomotor lesson materials. The instructor will lead the class through the process.

**Directions:**
1. Review the attached lesson plan.
2. Determine the adaptations required to revise the lesson plan to meet the following conditions:
   - One-person
   - To the door only
   - 15-minute time frame
3. Evaluate each component for required modifications.
4. In the space provided, make any required changes.
5. Strike out those portions of the lesson plan that need to be eliminated.
6. Changes will be discussed as a class when appropriate.
STUDENT ADAPTATION WORKSHEETS

**Topic:** How To Advance A Charged Hoseline Into A Structure, Two-Person Method

**Time Frame:** 1:00

**Level of Instruction:** Level II

**Authority:** 2009 Fire Fighter CTS

**Behavioral Objective:**

**Condition:** A fire engine equipped with a charged hoseline and nozzle, appropriate personal protective equipment, and a suitable structure

**Behavior:** The students will advance a charged hoseline into a structure using the two-person method

**Standard:** Completing all operations within _________ according to the job breakdown

**Materials Needed:**
- Job breakdown
- Fire engine equipped with charged hoseline and nozzle (minimum 150-feet of 1½" hoseline)
- Appropriate personal protective equipment
- Suitable structure
References:

- Essentials of Fire Fighting, IFSTA, Fourth Edition, Chapter 12
- Hose Practices, IFSTA, Seventh Edition, Chapter 4

PREPARATION:

In order to attack and extinguish fires in structures, it is necessary to advance or stretch hoselines from the engine to the seat of the fire. For maximum safety, it is necessary that a fire fighter be alert to the dangers of back draft, flashover, and building collapse as well.
<table>
<thead>
<tr>
<th>OPERATIONS</th>
<th>KEY POINTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Deploy hoseline</td>
<td>1a. To point of entry</td>
</tr>
<tr>
<td></td>
<td>b. Using appropriate hoseline pull</td>
</tr>
<tr>
<td>2. Flake hoseline</td>
<td>2a. So it can be easily used</td>
</tr>
<tr>
<td></td>
<td>b. In line with direction of travel</td>
</tr>
<tr>
<td>3. Charge hoseline</td>
<td>3a. Signaling engine operator to charge the hoseline</td>
</tr>
<tr>
<td></td>
<td>b. Bleeding air from nozzle</td>
</tr>
<tr>
<td></td>
<td>c. Appropriate pattern selected (30° or less)</td>
</tr>
<tr>
<td>4. Check door</td>
<td>4a. With ungloved hand or wrist</td>
</tr>
<tr>
<td></td>
<td>b. Starting at bottom of door and moving up</td>
</tr>
<tr>
<td>5. Check for back draft conditions</td>
<td>5a. Door is hot</td>
</tr>
<tr>
<td></td>
<td>b. Smoke &quot;puffing&quot; in and out</td>
</tr>
<tr>
<td></td>
<td>c. Notify officer of situation</td>
</tr>
<tr>
<td>6. Activate safety devices</td>
<td>6a. SCBA</td>
</tr>
<tr>
<td></td>
<td>b. Personal alarm device</td>
</tr>
<tr>
<td>7. Open door</td>
<td>7a. Standing to side as partner forces door open</td>
</tr>
<tr>
<td></td>
<td>b. Slowly</td>
</tr>
<tr>
<td>8. Enter structure</td>
<td>8a. Two-person minimum</td>
</tr>
<tr>
<td></td>
<td>b. Advancing hoseline</td>
</tr>
<tr>
<td></td>
<td>c. Keeping low</td>
</tr>
<tr>
<td></td>
<td>d. Using short bursts of water to cool ceiling if extreme heat condition exists to prevent flashover</td>
</tr>
<tr>
<td>OPERATIONS</td>
<td>KEY POINTS</td>
</tr>
<tr>
<td>-------------------------</td>
<td>---------------------------------------------------------------------------</td>
</tr>
<tr>
<td>9. Check attic</td>
<td>9a. If attic involvement is suspected or if no extreme thermal layer exists upon entry</td>
</tr>
<tr>
<td>10. Advance hoseline</td>
<td>10a. To seat of fire</td>
</tr>
<tr>
<td>11. Extinguish simulated fire</td>
<td>11a. At base</td>
</tr>
<tr>
<td>12. Check for extension</td>
<td>12a. Attic first</td>
</tr>
<tr>
<td></td>
<td>b. Other five sides of the structure</td>
</tr>
<tr>
<td>13. Perform primary search</td>
<td>13a. Notifying IC of primary knockdown and extension of fire</td>
</tr>
<tr>
<td></td>
<td>b. In rooms closest and above origin</td>
</tr>
<tr>
<td></td>
<td>c. Notifying IC when primary search is completed</td>
</tr>
</tbody>
</table>
**Application:**
The student will practice performing the operations in the job breakdown while under supervision.

**Evaluation:**
The student will complete a manipulative performance test at a time determined by the instructor.

**Assignment:**
Practice this job in order to prepare yourself for the upcoming performance test. Study for our next session.
GROUP ACTIVITY 2-7-1: INSTRUCTOR ANSWER KEY

**Topic:** How To Advance A Charged Hoseline Into A Structure, Two-Person Method

*How To Advance A Charged Hoseline To The Door Of A Structure, One-Person Method*

<table>
<thead>
<tr>
<th>Time Frame:</th>
<th>1:00</th>
<th>0:15</th>
</tr>
</thead>
<tbody>
<tr>
<td>Level of Instruction:</td>
<td>Level II</td>
<td>No change</td>
</tr>
<tr>
<td>Authority:</td>
<td>2009 Fire Fighter CTS</td>
<td>No change</td>
</tr>
</tbody>
</table>

**Behavioral Objective:**

**Condition:** A fire engine equipped with a charged hoseline and nozzle, appropriate personal protective equipment, and a suitable structure

*No change*

**Behavior:** The students will advance a charged hoseline into a structure using the two-person method

*The student will advance a charged hoseline to the door of a structure using the one-person method*

**Standard:** Completing all operations within ________ according to the job breakdown skills sheet

*Possible time standard could be included*

**Materials Needed:**

- Job breakdown - Skills Sheet
- Fire engine equipped with charged hoseline and nozzle (minimum 150-feet of 1½“ 1¼” hoseline)
- Appropriate personal protective equipment
- Suitable structure

*Skills sheet revised; Hoseline size changed*

**References:**

- Essentials of Fire Fighting, IFSTA, Fourth Edition, Chapter 12
- Hose Practices, IFSTA, Seventh Edition, Chapter 4
- Department standard operating guideline
**Preparation:** In order to attack and extinguish fires in structures, it is necessary to advance or stretch hoselines from the engine to the seat of the fire. For maximum safety, it is necessary that a fire fighter be alert to the dangers of back draft, flashover, and building collapse as well.

*Fire fighters must routinely advance hoselines from an engine to the seat of the fire. To learn how to perform this skill, fire fighters may perform portions of an evolution.*
<table>
<thead>
<tr>
<th>OPERATIONS</th>
<th>KEY POINTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Deploy hoseline</td>
<td>1a. To point of entry</td>
</tr>
<tr>
<td></td>
<td>b. Using appropriate hoseline pull</td>
</tr>
<tr>
<td>2. Flake hoseline</td>
<td>2a. So it can be easily used</td>
</tr>
<tr>
<td></td>
<td>b. In line with direction of travel</td>
</tr>
<tr>
<td>3. Charge hoseline</td>
<td>3a. Signaling engine operator to charge the hoseline</td>
</tr>
<tr>
<td></td>
<td>b. Bleeding air from nozzle</td>
</tr>
<tr>
<td></td>
<td>c. Appropriate pattern selected (30° or less)</td>
</tr>
<tr>
<td>4. Check door</td>
<td>4a. With ungloved hand or wrist</td>
</tr>
<tr>
<td></td>
<td>b. Starting at bottom of door and moving up</td>
</tr>
<tr>
<td>5. Check for back draft conditions</td>
<td>5a. Door is hot</td>
</tr>
<tr>
<td></td>
<td>b. Smoke &quot;puffing&quot; in and out</td>
</tr>
<tr>
<td></td>
<td>c. Notify officer of situation</td>
</tr>
<tr>
<td>6. Activate safety devices</td>
<td>6a. SCBA</td>
</tr>
<tr>
<td></td>
<td>b. Personal alarm device</td>
</tr>
<tr>
<td>7. Open door</td>
<td>7a. Standing to side as partner forces door open</td>
</tr>
<tr>
<td></td>
<td>b. Slowly</td>
</tr>
<tr>
<td>8. Enter structure</td>
<td>8a. Two-person minimum</td>
</tr>
<tr>
<td></td>
<td>b. Advancing hoseline</td>
</tr>
<tr>
<td></td>
<td>c. Keeping low</td>
</tr>
<tr>
<td></td>
<td>d. Using short bursts of water to cool ceiling if extreme heat condition</td>
</tr>
<tr>
<td></td>
<td>exists to prevent flashover</td>
</tr>
<tr>
<td>OPERATIONS</td>
<td>KEY POINTS</td>
</tr>
<tr>
<td>-----------------------------</td>
<td>-----------------------------------------------------------------------------</td>
</tr>
<tr>
<td>9. Check attic</td>
<td>9a. If attic involvement is suspected or if no extreme thermal layer exists upon entry</td>
</tr>
<tr>
<td>10. Advance hoseline</td>
<td>10a. To seat of fire</td>
</tr>
<tr>
<td>11. Extinguish simulated fire</td>
<td>11a. At base</td>
</tr>
<tr>
<td>12. Check for extension</td>
<td>12a. Attic first</td>
</tr>
<tr>
<td></td>
<td>b. Other five sides of the structure</td>
</tr>
<tr>
<td>13. Perform primary search</td>
<td>13a. Notifying IC of primary knockdown and extension of fire</td>
</tr>
<tr>
<td></td>
<td>b. In rooms closest and above origin</td>
</tr>
<tr>
<td></td>
<td>c. Notifying IC when primary search is completed</td>
</tr>
</tbody>
</table>
Application:
The student will practice performing the operations in the job breakdown skills sheet while under supervision.

No change

Evaluation:
The student will complete a manipulative performance test at a time determined by the instructor.

The student will complete a performance test on Day, Month, Date, Year.

Assignment:
Practice this job in order to prepare yourself for the upcoming performance test. Study for our next session.

No change
INDIVIDUAL ACTIVITY 2-7-2: ADAPTING PSYCHOMOTOR LESSON MATERIALS #1

<table>
<thead>
<tr>
<th>Time Frame:</th>
<th>Homework</th>
</tr>
</thead>
<tbody>
<tr>
<td>Materials Needed:</td>
<td>• Materials for your first psychomotor lesson</td>
</tr>
<tr>
<td></td>
<td>• Psychomotor Lesson Materials Checklist</td>
</tr>
<tr>
<td></td>
<td>• Pen or pencil</td>
</tr>
<tr>
<td>Introduction:</td>
<td>This activity provides the students the opportunity to adapt an existing lesson plan considering how each lesson plan component is relative to the target audience.</td>
</tr>
<tr>
<td>Directions:</td>
<td>1. Assess your lesson materials using the Psychomotor Lesson Materials Checklist.</td>
</tr>
<tr>
<td></td>
<td>2. Make legible revisions on your hard copy documents.</td>
</tr>
<tr>
<td></td>
<td>▪ Topic is still accurate.</td>
</tr>
<tr>
<td></td>
<td>▪ Objectives need to match your revisions.</td>
</tr>
<tr>
<td></td>
<td>▪ Lesson plan content has consistency and continuity</td>
</tr>
<tr>
<td></td>
<td>▪ Lesson plan content needs to match time allotment</td>
</tr>
<tr>
<td></td>
<td>▪ All lesson plan components are present</td>
</tr>
<tr>
<td></td>
<td>3. Bring your original documents and a second complete package for your instructor.</td>
</tr>
<tr>
<td></td>
<td>4. Bring all the materials you will need for your teaching demonstration.</td>
</tr>
<tr>
<td></td>
<td>5. Due: __________________________________________________________________________</td>
</tr>
<tr>
<td></td>
<td>6. If you do not meet the passing criteria, you will have one opportunity to submit a rewrite of your adapted lesson plan.</td>
</tr>
<tr>
<td></td>
<td>7. You will use these adapted materials for your upcoming teaching demonstration.</td>
</tr>
</tbody>
</table>
INDIVIDUAL ACTIVITY 2-7-3: ADAPTING PSYCHOMOTOR LESSON MATERIALS #2

<table>
<thead>
<tr>
<th>Time Frame:</th>
<th>Homework</th>
</tr>
</thead>
</table>
| Materials Needed: | - Materials for your second psychomotor lesson  
- Psychomotor Lesson Materials Checklist  
- Pen or pencil |
| Introduction: | This activity provides the students the opportunity to adapt an existing lesson plan considering how each lesson plan component is relative to the target audience. |
| Directions: | 1. Assess your lesson materials using the Psychomotor Lesson Materials Checklist.  
2. Make legible revisions on your hard copy documents.  
   - Topic is still accurate.  
   - Objectives need to match your revisions.  
   - Lesson plan content has consistency and continuity  
   - Lesson plan content needs to match time allotment  
   - All lesson plan components are present  
3. Bring your original documents and a second complete package for your instructor.  
4. Bring all the materials you will need for your teaching demonstration.  
5. Due: ________________________________  
6. If you do not meet the passing criteria, you will have one opportunity to submit a rewrite of your adapted lesson plan.  
7. You will use these adapted materials for your upcoming teaching demonstration. |
INDIVIDUAL ACTIVITY 2-7-4: PSYCHOMOTOR TEACHING DEMONSTRATION #1

<table>
<thead>
<tr>
<th>Time Frame:</th>
<th>Homework</th>
</tr>
</thead>
</table>
| Materials Needed: | • Adapted lesson plan  
• Appropriate audiovisual training aids  
• Sample Passing Student Instructor Psychomotor Teaching Demonstration Evaluation  
• Sample Failing Student Instructor Psychomotor Teaching Demonstration Evaluation |
| Introduction: | This activity provides the student with the opportunity to deliver a psychomotor lesson from an adapted lesson plan. Instructor led presentations require an awareness of the students' knowledge base and several factors regarding the learning environment. Such things as lighting, comfort, instructor demeanor, voice volume, maintaining eye contact, and avoiding distracting teaching methods are all important considerations when presenting instruction. |
| Directions: | 1. Your teaching demonstration is scheduled for:  
(Enter Day, Date, and Approximate Time)  
2. Review the Sample Passing Student Instructor Psychomotor Teaching Demonstration Evaluation form.  
3. Review the Sample Failing Student Instructor Psychomotor Teaching Demonstration Evaluation form.  
4. Prepare to teach a 15-minute presentation from your adapted psychomotor lesson plan following the four-step method of instruction.  
   - Include a clearly stated student behavioral objective.  
   - Follow your lesson plan.  
   - Use appropriate personal protective equipment.  
   - Reinforce teaching points.  
   - Allow time for student application while you supervise and provide feedback.  
   - Allow time for student evaluation.  
   - Conclude the presentation with an assignment, if appropriate.  
5. Your presentation time must be at least 12 minutes and no longer than 17 minutes.  
6. You will be evaluated by both student evaluators and the Primary Instructor for the class or a qualified Skills Evaluator. |
INDIVIDUAL ACTIVITY 2-7-5: PSYCHOMOTOR TEACHING DEMONSTRATION #2

**Time Frame:**  
Homework

**Materials Needed:**  
- Adapted lesson plan
- Appropriate audiovisual training aids
- Sample Passing Student Instructor Psychomotor Teaching Demonstration Evaluation
- Sample Failing Student Instructor Psychomotor Teaching Demonstration Evaluation

**Introduction:**  
This activity provides the student with the opportunity to deliver a psychomotor lesson from an adapted lesson plan. Instructor led presentations require an awareness of the students' knowledge base and several factors regarding the learning environment. Such things as lighting, comfort, instructor demeanor, voice volume, maintaining eye contact, and avoiding distracting teaching methods are all important considerations when presenting instruction.

**Directions:**  
1. Your teaching demonstration is scheduled for:

   (Enter Day, Date, and Approximate Time)

2. Review the Sample Passing Student Instructor Psychomotor Teaching Demonstration Evaluation form.

3. Review the Sample Failing Student Instructor Psychomotor Teaching Demonstration Evaluation form.

4. Prepare to teach a 15-minute presentation from your adapted psychomotor lesson plan following the four-step method of instruction.
   - Include a clearly stated student behavioral objective.
   - Follow your lesson plan.
   - Use appropriate personal protective equipment.
   - Reinforce teaching points.
   - Allow time for student application while you supervise and provide feedback.
   - Allow time for student evaluation.
   - Conclude the presentation with an assignment, if appropriate.

5. Your presentation time must be at least 12 minutes and no longer than 17 minutes.

6. You will be evaluated by both student evaluators and the Primary Instructor for the class or a qualified Skills Evaluator.
Sample Passing Student Instructor Psychomotor Teaching Demonstration Evaluation

Student Instructor: **William James**  
Demo #: [ ] 1st [X] 2nd  

**How To Inspect A Pulaski**  
October 31  
Level of Instruction: **II**  

Student Evaluator: **Colleen Buhler**  
Primary [X] Secondary [ ]

<table>
<thead>
<tr>
<th>EVALUATED COMPONENTS</th>
<th>CONSIDER</th>
<th>YES</th>
<th>NO</th>
<th>Pass or Fail</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1. MANAGED TRAINING ENVIRONMENT</strong></td>
<td>Disruptions, distractions</td>
<td>X</td>
<td>F</td>
<td></td>
</tr>
<tr>
<td>Comments: <em>All students had a good view of the demo.</em></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>2. LEARNING OBJECTIVE</strong></td>
<td>Must include Condition, Behavior, Standard</td>
<td>X</td>
<td>F</td>
<td></td>
</tr>
<tr>
<td>Comments: <em>Stated clearly.</em></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>3. PREPARATION</strong></td>
<td>ACID BASE, Effective</td>
<td>X</td>
<td>F</td>
<td></td>
</tr>
<tr>
<td>Comments: <em>Tied need to know to everyday tool use. Stressed safety.</em></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>4. PRESENTATION</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4a. Content</td>
<td>Appropriate lesson flow, known to unknown</td>
<td>X</td>
<td>F</td>
<td></td>
</tr>
<tr>
<td>Comments: <em>Good flow. Followed skills sheet.</em></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4b. Training Aids and Props</td>
<td>Same as what the students will use, easily seen, used effectively and safety</td>
<td>X</td>
<td>F</td>
<td></td>
</tr>
<tr>
<td>Comments: <em>Equipment set-up for students to see. Had everything he needed.</em></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4c. Performed Skill at Full-speed</td>
<td>Using skills sheet, promoting safety</td>
<td>X</td>
<td>F</td>
<td></td>
</tr>
<tr>
<td>Comments: <em>Performed smoothly according to skills sheet. Maintained good eye contact with the entire class.</em></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4d. Performed Slowly, Verbalizing</td>
<td>Operations and key points, promoting safety</td>
<td>X</td>
<td>F</td>
<td></td>
</tr>
<tr>
<td>Comments: <em>Stressed safety. Made sure all could see and hear.</em></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4e. Verbal Communication</td>
<td>Volume, clarity, interferences</td>
<td>X</td>
<td>F</td>
<td></td>
</tr>
<tr>
<td>Comments: <em>Good volume and clarity. Talked to students, not at them.</em></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

All students had a good view of the demo.  
Stated clearly.  
Tied need to know to everyday tool use. Stressed safety.
<table>
<thead>
<tr>
<th>EVALUATED COMPONENTS</th>
<th>CONSIDER</th>
<th>YES</th>
<th>NO</th>
<th>Pass or Fail</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nonverbal Communication</td>
<td>Eye contact, gestures, distracting mannerisms</td>
<td>X</td>
<td></td>
<td>P or F</td>
</tr>
</tbody>
</table>

Comments: Had good eye contact throughout the demonstration. Made sure everyone could see what he was doing.

5. APPLICATION

5a. Student Skill Performance | Checking key points, correcting errors | X |    | P or F |

Comments: Worked with each student and guided through the demo. Corrected any mistakes and reminded them of safety issues.

5b. Active Learning Environment | Questioning techniques, interaction, feedback | X |    | P or F |

Comments: Asked students questions. Gave positive feedback.

6. EVALUATION: | Student performs without assistance | X |    | P or F |

7. ASSIGNMENT | | X |    | P or F |

- Critical Component: Failure on this component results in failure of the teaching demonstration

[X] Primary or [ ] Secondary Student Evaluator: 15:12 Actual Teaching Time

Grade: Pass [X] Fail [ ]

Comments: Good job! Don’t over praise. Glad you failed the student that wasn’t trying.

Master Instructor or Skills Evaluator: ________ Actual Teaching Time

Grade: Pass [ ] Fail [ ]

Comments:
## SAMPLE FAILING STUDENT INSTRUCTOR PSYCHOMOTOR TEACHING DEMONSTRATION EVALUATION

**Student Instructor:** Bill Buckner  
**Demo #:** [X] 1st [ ] 2nd  
**Topic:** How To Perform a Working Hose Drag  
**Date:** October 31  
**Student Evaluator:** Mark Ferreira  
**Level of Instruction:** II  
**Primary [X] Secondary [ ]**

### EVALUATED COMPONENTS

<table>
<thead>
<tr>
<th>EVALUATED COMPONENTS</th>
<th>CONSIDER</th>
<th>YES</th>
<th>NO</th>
<th>Pass or Fail</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. MANAGED TRAINING ENVIRONMENT</td>
<td>Disruptions, distractions</td>
<td>X</td>
<td>P or F</td>
<td>✔</td>
</tr>
<tr>
<td>Comments: Allowed all students to see the demo.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. LEARNING OBJECTIVE</td>
<td>Must include Condition, Behavior, Standard</td>
<td>X</td>
<td>P</td>
<td>✔</td>
</tr>
<tr>
<td>Comments: Did not say what the standard would be!</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. PREPARATION</td>
<td>ACID BASE, Effective</td>
<td>X</td>
<td>P or F</td>
<td>✔</td>
</tr>
<tr>
<td>Comments: Used a short video of a recent fire showing this skill.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. PRESENTATION</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4a. Content</td>
<td>Appropriate lesson flow, known to unknown</td>
<td>X</td>
<td>P or F</td>
<td>✔</td>
</tr>
<tr>
<td>Comments: Skills sheet appeared to be complete.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4b. Training Aids and Props</td>
<td>Same as what the students will use, easily seen, used effectively and safety</td>
<td>X</td>
<td>P or F</td>
<td>✔</td>
</tr>
<tr>
<td>Comments: Equipment set-up prior to the demo. Had more than he needed.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4c. Performed Skill at Full-speed</td>
<td>Using skills sheet, promoting safety</td>
<td>X</td>
<td>P or F</td>
<td>✔</td>
</tr>
<tr>
<td>Comments: Did not follow the skills sheet. Went a little too fast!</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4d. Performed Slowly, Verbalizing</td>
<td>Operations and key points, promoting safety</td>
<td>X</td>
<td>P or F</td>
<td>✔</td>
</tr>
<tr>
<td>Comments: Omitted this step</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4e. Verbal Communication</td>
<td>Volume, clarity, interferences</td>
<td>X</td>
<td>P or F</td>
<td>✔</td>
</tr>
<tr>
<td>Comments: Good clear voice, volume and clarity</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EVALUATED COMPONENTS</td>
<td>CONSIDER</td>
<td>YES</td>
<td>NO</td>
<td>Pass or Fail</td>
</tr>
<tr>
<td>--------------------------------------</td>
<td>--------------------------------------------------------------------------</td>
<td>-----</td>
<td>----</td>
<td>--------------</td>
</tr>
<tr>
<td>4f. Nonverbal Communication</td>
<td>Eye contact, gestures, distracting mannerisms</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Comments:</td>
<td>Maintained eye contact with several students.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. APPLICATION</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5a. Student Skill Performance</td>
<td>Checking key points, correcting errors</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Comments:</td>
<td>Helped each student. Was impatient with one student who didn't get it.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5b. Active Learning Environment</td>
<td>Questioning techniques, interaction, feedback</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Comments:</td>
<td>Only asked one question at the end. &quot;Did everyone see that?&quot;</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. EVALUATION:</td>
<td></td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. ASSIGNMENT</td>
<td></td>
<td>X</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Critical Component: Failure on this component results in failure of the teaching demonstration

[X] Primary or [   ] Secondary Student Evaluator: 20.25 Actual Teaching Time
Grade: Pass [   ] Fail [X]  

Comments: Did not provide standard in SBO.
Use of video was effective. Didn't complete each operation on the skills sheet. No interaction.

Master Instructor or Skills Evaluator:                   Actual Teaching Time
Grade: Pass [   ] Fail [   ]

Comments:

---

January 2009 2-7: Adapting Psychomotor Lesson Materials Page 29
**Topic:** 2-8: Selecting And Using Training Aids

**Time Frame:** 1:00

**Level of Instruction:** Level II

**Authority:** 2008 Training Instructor CTS# 8: Describe And Demonstrate The Review And Adaptation Of Prepared Instructional Materials

**Behavioral Objective:**

- **Condition:** Given a summative test
- **Behavior:** The student will describe and demonstrate the selection of training aids for a prepared psychomotor lesson plan
- **Standard:** With a minimum 80% accuracy on the summative test according to the information contained in *Fire and Emergency Services Instructor*, IFSTA, Seventh Edition, Pages 249-274

**Materials Needed:**
- Writing board/pad with markers/erasers
- Appropriate audiovisual training aids and devices

**References:**
- *Fire and Emergency Services Instructor*, IFSTA, Seventh Edition, Pages 249-274

**Preparation:** Each instructor must develop a motivational statement on why the student should learn the upcoming material. The purpose is to establish relevancy of the lesson to the audience. The ACID BASE acronym can be used to help develop student motivation.

- **Attention (attract)**
- **Begin**
- **Curiosity (arouse)**
- **Association**
- **Interest (create)**
- **Students**
- **Desire (stimulate)**
- **Experience**

Cite examples or use related illustrations of near-miss incidents, injuries, or fatalities. Write this section "from the heart." Be creative! Have fun with it or be serious, but remember the goal is to stimulate student motivation.
I. BENEFITS OF USING TRAINING AIDS IN A PSYCHOMOTOR LESSON

A. Enhance student understanding
   1. Increases the students’ ability to understand the information in a lesson

B. Increase student acceptance
   1. Seeing an illustration or touching an item helps students accept the reality of the item more easily than simply hearing a description of it

C. Add variety to instructional delivery
   1. Enhances the interest

D. Clarify, prove, or emphasize a key point
   1. Allows the students to see the key point at the same time they hear the description

E. Enhance memory
   1. Reinforces the verbal presentation, making it easier to remember and retain

F. Illustrate a sequence of events or steps in a process
   1. Establishes a sequence of steps, the components of an assembly, or the steps of a theoretical process

G. Save lecture time
   1. More information can be transferred to the student
   2. Lecture time can be reduced making training more efficient

How do training aids assist students in remembering?
II. FACTORS TO CONSIDER WHEN SELECTING TRAINING AIDS FOR A PSYCHOMOTOR LESSON

A. Learning objectives and lesson content
   1. Content must be relevant to the desired learning objectives and lesson content

B. Required student performance
   1. Standardized curricula has made it easier for instructors to select appropriate training aids
      a) Based on the lesson plan, training aids should illustrate or demonstrate what the student must be able to do at the end of the training

C. Class size and interaction
   1. Key factors in selecting training aids
      2. Student participation can influence the choice of training aids

D. Pace of learning
   1. High pace of learning
      a) Can be integrated into a psychomotor lesson plan so the class moves quickly through the information
   2. Students are unfamiliar with the material
      a) Should allow an instructor to proceed at a slower pace
   3. Variety of knowledge levels or experiences
      a) Student-centered strategy can include a mixture of the two scenarios

SLIDE: 2-8-3

What should be the primary focus when selecting training aids?

Why is class size an important factor to consider when selecting training aids?
b) Students not at the required learning level can access self-study materials before joining the more advanced students

E. Practice factors
1. Important to give students an opportunity to apply new knowledge and skills

2. To make the new application meaningful, practice time should be included in the lesson plan along with the training aids or props needed

F. Evaluative factors
1. Consider how a student’s knowledge will be evaluated at the end of the course

2. May and often will be used as the testing tool
   a) For example, the same CPR mannequin is usually used for the initial demonstration, student practice, and final evaluation

   Why use the same training aid?

   b) Using the same training aid for both ensures student familiarity with the prop or item during the skills evaluation

G. Budget limitations
1. Should be cost-effective
   a) Benefit must be greater than the purchase cost of the device, cost of upkeep and storage, and cost in time to develop the training aid

2. To establish cost-effectiveness, determine first the benefits of purchasing, developing, or using the training aid

3. Objectively determine the cost of purchasing or creating a training aid

<table>
<thead>
<tr>
<th>PRESENTATION</th>
<th>APPLICATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>b) Students not at the required learning level can access self-study materials before joining the more advanced students</td>
<td>Why?</td>
</tr>
<tr>
<td>E. Practice factors</td>
<td></td>
</tr>
<tr>
<td>1. Important to give students an opportunity to apply new knowledge and skills</td>
<td></td>
</tr>
<tr>
<td>2. To make the new application meaningful, practice time should be included in the lesson plan along with the training aids or props needed</td>
<td></td>
</tr>
<tr>
<td>F. Evaluative factors</td>
<td></td>
</tr>
<tr>
<td>1. Consider how a student’s knowledge will be evaluated at the end of the course</td>
<td></td>
</tr>
<tr>
<td>2. May and often will be used as the testing tool</td>
<td></td>
</tr>
<tr>
<td>a) For example, the same CPR mannequin is usually used for the initial demonstration, student practice, and final evaluation</td>
<td>Why use the same training aid?</td>
</tr>
<tr>
<td>b) Using the same training aid for both ensures student familiarity with the prop or item during the skills evaluation</td>
<td></td>
</tr>
<tr>
<td>G. Budget limitations</td>
<td></td>
</tr>
<tr>
<td>1. Should be cost-effective</td>
<td></td>
</tr>
<tr>
<td>a) Benefit must be greater than the purchase cost of the device, cost of upkeep and storage, and cost in time to develop the training aid</td>
<td></td>
</tr>
<tr>
<td>2. To establish cost-effectiveness, determine first the benefits of purchasing, developing, or using the training aid</td>
<td></td>
</tr>
<tr>
<td>3. Objectively determine the cost of purchasing or creating a training aid</td>
<td></td>
</tr>
</tbody>
</table>

SLIDE: 2-8-4
### III. ADVANTAGES OF NONPROJECTED AUDIOVISUAL TRAINING AIDS OVER PROJECTED TRAINING AIDS

<table>
<thead>
<tr>
<th>PRESENTATION</th>
<th>APPLICATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Do not depend on high levels of technology or technical skill</td>
<td>What are some examples of cost-effective training aids you have used or seen?</td>
</tr>
<tr>
<td>B. Easier to use and less likely to malfunction during presentations</td>
<td><strong>SLIDE: 2-8-5</strong></td>
</tr>
<tr>
<td>C. Generally, nonprojection-type equipment also costs less to purchase, create, use, and maintain</td>
<td>What makes a model such a useful tool?</td>
</tr>
</tbody>
</table>

### IV. NONPROJECTED TRAINING AIDS

A. Models

1. Excellent medium for illustrating mechanical or spatial concepts
2. Students can clearly observe the types of relationships between the parts of a model as they watch it function or manipulate it
3. Tabletop miniatures
   a) Miniatures of fire and emergency apparatus are routinely used along with model buildings to practice strategy and tactics
   b) Tabletop models allow participants to play out a simulated incident in compressed time
4. Cutaway models
   a) Of great value when participants are learning the inner workings of mechanical systems such as valves or pumps

What advantages does a cutaway model have?
### Anatomical models

- Available in three dimensions, some of which have cutaway or take-apart features

  - Benefit students who are developing their EMS skills and knowledge in such areas as the mechanisms of internal injuries

### Replicas or miniatures

- Can demonstrate how actual equipment or devices are used

  - Examples are various types of cribbing and shoring assemblies based on actual designs

  - Students can see how the components are assembled and used before a practical training evolution

### Actual tools and equipment

- Can also be used for demonstrations

  - An actual self-contained breathing apparatus (SCBA) is a better training aid to show key components than a picture of the SCBA

### Casualty simulation training aids

1. Any medium that increases the realism of a simulation increases its value

   a) Simulated casualties give tremendous benefits in increasing realism for EMS training involving hands-on applications
b) Instructors can simulate injuries using commercially available moulage kits and prostheses or by applying Plasticine® modeling paste, wax, and makeup

2. When a very realistic simulation is required, instructors can arrange to use personnel who are qualified as casualty simulato

3. Instructors must properly brief the role players on their injuries, the information they are to reveal, and any other pertinent scenario details

   a) A realistic role-play helps enhance the lessons learned

V. PROJECTED TRAINING AIDS

A. Advantages

1. Images are vivid, multicolored, and visible to a large audience

2. These training aids stimulate multiple senses simultaneously

B. Disadvantages

1. Large investment in audiovisual equipment

2. Costly purchase of projected training-aid presentations

3. Device placement obstructing the vision of some students in the classroom

What must the instructor do before using role players to increase realism in a casualty simulation?

What are some disadvantages of projected training aids?
4. Distraction for some students by instructor operating the device
5. Extensive time spent in creating presentations

VI. GUIDELINES FOR USING AUDIOVISUAL TRAINING AIDS
A. Keep visual aids simple and easy to understand
B. Allocate sufficient preparation time for the visual aids so that they convey the message and look professional
C. Rehearse with the training aids before giving a lecture or demonstration
D. Use only the necessary number of training aids; too many can be distracting
E. Create training aids that are large enough to be seen and read by all members of the class
   1. Ensure that slides, illustrations, or transparencies contain words that are simple and easy to read
F. Have a contingency plan available in case there is a failure with the audiovisual training aid device
   1. Be prepared to repair or replace the projection equipment or materials in such an event

VII. STRATEGIES FOR AVOIDING DISTRACTIONS WHEN USING AUDIOVISUAL TRAINING AIDS
A. Introduce audiovisual training aids at the time they are to be viewed, heard, or manipulated
B. Avoid simultaneous use of multiple training aids
   1. Unless they are carefully and strategically written into the lesson plan
C. Apply training aids in ways that emphasize the message not the equipment
D. Keep eye contact with students when using a visual aid
<table>
<thead>
<tr>
<th>PRESENTATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>E. Ensure that all students in the presentation room can hear audio training aid devices clearly</td>
</tr>
<tr>
<td>F. Display projected or nonprojected visual training aids above the eyelevel of seated students</td>
</tr>
<tr>
<td>G. Adjust ambient lighting</td>
</tr>
<tr>
<td>H. Keep window blinds closed to reduce glare</td>
</tr>
<tr>
<td>I. Coordinate with other personnel and operations to minimize pedestrian and/or vehicle traffic in the training area</td>
</tr>
</tbody>
</table>

**SLIDE: 2-8-11**
Summary:
When properly used, training aids and devices can create an active psychomotor learning experience for any student. The instructor must be familiar with training aids, the types of equipment required to support or utilize them, and the benefits and limitations of the equipment. Training aids are the instructor’s tools just as nozzles and axes are the firefighter’s tools. Additionally, the benefits and limitations of the training aids should be thoroughly reviewed during the selection process.

Evaluation:
The student will complete the summative test at a time determined by the instructor.

Assignment:
Review your notes and read Fire and Emergency Services Instructor, IFSTA, Seventh Edition, Pages 249-274 in order to prepare yourself for the upcoming test. Study for our next session.
**Topic:** 2-9: Procedures Used For Evaluating Student Teaching Presentations

**Time Frame:** 1:00

**Level of Instruction:** Level II

**Authority:** 2008 Training Instructor CTS #12: Describe And Demonstrate The Methods Of Student Instructor Evaluation

**Behavioral Objective:**

**Condition:** Given an activity and a summative test

**Behavior:** The student will describe and demonstrate procedures for evaluating student instructors including providing feedback, making constructive suggestions for improvement, and completing an evaluation form

**Standard:** With a minimum 80% accuracy on the summative test according to the information contained in Fire and Emergency Services Instructor, IFSTA, Seventh Edition, Pages 182, 183, and 361 and successfully completing Individual Activities 2-9-1 and 2-9-2

**Materials Needed:**

- Writing board pad with markers/erasers
- Appropriate audiovisual training aids and devices
- Individual Activity 2-9-1: Evaluating A Student Instructor's Psychomotor Teaching Demonstration As The Primary Evaluator
- Individual Activity 2-9-2: Evaluating A Student Instructor's Psychomotor Teaching Demonstration As The Secondary Evaluator
- Blank Psychomotor Teaching Demonstration Evaluation Form
- Sample Passing Student Instructor Evaluation
- Sample Failing Student Instructor Evaluation

**References:**

- Fire and Emergency Services Instructor, IFSTA, Seventh Edition, Pages 182, 183, and 361

**Preparation:** Each instructor must develop a motivational statement on why the student should learn the upcoming material. The purpose is to establish relevancy of the lesson to the audience. The ACID BASE acronym can be used to help develop student motivation.

  - Attention (attract)  Begin
  - Curiosity (arouse)   Association
Interest (create)  Students
Desire (stimulate)  Experience

Cite examples or use related illustrations of near-miss incidents, injuries, or fatalities. Write this section "from the heart." Be creative! Have fun with it or be serious, but remember the goal is to stimulate student motivation.
I. PURPOSE OF STUDENT INSTRUCTOR EVALUATIONS

A. Assess the effectiveness of a presentation
B. Provide constructive criticism for improvement
C. Focused on objective criteria

1. Easily defined or observable
   a) What you saw
   b) What you heard

c) Examples
   1) "She spoke with good clarity and volume."
   2) "He made eye contact with students in the front row but did not look at the rest of the class."

D. Avoid subjective criteria
   1. Not easily defined or observable
      a) What you felt
      b) Examples
         1) "He spoke well."
         2) "Her eye contact was O.K."

NOTE: Refer students to the Psychomotor Teaching Demonstration Evaluation Form, Sample Passing Student Instructor Psychomotor Teaching Demonstration Evaluation, and Sample Failing Student Instructor Psychomotor Teaching Demonstration Evaluation in their student supplement.
II. THE EVALUATION FORM

A. Use an appropriate and standardized student instructor evaluation form
   1. Ensures the student evaluators complete the form in the same manner and using the same criteria
   2. Reduces subjectivity
   3. Helps to ensure consistency

B. Should include objective evaluation of
   1. Managing the training environment
      a) Student disruptions
      b) Distractions
   2. Clear communication of learning objective

   a) Condition
      1) What materials and equipment the student will be given to use
   b) Behavior
      1) What actions the student will perform
   c) Standard
      1) How well the student will need to perform

   3. Effective preparation
      a) Draws students in
      b) Prepares them to learn
      1) ACID BASE
4. Presentation techniques
   a) Verbal communication
      1) Volume
      2) Clarity
      3) Lack of interferences
   b) Nonverbal communication
      1) Eye contact
      2) Lack of distracting mannerisms
   c) Performed the skill correctly
   d) Training aids
      1) Appropriate for the topic
      2) Used effectively
      3) Operated properly

5. Application
   a) Active learning environment
      1) Frequent use of questioning techniques
      2) Active student/instructor interaction
      3) Active student/student interaction

6. Evaluation
   a) No student/instructor interaction
   b) Observed student for safety and proper performance
   c) Feedback after the student has performed the skill

7. Appropriate time management

III. EVALUATION PROCEDURES
    A. Before the evaluation
       1. Review the evaluation materials
          a) Evaluation form
       2. Become familiar with the evaluation criteria
B. During the evaluation
   1. Have the evaluation criteria available for review
   2. Take notes
      a) Positive feedback
      b) Suggestions for improvement
C. After the evaluation
   1. Finalize the evaluation form
   2. Provide objective feedback to student instructor

**NOTE:** Refer students to Individual Activity 2-9-1: Evaluating A Student Instructor's Psychomotor Teaching Demonstration As The Primary Evaluator and Individual Activity 2-9-2: Evaluating A Student Instructor's Psychomotor Teaching Demonstration As The Secondary Evaluator in their student supplement.

**CLASS ACTIVITY:** Complete Individual Activities 2-9-1 and 2-9-2.
Summary:
Evaluation is important. Leading a group activity that helps a fellow instructor better his or her performance can be as important as the demonstration itself. Learning what to look for and how to present a positive critique, eliciting class participation, and drawing out pertinent comments can be as important as the student’s demonstration.

The evaluation you make should reflect, in very specific language, the performance you observed. By doing so, the quality of student teaching demonstrations may improve.

Delivering efficient and effective psychomotor teaching demonstrations are the “Bread and Butter” of Fire and Emergency services instruction. Anything we can do to help another instructor become proficient in this delivery is an important step that must not be overlooked. The evaluations you complete for student instructors must be of value to that person and must provide a method for the instructor to improve their teaching skills. Individual improvement of instruction is why we are here, so help each other by completing the student evaluation forms and lead a class discussion that will assist other students better themselves.

Evaluation:
The student will complete the activity and summative test at a time determined by the instructor.

Assignment:
Review your notes and read Fire and Emergency Services Instructor, IFSTA, Seventh Edition, Pages 182, 183, and 361 in order to prepare yourself for the upcoming test. Study for our next session.
INDIVIDUAL ACTIVITY 2-9-1: EVALUATING A STUDENT INSTRUCTOR'S PSYCHOMOTOR TEACHING DEMONSTRATION AS THE PRIMARY EVALUATOR

**Time Frame:** 0:30

**Materials Needed:**
- Blank Psychomotor Teaching Demonstration Evaluation Form
- Sample Passing Student Instructor Psychomotor Teaching Demonstration Evaluation
- Sample Failing Student Instructor Psychomotor Teaching Demonstration Evaluation
- Pen or pencil

**Introduction:**
This activity provides the student the opportunity to observe student instructor teaching demonstrations and provide feedback in the form of a written evaluation. Student evaluators will be able to help student instructors by focusing on all aspects of the Training Instructor 1B course and give constructive, positive feedback to their fellow students.

**Directions:**
1. Review the Psychomotor Teaching Demonstration Evaluation Form.
2. Review the Sample Passing Student Instructor Psychomotor Teaching Demonstration Evaluation. Pay special attention to the details of the remarks in each category.
3. Review the Sample Failing Student Instructor Psychomotor Teaching Demonstration Evaluation. Pay special attention to the problem areas identified and how they were expressed.
4. As the **Primary Evaluator**, you will present your findings (using your completed evaluation form) and then lead a class discussion on the student instructor’s performance.
5. Be prepared to discuss your overall experience with the class.
6. Submit your completed evaluation to your Primary Instructor when requested.
INDIVIDUAL ACTIVITY 2-9-2: EVALUATING A STUDENT INSTRUCTOR'S PSYCHOMOTOR TEACHING DEMONSTRATION AS THE SECONDARY EVALUATOR

**Time Frame:** 0:30

**Materials Needed:**
- Blank Psychomotor Teaching Demonstration Evaluation Form
- Sample Passing Student Instructor Psychomotor Teaching Demonstration Evaluation
- Sample Failing Student Instructor Psychomotor Teaching Demonstration Evaluation
- Pen or pencil

**Introduction:**
This activity provides the student the opportunity to observe student instructor teaching demonstrations and provide feedback in the form of a written evaluation. Student evaluators will be able to help student instructors by focusing on all aspects of the Training Instructor 1B course and give constructive, positive feedback to their fellow students.

**Directions:**
1. Review the Psychomotor Teaching Demonstration Evaluation Form.
2. Review the Sample Passing Student Instructor Psychomotor Teaching Demonstration Evaluation. Pay special attention to the details of the remarks in each category.
3. Review the Sample Failing Student Instructor Psychomotor Teaching Demonstration Evaluation. Pay special attention to the problem areas identified and how they were expressed.
4. As the **Secondary Evaluator**, you will present your findings as requested by the Primary Evaluator.
5. Be prepared to discuss your overall experience with the class.
6. Submit your completed evaluation to your Primary Instructor when requested.
# Student Instructor Psychomotor Teaching Demonstration Evaluation Form

**Student Instructor:** [Blank]

**Demo #:** [ ] 1st [ ] 2nd

**Topic:** [Blank]

**Date:** [Blank]

**Level of Instruction:** [Blank]

**Student Evaluator:** [Blank]

**Primary [ ] Secondary [ ]

<table>
<thead>
<tr>
<th>EVALUATED COMPONENTS</th>
<th>CONSIDER</th>
<th>YES</th>
<th>NO</th>
<th>Pass or Fail</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. MANAGED TRAINING ENVIRONMENT</td>
<td>Disruptions, distractions</td>
<td></td>
<td></td>
<td>P or F [ ]</td>
</tr>
<tr>
<td>Comments:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. LEARNING OBJECTIVE</td>
<td>Must include Condition, Behavior, Standard</td>
<td></td>
<td></td>
<td>P or F [ ]</td>
</tr>
<tr>
<td>Comments:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. PREPARATION</td>
<td>ACID BASE, Effective</td>
<td></td>
<td></td>
<td>P or F [ ]</td>
</tr>
<tr>
<td>Comments:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. PRESENTATION</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4a. Content</td>
<td>Appropriate lesson flow, known to unknown</td>
<td></td>
<td></td>
<td>P or F [ ]</td>
</tr>
<tr>
<td>Comments:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4b. Training Aids and Props</td>
<td>Same as what the students will use, easily seen, used effectively and safety</td>
<td></td>
<td></td>
<td>P or F [ ]</td>
</tr>
<tr>
<td>Comments:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4c. Performed Skill at Full-speed</td>
<td>Using skills sheet, promoting safety</td>
<td></td>
<td></td>
<td>P or F [ ]</td>
</tr>
<tr>
<td>Comments:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4d. Performed Slowly, Verbalizing</td>
<td>Operations and key points, promoting safety</td>
<td></td>
<td></td>
<td>P or F [ ]</td>
</tr>
<tr>
<td>Comments:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4e. Verbal Communication</td>
<td>Volume, clarity, interferences</td>
<td></td>
<td></td>
<td>P or F [ ]</td>
</tr>
<tr>
<td>Comments:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### EVALUATED COMPONENTS

<table>
<thead>
<tr>
<th></th>
<th>CONSIDER</th>
<th>YES</th>
<th>NO</th>
<th>Pass or Fail</th>
</tr>
</thead>
<tbody>
<tr>
<td>4f. Nonverbal Communication</td>
<td>Eye contact, gestures, distracting mannerisms</td>
<td></td>
<td></td>
<td>P or F</td>
</tr>
<tr>
<td>Comments:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. APPLICATION</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5a. Student Skill Performance</td>
<td>Checking key points, correcting errors</td>
<td></td>
<td></td>
<td>P or F</td>
</tr>
<tr>
<td>Comments:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5b. Active Learning Environment</td>
<td>Questioning techniques, interaction, feedback</td>
<td></td>
<td></td>
<td>P or F</td>
</tr>
<tr>
<td>Comments:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- Critical Component: Failure on this component results in failure of the teaching demonstration

---

[ ] Primary or [ ] Secondary Student Evaluator: 

_________ Actual Teaching Time

Grade: Pass [ ] Fail [ ]

Comments:

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

Master Instructor or Skills Evaluator:

_________ Actual Teaching Time

Grade: Pass [ ] Fail [ ]

Comments:

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________
**Topic:** 2-10: Legal And Ethical Considerations As They Relate To Psychomotor Training

**Time Frame:** 1:30

**Level of Instruction:** Level II

**Authority:** 2008 Training Instructor CTS #4: Describe The Instructor's Role, Responsibilities, And Obligations

**Behavioral Objective:**

- **Condition:** Given an activity and a summative test
- **Behavior:** The student will describe the legal and ethical considerations that relate to psychomotor training.
- **Standard:** With a minimum 80% accuracy on the summative test according to the information contained in Fire and Emergency Services Instructor, IFSTA, Seventh Edition, Pages 59-84, Training Instructor 1B Student Supplement, SFT, 2010 Edition, Pages 36-37, and successfully completing Group Activity 2-10-1

**Materials Needed:**
- Writing board/pad with markers/erasers
- Appropriate audiovisual training aids and devices
- Group Activity 2-10-1: Legal And Ethical Concerns

**References:**
- Fire and Emergency Services Company Officer, IFSTA, Fourth Edition, Page 270
- Fire and Emergency Services Instructor, IFSTA, Seventh Edition, Pages 59-84
- General Safety Orders, Cal/OSHA

**Preparation:** Each instructor must develop a motivational statement on why the student should learn the upcoming material. The purpose is to establish relevancy of the lesson to the audience. The ACID BASE acronym can be used to help develop student motivation.

- Attention (attract) 
- Curiosity (arouse) 
- Interest (create) 
- Desire (stimulate) 
- Begin 
- Association 
- Students 
- Experience

Cite examples or use related illustrations of near-miss incidents, injuries, or fatalities. Write this section "from the heart." Be creative! Have fun with it or be serious, but remember the goal is to stimulate student motivation.
NOTE: Refer students to Group Activity 2-10-1: Legal And Ethical Concerns in their student supplement. Do not discuss the lists until the end of your presentation.

I. LEGAL CONSIDERATIONS AND THEIR EFFECT

A. Personal liability
   1. The training instructor is exposed to both criminal and civil liability when providing training in the industrial setting (occupational training)

B. Agency liability

II. CAL/OSHA

A. General safety Orders
   1. Cal/OSHA is the state agency that regulates and enforces California workplace safety and health standards

B. Citations
   1. Issued for any violations of the standards
   2. A written notice of a safety or health violation
      a) Usually based upon an inspection of a workplace or industrial accident
   3. Typically must be issued within six months of the alleged violation
   4. Must describe the violation with particularity
   5. Must provide notice of any proposed penalty and
provide a reasonable time for abatement

C. Five violation categories

1. Regulatory violation
   a) Occurs when an employer fails to comply with administrative safety and health requirements, such as record keeping, reporting, posting, or permit requirements
   b) The penalty may be as high as $7,000
   c) Failure to make a timely report of a death or serious illness or injury is subject to a minimum penalty of $5,000

2. General violation
   a) Occurs when an injury or illness results from a safety or health violation that is determined not to be likely to cause death or serious harm
   b) The penalty may be as high as $7,000

3. Serious violation
   a) Occurs where there is a substantial probability that a safety or health violation could result in death or serious injury
   b) Occurs whenever an employee suffers any loss of a body part, any degree of permanent disfigurement, or any injury requiring hospitalization (other than for observation) for more than 24 hours
   c) The base penalty is $18,000 and may be as high as $25,000

How many violation categories are there?

SLIDE: 2-10-4

Could there be a financial loss for a serious violation?

What is a willful violation?
4. Willful violation
   a) Occurs where it is determined that the employer and/or employee committed an intentional and knowing safety or health violation, yet made no reasonable effort to eliminate the resulting hazard
   b) The minimum penalty is $5,000 and may be as high as $70,000
   c) A willful violation that causes death or prolonged physical impairment may also result in a criminal fine of up to $1.5 million and/or imprisonment for up to three years
5. Repeat violation
   a) Occurs where an employer repeats the same safety or health violation within three years of a previous violation
   b) The penalty may be as high as $70,000.

D. Any Cal/OSHA citation is a serious matter
   1. It is incumbent to anticipate potential safety or health hazards in the workplace, and to make reasonable efforts to eliminate or mitigate those hazards

III. LEGAL LIABILITY

A. Liability is a term used to describe a legal responsibility

B. Negligence is a breach of duty where there is a responsibility to perform
   1. An instructor can be considered negligent for
      a) Providing incorrect information or instruction
      b) Failing to instruct a topic they are responsible to teach
<table>
<thead>
<tr>
<th>PRESENTATION</th>
<th>APPLICATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>c) Teaching a topic they are unqualified to instruct</td>
<td></td>
</tr>
<tr>
<td>d) Failing to provide for safety</td>
<td></td>
</tr>
</tbody>
</table>

C. Foreseeability
1. The act of foreseeing consequences and taking reasonable precautions

a) Trip hazards  
b) Damaged or unsafe equipment  
c) Environmental hazards  
d) Students that are not fit or physically capable of performing the skill  
e) Lack of appropriate supervision or safe operating conditions

D. Vicarious liability
1. Blame for actions of one person can be transferred to another person or organization

E. Liability reduction
1. Courts have come to expect that reasonable and prudent instructors should perform the following steps as a normal part of their instructional preparation, especially when delivering psychomotor skills training  
a) Develop a safety plan or formally develop a strategy to prevent injuries  
b) Follow the safety plan
c) Provide for health and safety of students and participants

d) Give proper instructions

e) Have a written safety message

2. Precautions that should be followed to minimize liability

a) Check equipment regularly for safe operating conditions

b) Ensure that students are physically fit and prepared for the tasks to be performed

c) Instruct and test students in the safe operation of the equipment

d) Do not leave students unattended while they are practicing potential dangerous skills

e) Do not exceed the individual’s skill level when training students or working with other instructors

f) Be aware of standard expectations

g) Teach to established standards

h) Teach only topics you are qualified to teach

i) Provide a safe learning environment

j) Post the safety message

k) Instructors are expected to predict and anticipate the potential for injuries that may arise from psychomotor skills training

   1) In classroom

   2) On the training grounds

3. When planning training evolutions or activities involving psychomotor skills, instructors should consider the following
a) Instructors can be held liable for the actions of students
b) Individuals can be held personally liable for contributing to their own injuries and/or the injuries of others
c) Employers can be held liable for injuries caused by their employees involved in a sanctioned training activity

IV. PSYCHOMOTOR TRAINING GOALS AND OUTCOMES

A. Instructor role and responsibilities

1. Implement prevention and treatment of environmental stress factors that pertain to acclimation and conditioning

   a) Hydration
   b) Proper practice
   c) Appropriate PPE and/or attire
   d) Students' level of understanding

2. Accept the moral, professional, and legal responsibilities to conduct safe training programs

   a) Minimize injury and illness
   b) Minimize risk factors

3. Demonstrate proper use of techniques

4. Intervene when appropriate

5. Communicate in a confident manner

6. Use motivational techniques

7. Respect the various cultural attitudes, beliefs, and values regarding the target audience

8. Understand and utilize the concepts of coaching,
mentoring, and counseling

V. PSYCHOMOTOR TRAINING AND STUDENTS’ RIGHTS

A. Each student has substantive rights established by law
      a) Privacy of records and test scores
   2. Americans with Disabilities Act (1990)
      a) Equal access to the learning environment and materials being taught
   3. Title VII of the Civil Rights Acts (1964)
      a) Fair and equal treatment
      b) Nonhostile learning environment free of discrimination and harassment
   4. Additional substantive student rights related to psychomotor skills training
      a) Reasonable regulations are necessary to protect students during training activities and are justified even though they may be perceived as infringing on students rights
         1) Requiring full turnout gear on the drill ground for student safety
      b) Disagree with the instructor or institution
      c) Safe learning environments

VI. INSTRUCTOR ETHICS

A. Ethics are philosophical principles that are used to determine correct and proper behavior by members of a society
   1. A glue for civilization
Where do a person's ethics originate?

<table>
<thead>
<tr>
<th>PRESENTATION</th>
<th>APPLICATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>B. Origins of personal ethics</td>
<td>What are some ways in which unethical people might exploit their position of power as an instructor?</td>
</tr>
<tr>
<td>1. Family</td>
<td>a) Favors demanded from students for passing grades</td>
</tr>
<tr>
<td>2. Religion</td>
<td>b) Taking credit for student's work or ideas</td>
</tr>
<tr>
<td>3. Education</td>
<td></td>
</tr>
<tr>
<td>4. Peers</td>
<td></td>
</tr>
<tr>
<td>5. Institutions (orphanage, half-way house)</td>
<td></td>
</tr>
<tr>
<td>C. Causes of unethical conduct</td>
<td>D. Formal ethics programs contain</td>
</tr>
<tr>
<td>1. Financial reasons</td>
<td>1. Written code of ethics</td>
</tr>
<tr>
<td>2. Advancement reasons</td>
<td>a) Organizational and individual codes</td>
</tr>
<tr>
<td>3. Exploitive mentality</td>
<td>1) State Fire Training Code of Conduct</td>
</tr>
<tr>
<td>a) Favors demanded from students for passing grades</td>
<td>b) Define acceptable and unacceptable behavior</td>
</tr>
<tr>
<td>b) Taking credit for student's work or ideas</td>
<td>c) Establish standards of practice</td>
</tr>
<tr>
<td></td>
<td>2. Training in making ethical decisions</td>
</tr>
<tr>
<td></td>
<td>a) Recognize and define the ethical dilemma</td>
</tr>
<tr>
<td></td>
<td>What are some questions that can help to recognize and define an ethical dilemma?</td>
</tr>
</tbody>
</table>
1) What is it?
2) What caused it?
3) Who is involved?
4) What are the potential results?
5) Why is it an ethical dilemma?

b) Obtain the facts
   1) Be objective
   2) Approach the dilemma from an intellectual viewpoint, not emotional

c) List all alternatives
   1) Brainstorm
   2) Discuss with other professional peers

d) Compare all alternatives to established criteria
   1) Are the alternatives
      • Legal?
      • Moral?
      • Justifiable or rational?

e) Select the best alternative and make the decision

f) Assess the decision objectively

What are some questions that can help assess the decision?

1) Would your agency approve?
2) Would your family approve?
3) Would the media approve?

What are some questions that can help assess the decision?

1) Would your agency approve?
2) Would your family approve?
3) Would the media approve?

What are some questions that can help assess the decision?

1) Would your agency approve?
2) Would your family approve?
3) Would the media approve?

What are some questions that can help assess the decision?

1) Would your agency approve?
2) Would your family approve?
3) Would the media approve?

What are some questions that can help assess the decision?

1) Would your agency approve?
2) Would your family approve?
3) Would the media approve?

What are some questions that can help assess the decision?

1) Would your agency approve?
2) Would your family approve?
3) Would the media approve?

What are some questions that can help assess the decision?

1) Would your agency approve?
2) Would your family approve?
3) Would the media approve?

What are some questions that can help assess the decision?

1) Would your agency approve?
2) Would your family approve?
3) Would the media approve?

What are some questions that can help assess the decision?

1) Would your agency approve?
2) Would your family approve?
3) Would the media approve?

What are some questions that can help assess the decision?

1) Would your agency approve?
2) Would your family approve?
3) Would the media approve?

What are some questions that can help assess the decision?

1) Would your agency approve?
2) Would your family approve?
3) Would the media approve?

What are some questions that can help assess the decision?

1) Would your agency approve?
2) Would your family approve?
3) Would the media approve?

What are some questions that can help assess the decision?

1) Would your agency approve?
2) Would your family approve?
3) Would the media approve?

What are some questions that can help assess the decision?

1) Would your agency approve?
2) Would your family approve?
3) Would the media approve?

What are some questions that can help assess the decision?

1) Would your agency approve?
2) Would your family approve?
3) Would the media approve?

What are some questions that can help assess the decision?

1) Would your agency approve?
2) Would your family approve?
3) Would the media approve?

What are some questions that can help assess the decision?

1) Would your agency approve?
2) Would your family approve?
3) Would the media approve?

What are some questions that can help assess the decision?

1) Would your agency approve?
2) Would your family approve?
3) Would the media approve?

What are some questions that can help assess the decision?

1) Would your agency approve?
2) Would your family approve?
3) Would the media approve?

What are some questions that can help assess the decision?

1) Would your agency approve?
2) Would your family approve?
3) Would the media approve?

What are some questions that can help assess the decision?

1) Would your agency approve?
2) Would your family approve?
3) Would the media approve?

What are some questions that can help assess the decision?

1) Would your agency approve?
2) Would your family approve?
3) Would the media approve?

What are some questions that can help assess the decision?

1) Would your agency approve?
2) Would your family approve?
3) Would the media approve?

What are some questions that can help assess the decision?

1) Would your agency approve?
2) Would your family approve?
3) Would the media approve?

What are some questions that can help assess the decision?

1) Would your agency approve?
2) Would your family approve?
3) Would the media approve?

What are some questions that can help assess the decision?

1) Would your agency approve?
2) Would your family approve?
3) Would the media approve?

What are some questions that can help assess the decision?

1) Would your agency approve?
2) Would your family approve?
3) Would the media approve?

What are some questions that can help assess the decision?

1) Would your agency approve?
2) Would your family approve?
3) Would the media approve?

What are some questions that can help assess the decision?

1) Would your agency approve?
2) Would your family approve?
3) Would the media approve?

What are some questions that can help assess the decision?

1) Would your agency approve?
2) Would your family approve?
3) Would the media approve?

What are some questions that can help assess the decision?

1) Would your agency approve?
2) Would your family approve?
3) Would the media approve?
Summary:
Legal and ethical situations occur every day in the classroom and on the drill ground. Good instructors can prepare for these situations by becoming familiar with basic legal and ethical considerations and developing a system for making sound ethical decisions while limiting the risk for injuries associated with instructional process. Courts have found that exposing students to hazardous training environments, without having adequate measures taken to reduce the associated risks could be perceived as negligence if an injury occurs. Instructors are expected to manage risks associated with this type of training.

Evaluation:
The student will complete the activity and summative test at a time determined by the instructor.

Assignment:
GROUP ACTIVITY 2-10-1: LEGAL AND ETHICAL CONCERNS

<table>
<thead>
<tr>
<th>Time Frame:</th>
<th>0:15</th>
</tr>
</thead>
<tbody>
<tr>
<td>Materials Needed:</td>
<td>Writing board/pads</td>
</tr>
<tr>
<td></td>
<td>Pens</td>
</tr>
<tr>
<td>Introduction:</td>
<td>This activity provides the students the opportunity to list legal and ethical concerns they may have as new instructors. The lists generated will be incorporated into the lesson where appropriate as discussion points. At the end of the lesson, the lists will be reviewed to ensure that all legal and ethical concerns have been addressed.</td>
</tr>
<tr>
<td>Directions:</td>
<td>1. Each group will be assigned a writing board and pens.</td>
</tr>
<tr>
<td></td>
<td>2. Half of the groups will list <strong>legal</strong> concerns they can foresee as instructors teaching cognitive lessons.</td>
</tr>
<tr>
<td></td>
<td>3. The other half of the groups will list <strong>ethical</strong> concerns they can foresee as instructors teaching cognitive lessons.</td>
</tr>
<tr>
<td></td>
<td>4. You have 5 minutes to complete this activity.</td>
</tr>
<tr>
<td></td>
<td>5. Be prepared to discuss your lists with the class.</td>
</tr>
</tbody>
</table>
**Topic:** 3-1: Introduction To And Administration Of Performance Tests

**Time Frame:** 1:30

**Level of Instruction:** Level II

**Authority:** 2008 Training Instructor CTS # 10: Describe And Demonstrate The Testing Process

**Behavioral Objective:**

- **Condition:** Given an activity and a summative test
- **Behavior:** The student will describe the administration of the performance testing process and performance test criteria
- **Standard:** With a minimum 80% accuracy on the summative test according to the information contained in *Fire and Emergency Services Instructor*, IFSTA, Seventh Edition, Pages 308 and 402-405 and successfully completing Individual Activity 3-1-1

**Materials Needed:**
- Writing board/pad with markers/erasers
- Appropriate audiovisual training aids and devices
- Appropriate material and equipment to perform the skill in Individual Activity 3-1-1: Scoring a Performance Test

**References:**
- *Fire and Emergency Services Instructor*, IFSTA, Seventh Edition, Pages 308 and 402-405

**Preparation:** Each instructor must develop a motivational statement on why the student should learn the upcoming material. The purpose is to establish relevancy of the lesson to the audience. The ACID BASE acronym can be used to help develop student motivation.

<table>
<thead>
<tr>
<th>Attention (attract)</th>
<th>Begin</th>
</tr>
</thead>
<tbody>
<tr>
<td>Curiosity (arouse)</td>
<td>Association</td>
</tr>
<tr>
<td>Interest (create)</td>
<td>Students</td>
</tr>
<tr>
<td>Desire (stimulate)</td>
<td>Experience</td>
</tr>
</tbody>
</table>

Cite examples or use related illustrations of near-miss incidents, injuries, or fatalities. Write this section "from the heart." Be creative! Have fun with it or be serious, but remember the goal is to stimulate student motivation.
I. INTRODUCTION TO PERFORMANCE TESTS
A. Students are required to perform psychomotor
   1. Skills
   2. Tasks
   3. Evolutions

B. Performed at the same level that the psychomotor skill is performed on the job
C. Students are tested on their present abilities or attainments and not their future potentials
D. Must be based on standard criteria and performance objectives

II. PURPOSE OF PERFORMANCE TESTS
A. Give students an opportunity to demonstrate their proficiency
B. Performance or skills tests measure an individual's proficiency in performing
   1. A job
   2. A task
   3. An evolution that requires achieving a psychomotor objective

C. Performance or skills tests hold test-takers to
   1. A time standard (timed performance)
   2. A quality standard (minimum acceptable product or process standard)
   3. Or both time and quality standard
D. Test conditions
   1. Under controlled conditions
   2. After appropriate practice or drill sessions
   3. Instructors can make valid and reliable judgments about student performance only when testing conditions are controlled

III. PERFORMANCE TESTS DEVELOPMENT GUIDELINES

A. Specify performance objectives to be measured
   1. Construct test items based on those objectives

B. Each test item should require the performance of a number of basic skills
   1. This allows a broad sampling without consuming the time necessary to test performance of each separate basic skill
   2. Example
      a) A test item that requires ventilating a pitched roof also requires students to demonstrate use of ground and roof ladders, cutting tools, safety ropes, hoselines, and PPE

C. Select rating factors on which the test will be judged
   1. Rate students against a standard
   2. Not against the performance of other students

D. Design a rating form and include such items as the following
   1. Student's approach to a stated job or procedure
   2. Care shown in handling
      a) Tools

Under what conditions should students be tested?

What are some other items that should be included in a rating form?
### b) Equipment

- 3. Demonstration of accuracy
- 4. Time required to complete a job or procedure safely

#### E. Prepare directions that clearly explain the test situation to students

1. Supplement a written set of instructions with an oral explanation
2. Give students the opportunity to ask questions
3. So students understand what is expected of them

#### F. Try a new performance test on other instructors before using it on students

1. Conduct a trial test to measure validity
2. Uncover problems that can be corrected

#### G. Use more than one test evaluator

1. Request other instructors or officers to be test evaluators

### IV. PERFORMANCE TEST EVALUATORS

#### A. Use more than one test evaluator

#### B. Try to avoid using instructors who have taught the class to evaluate the groups that they taught

#### C. Provide instructions to evaluators

1. About what they are to look for during the test
2. And how to use the rating scales and forms

What benefit is there for trying a new performance test on other instructors?

- Conduct a trial test to measure validity
- Uncover problems that can be corrected

Other than using more than one evaluator, what else should instructors be aware of?
D. Calculate an average score from all evaluators for each student or student team
   1. Example
      a) A student or team who receives three scores of 97%, 94%, and 94% from three evaluators, receives an average score of 95%

E. Scoring for performance tests are criterion-referenced
   1. Pass/Fail
   2. Satisfactory/Unsatisfactory
   3. Scoring may be coupled with a minimum points earned requirement

V. PERFORMANCE TEST ADMINISTRATION
   A. Follow established procedures
      1. Ensure that all necessary apparatus and equipment are ready

         a) Before beginning the tests

   B. A test evaluator must use the same equipment throughout the test for testing students

   C. Follow the same sequence of tasks for all students

   D. Rate each student on the same basis

   E. All distractions must be eliminated from the testing area

      1. So that evaluators can concentrate on observing and evaluating student performances
      2. And students can concentrate on demonstrating proficient performances
F. Make a score distribution chart after tests have been administered
   1. Evaluate students with low scores
   2. Students who have difficulty in performing manipulative skills must receive immediate attention

G. Rotate team members to every position for team evaluation ratings

   1. Ensure that each student is observed and evaluated in each position in an evolution

VI. ADVANTAGES OF PERFORMANCE SKILLS TESTS

A. Validity
   1. A performance test is the only valid method of measuring a student's achievement and ability to perform manipulative skills

B. Reliability
   1. A properly constructed performance test using specific criteria is a reliable measure of performance when coupled with an appropriate rating scale

C. Some individuals may not be able to express themselves orally or in writing
   1. However, they may be able to perform a job as well as or better than other students

D. Student motivation
   1. Performance tests are excellent means of motivating students
2. Knowing that they are expected to demonstrate skill abilities in performance tests usually motivates.

3. Students spend in-class and out-of-class time practicing to prepare and develop comfort levels for their skills.

E. Sense of accomplishment
   1. Students who successfully complete well-prepared and carefully administered tests will be proud of their accomplishments.

F. Job related
   1. Students recognize that the psychomotor skills on which they are being tested are directly related to the performance of their duties as fire and emergency services personnel.

VII. DISADVANTAGES OF PSYCHOMOTOR TESTS

A. Unreliability
   1. Scores may be unreliable because of test evaluator subjectivity.

   2. Reliability is proportionate to how well the evaluator identifies the skills observed and compares them with the criteria specified.

   3. A lack of definitive rating criteria adds to evaluator subjectivity and reduces reliability.
<table>
<thead>
<tr>
<th>PRESENTATION</th>
<th>APPLICATION</th>
</tr>
</thead>
</table>
| B. Inefficiency of time and resources  
1. Performance tests are both time and resource consuming  
2. Provide consistent conditions for each individual or team because the test may take hours  
C. Requires more instructors and test evaluators  
Why are more instructors needed for performance tests? |
| 1. To observe students  
2. To monitor students  
3. To evaluate students during the test  
4. To ensure student safety  
D. Difficulty  
1. It is difficult to test each individual in team evolutions  
2. Eliminate subjectivity  |

**NOTE:** Refer students to Individual Activity 3-1-1: Scoring a Performance Test in their student supplement.

Discussion points using the Bleeding Control/Shock Management Skill provided:
- No time standard
- Subjectivity of the operation; "Bandages the wound"

If you use a different performance rating sheet for this activity, you must provide one copy for each student.

**CLASS ACTIVITY:** Complete Individual Activity 3-1-1.
Summary:
Training programs, courses, and lessons are not complete without a method to measure that learning has taken place. Performance tests are measured by observation as a method to determine if the students are ready to move on to the next block of instruction or complete certification. In performance tests, students are required to perform a skill, task, or evolution rather than talk or write about it. The administration of a performance test begins before the test is given. Instructors must have valid criteria on which to rate students during the performance test, with equipment ready to use. Students should have an idea what they will be tested on and trained to a point that the "test" is a confirmation of knowledge they have gained.

Instructors must understand the purpose of performance testing is to ensure students can safely and effectively perform vital skills as they are performed during emergency operations. Test preparation items should be prearranged long before the test is administered. Materials must be arranged and ready for the students to use. Instructors need to develop guidelines to administer tests that are valid and reliable to all students involved.

Evaluation:
The student will complete the activity and summative test at a time determined by the instructor.

Assignment:
Review your notes and read Fire and Emergency Services Instructor, IFSTA, Seventh Edition, Pages 308 and 402-405 in order to prepare yourself for the upcoming test. Study for our next session.
INDIVIDUAL ACTIVITY 3-1-1: SCORING A PERFORMANCE TEST

<table>
<thead>
<tr>
<th>Time Frame:</th>
<th>0:15</th>
</tr>
</thead>
</table>
| Materials Needed: | ■ Sample performance test rating sheet  
|                   | ■ Pen/pencil                |

**Introduction:**
This activity provides the students the opportunity to evaluate a performance test using a performance test rating sheet and discussing its strengths and weaknesses.

**Directions:**
1. Review the performance test rating sheet.
2. Grade the instructor as he or she performs the skill using the rating sheet.
3. Determine if the instructor passed or failed the skill.
4. Be prepared to discuss your evaluation.
Skill #8: Bleeding Control/Shock Management

<table>
<thead>
<tr>
<th>Task</th>
<th>Points Possible</th>
<th>Points Awarded</th>
</tr>
</thead>
<tbody>
<tr>
<td>Takes or verbalizes body substance isolation precautions</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Applies direct pressure to the wound</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Elevates the extremity</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Note: The examiner must now inform the candidate that the wound continues to bleed.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Applies an additional dressing to the wound</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Note: The examiner must now inform the candidate that the wound still continues to bleed. The second dressing does not control the bleeding.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Locates and applies pressure to appropriate arterial pressure point</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Note: The examiner must now inform the candidate that the bleeding is controlled.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bandages the wound</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Note: The examiner must now inform the candidate the patient is now showing signs and symptoms indicative of hypoperfusion.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Properly position the patient</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Applies high concentration oxygen</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Initiates steps to prevent heat loss from the patient</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Indicates the need for immediate transportation</td>
<td>1</td>
<td></td>
</tr>
</tbody>
</table>

Total: 10

Critical Criteria

_____ Did not take or verbalize body substance isolation precautions
_____ Did not apply high concentration oxygen
_____ Applied a tourniquet before attempting other methods of bleeding control
_____ Did not control hemorrhage in a timely manner
_____ Did not indicate a need for immediate transportation
**Topic:** 3-2: Student Progress And Testing Feedback

**Time Frame:** 1:00

**Level of Instruction:** Level II

**Authority:** 2008 Training Instructor CTS #11: Describe And Demonstrate The Procedures For Student Feedback

**Behavioral Objective:**

- **Condition:** Given a summative test
- **Behavior:** The student will describe the different types of feedback used by instructors and the techniques employed to provide positive feedback on evaluation results
- **Standard:** With a minimum 80% accuracy on the summative test according to the information contained in *Fire and Emergency Services Instructor*, IFSTA, Seventh Edition, Pages 315-317

**Materials Needed:**
- Writing board/pad with markers/erasers
- Appropriate audiovisual training aids and devices

**References:**
- *Fire and Emergency Services Instructor*, IFSTA, Seventh Edition, Pages 315-317

**Preparation:** Each instructor must develop a motivational statement on why the student should learn the upcoming material. The purpose is to establish relevancy of the lesson to the audience. The ACID BASE acronym can be used to help develop student motivation.

- **Attention** (attract)  **Begin**
- **Curiosity** (arouse)  **Association**
- **Interest** (create)  **Students**
- **Desire** (stimulate)  **Experience**

Cite examples or use related illustrations of near-miss incidents, injuries, or fatalities. Write this section "from the heart." Be creative! Have fun with it or be serious, but remember the goal is to stimulate student motivation.
I. FEEDBACK

A. Instructors continually give feedback to their students

B. Instructor feedback may be based on informal or formal evaluations

C. Informal evaluations
   1. Occurs daily through the interaction between instructors and students
   2. Provides immediate feedback to the student and helps enforce learning as it occurs
   3. Takes the form of
      a) Coaching
      b) Counseling
   4. The continual contact that informal evaluations provide between the student and instructor gives the student
      a) An accurate idea of the progress a student is making in the course
      b) What is expected by the instructor

D. Formal evaluations
   1. The result of the evaluation and testing process
   2. Instructors discuss the test results with students
      a) Privately
      b) Explaining the positive and negative results of the student’s test scores
   3. In some cases, an entire class or group of participants may be given feedback on the test results
      a) This situation occurs when the performance being tested involves teams or multiple groups
II. POSITIVE FEEDBACK

A. Stresses the strengths of a student’s attempt at completing an activity or performance evaluation

B. Positive feedback results in the following student behavior changes
   1. Becoming or remaining motivated
   2. Changing or correcting inappropriate behavior
   3. Acquiring new beliefs, values, or attitudes
   4. Improving skills and knowledge
   5. Increasing self-confidence, awareness, and esteem
   6. Feeling accepted into the organization and profession

C. To accomplish these positive results, instructors must ensure that feedback has the following elements
   1. Prompt and timely
   2. Encouraging
   3. Specific
      a) Focused on one skill or behavior
      b) What is correct or incorrect
      c) How incorrect skills or behaviors can be corrected
      d) Clear and easily understood
e) Objective and focused on the action and not the student
f) Relevant to the action, behavior, or knowledge

III. NEGATIVE FEEDBACK
A. Instructors should be aware that feedback could have a negative result when it is not provided correctly

B. Negative results can occur when feedback has the following elements
   1. Feedback too vague or general
      a) Feedback leaves the student to wonder what can be done to correct the skill or behavior
   2. Subjective
      a) Not based on fact or specific criteria
      b) Directed personally at the individual and not the skill or behavior
   3. Examples late in delivery
      a) Positive feedback loses its sincerity or importance if it is delayed
      b) Negative feedback is disconnected from the action and seems unimportant
C. Critical of the student and not focused on correcting the skill or behavior
D. One-sided with instructors providing the criticism and solution

IV. FEEDBACK APPLICATIONS
A. Formal evaluations that are based on tests give instructors the opportunity to use errors for reinforcing
   1. Knowledge
   2. Skills
   3. Attitudes that were addressed on the test

SLIDE: 3-2-8

What's an example of negative feedback?

SLIDE: 3-2-9
B. Two approaches

1. Counsel individually with students to discuss the test
   a) Individual counseling permits instructors the time to help a student understand
      1) Correct answers to missed questions
      2) Helps instructors to determine whether a student’s learning or studying styles were barriers to success

2. Review incorrect answers with the entire class
   a) Class review of the questions answered incorrectly on the test is an opportunity to review and reinforce the correct answers

V. STUDENT PROGRESS QUESTIONING TECHNIQUES

A. Take a wrong answer, but tactfully to steer the student or group to the right conclusion

1. Instructors often give the standard reply "OK" to all student responses
   a) Even if the answer is clearly wrong

2. Instructors are reluctant to discourage future responses

B. Take a wrong answer, but ask why the answer is wrong or where it fits in the lesson

1. Think, then analyze problems
2. Compare facts and ideas
3. Apply facts and ideas to different situations
4. Critique and find solutions
5. Explore and discover new methods of application

C. Guiding this type of discussion, more lesson material may be covered than would have otherwise

1. Students have truly learned the material
2. Students can then apply the material appropriately in a variety of situations
   a) Rather than in staged classroom situations only
3. This instructional method allows students to build their knowledge from what they discover and then associate it with the class material and skills
Summary:
Instructor to student feedback is an important component of the instructional process. It is the tool that allows the student to understand how they are progressing through the material, and what they must do to meet the learning objectives. Without this feedback, a student may be surprised to find at the end of the class that they were on the wrong track all along. One of the most important tasks the instructor must accomplish while teaching is to provide enough meaningful feedback to the students.

Students and instructors deliver feedback to each other throughout a course of instruction. The student's progress is monitored and guided through observations made by the instructor. Through these observations, instructors provide meaningful feedback to students. Feedback is communicated through counseling or coaching methods to guide and correct student behavior. Students understand what was done right and what behavior they need to continue to improve. When this communication is constructive it helps the instructor by confirming that learning has taken place and helps determine instructional effectiveness.

Evaluation:
The student will complete the summative test at a time determined by the instructor.

Assignment:
Review your notes and read Fire and Emergency Services Instructor, IFSTA, Seventh Edition, Pages 315-317 in order to prepare yourself for the upcoming test. Study for our next session.
Appendix A: Formative Test #1 Answer Key

INSTRUCTIONS: This is a 20-item multiple-choice test. For each of the following questions or statements, draw a circle around the letter preceding the one best answer. You have 30 minutes to complete the test.

EXAMPLE: The Incident Command System was developed by the

a. military
b. fire service
  c. government
d. NRA standards

1. What is the first learning step in the psychomotor domain?
   a. Imitation
   ▶ b. Observation
c. Performance
d. Perfection

   Answer found in Fire and Emergency Services Instructor, IFSTA, Seventh Edition, Page 143

2. In the fire and emergency services training, what is the most commonly used form of learning?
   a. The cognitive domain
   b. On-the-job training
   ▶ c. The psychomotor domain
d. Trial-and-error on the fireground

   Answer found in Fire and Emergency Services Instructor, IFSTA, Seventh Edition, Page 143

3. Considering the levels of learning in the psychomotor domain, in which step does the student modify and personalize the motor activity?
   a. Imitation
   ▶ b. Adaptation
c. Performance
d. Perfection

   Answer found in Fire and Emergency Services Instructor, IFSTA, Seventh Edition, Page 143
4. In psychomotor learning, the coaching process includes
   a. mentoring, monitoring, and manipulation
   ► b. observation, evaluation, and suggestions for improvement
c. firmness, fairness, and friendship
d. evaluation, discipline, and termination

   Answer found in Fire and Emergency Services Instructor, IFSTA, Seventh Edition, Page 180

5. In which step of the four-step method of instruction does most learning take place, making this step critically important?
   a. Preparation
   b. Presentation
   ► c. Application
d. Evaluation

   Answer found in Fire and Emergency Services Instructor, IFSTA, Seventh Edition, Page 195

6. Students that are required to say what they are doing while they perform an activity have
   a. made a mistake and need remediation
   ► b. a chance to retain 90% of the information
c. no chance of ever doing the task without speaking it at the same time
d. a 50-50 chance of learning the task

   Answer found in Fire and Emergency Services Instructor, IFSTA, Seventh Edition, Page 150

7. The act of showing how to do something or how something operates or acts best describes the definition of
   a. illustrated lecture
   b. discussion
c. lecture
   ► d. demonstration

   Answer found in Fire and Emergency Services Instructor, IFSTA, Seventh Edition, Page 224

8. When instructors provide new information, students take that information and
   a. place it in a memory recall file
   b. try to link it to other new information
   ► c. try to link it to what they already know
d. place it according to the stimulus package it was delivered in

   Answer found in Fire and Emergency Services Instructor, IFSTA, Seventh Edition, Page 151
9. Which of the following is an advantage of the demonstration method of instruction?
   a. Students receive feedback at a later time when they can concentrate on the feedback
   b. Other students can determine whether learning objectives have been met
   ► c. Students have a high level of interest when performing
   d. Instructors save time by using the demonstration method as preparation and cleanup time is minimized

   Answer found in Fire and Emergency Services Instructor, IFSTA, Seventh Edition, Page 224

10. Which of the following is not a limitation of the demonstration method of instruction?
    a. Instructors must plan for extensive preparation time and cleanup
    b. Careful lesson planning is important because assembly and practice time can use much of the class time
    ► c. Excessive practice of skills leads to student burnout and safety degradation
    d. Skills that must be performed or practiced outside depend on weather conditions

   Answer found in Fire and Emergency Services Instructor, IFSTA, Seventh Edition, Pages 224-225

11. Which of the following is not one of the guidelines an instructor should follow when preparing for a demonstration?
    a. Know clearly what is to be demonstrated and its learning objective
    b. Acquire all equipment and accessories, ensure that they work, and arrange them for use
    c. Arrange the room or demonstration area so that all students can see and hear the demonstration
    ► d. Have a general understanding of every step of the demonstration and discuss this with all instructors involved

   Answer found in Fire and Emergency Services Instructor, IFSTA, Seventh Edition, Page 225

12. What happens as training becomes more realistic?
    a. The benefit to the student decreases and potential risk increases
    b. The benefit to the student increases and potential risk decreases
    c. The benefit to the student decreases and potential risk decreases
    ► d. The benefit to the student increases and potential risk increases

   Answer found in Fire and Emergency Services Instructor, IFSTA, Seventh Edition, Page 37
13. When preparing for a demonstration, the instructor should
   a. have the students arrange the equipment to be used
   b. wait until the demonstration begins to test equipment
   ► c. know clearly what is to be demonstrated and its learning objective
   d. repeat the demonstration step-by-step in front of the students

   Answer found in Fire and Emergency Services Instructor, IFSTA, Seventh Edition, Page 225

14. What student advantage is there for using multiple instructors during a skills presentation?
   a. Provides a clear and narrow view of presentation methods
   b. Offers a clear view of skills objectives
   ► c. Allows contact with more than one instructor during a lesson
   d. Provides contact with only one instructor during a lesson

   Answer found in Fire and Emergency Services Instructor, IFSTA, Seventh Edition, Page 225

15. Which of the following is a solution to the challenge of ensuring safe training environments?
   a. Do not train at remote and unfamiliar sites
   b. Limit the time devoted to practical evolutions
   ► c. Be familiar with safety regulations as they apply to training
   d. Allow only advanced students to perform practical training evolutions

   Answer found in Fire and Emergency Services Instructor, IFSTA, Seventh Edition, Page 35

16. Which of the following is a disadvantage of the demonstration presentation format?
   a. Participants can receive feedback immediately
   b. Instructors can readily observe a change in behavior
   c. Students have a high level of interest when participating
   ► d. Instructors must plan for extensive preparation and cleanup times

   Answer found in Fire and Emergency Services Instructor, IFSTA, Seventh Edition, Page 224

17. Which NFPA standard addresses guidelines for live-fire training evolutions?
   ► a. NFPA 1403
   b. NFPA 1410
   c. NFPA 1500
   d. NFPA 1660

   Answer found in Fire and Emergency Services Instructor, IFSTA, Seventh Edition, Page 111
18. A multistory, multipurpose structure that may be open or enclosed and should be optimally six stories in height best describes
   ► a. a drill tower
   b. an acquired midrise structure
   c. a live-fire building
   d. a prefab smoke building

   Answer found in Fire and Emergency Services Instructor, IFSTA, Seventh Edition, Page 105

19. The "ACID" acronym applies to which step of the four-step method of instruction?
   ► a. Preparation
   b. Presentation
   c. Application
   d. Evaluation

   Answer found in Fire and Emergency Services Instructor, IFSTA, Seventh Edition, Page 195

20. Which ancillary component of a lesson plan divides a task into parts by listing the operational steps and their key points for completing each operation?
   a. Job sheet
   ► b. Skills sheet
   c. Activity sheet
   d. Assignment sheet

   Answer found in Fire and Emergency Services Instructor, IFSTA, Seventh Edition, Page 341
## Appendix A: Formative Test #2 Answer Key

### INSTRUCTIONS:
This is a 20-item multiple-choice test. For each of the following questions or statements, draw a circle around the letter preceding the one best answer. You have 30 minutes to complete the test.

### EXAMPLE:
The Incident Command System was developed by the

- a. school system
- b. fire service
- c. state legislature
- d. NFPA

---

1. A good guideline to follow when using audiovisual training aids is to
   - a. use as many as possible
   - b. use visual aids that are complex and present multiple ideas
   - c. rehearse with the training aids before giving a lecture
   - d. not spend a lot of preparation time for visual aids

   *Answer found in Fire and Emergency Services Instructor, IFSTA, Seventh Edition, Page 254*

2. Which of the following is a strategy for avoiding distractions when using audiovisual training aids?
   - a. Avoid eye contact with students when using a visual aid
   - b. Use multiple training aids simultaneously whenever possible
   - c. Introduce audiovisual training aids at the time they are to be viewed
   - d. Display projected visual training aids below the eye level of seated students

   *Answer found in Fire and Emergency Services Instructor, IFSTA, Seventh Edition, Page 254*

3. An excellent medium for illustrating mechanical or spatial concepts is
   - a. a model
   - b. an easel pad
   - c. a handout or duplicated material
   - d. an illustration or diagram display

   *Answer found in Fire and Emergency Services Instructor, IFSTA, Seventh Edition, Page 262*
4. Audiovisual training aids can enhance psychomotor lesson presentations by
   a. decreasing necessary repetitive repetitions
   b. increasing necessary repetitive repetitions
   c. decreasing memory
   ▶ d. enhancing memory

   Answer found in Fire and Emergency Services Instructor, IFSTA, Seventh Edition, Page 250

5. Instructors sometimes improperly use the illustration method as a substitute for
   a. the discussion method
   b. the lecture method
   c. self-directed learning
   ▶ d. the demonstration method

   Answer found in Fire and Emergency Services Instructor, IFSTA, Seventh Edition, Page 222

6. Which of the following is not a benefit of using audiovisual aids?
   ▶ a. Increases lecture time
   b. Adds interest to a lecture
   c. Helps students organize ideas
   d. Enhances student understanding

   Answer found in Fire and Emergency Services Instructor, IFSTA, Seventh Edition, Page 250

7. "A step or the smallest aspect in performing a task" best describes
   ▶ a. an operation
   b. a skills sheet
   c. a course outline
   d. a job or topic

   Answer found in Fire and Emergency Services Instructor, IFSTA, Seventh Edition, Page 341

8. "May include information that aids in knowing or understanding operations that enable
   the student to perform the task correctly" best describes
   ▶ a. a key point
   b. a skills sheet
   c. an operation
   d. a job or topic

   Answer found in Fire and Emergency Services Instructor, IFSTA, Seventh Edition, Page 341
9. The first step in a skills demonstration includes
   ► a. an explanation of the skill
   b. the students practicing the steps
   c. a demonstration of the skill at normal speed
   d. a demonstration of the skill at a slow speed
   
   *Answer found in Fire and Emergency Services Instructor, IFSTA, Seventh Edition, Page 282*

10. Whether creating a new lesson plan or adapting an existing lesson plan, instructors start at the same step, which is to
    a. begin at a level of student understanding
    ► b. start with the desired learning outcomes
    c. create lesson plans around time frames given for the topic
    d. build a testing mechanism so that the lesson plan is developed properly

   *Answer found in Fire and Emergency Services Instructor, IFSTA, Seventh Edition, Page 339*

Complete Section II on the following page.
INSTRUCTIONS: Section II is a matching test. Select the one response in Column 2 that most nearly matches an item in Column 1. Write the number of the item from Column 1 in the parenthesis that precedes the appropriate response in Column 2.

Example:

<table>
<thead>
<tr>
<th>COLUMN 1</th>
<th>COLUMN 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. hammer</td>
<td>(2) Tool used to cut</td>
</tr>
<tr>
<td>2. saw</td>
<td>(1) Tool used to drive nails</td>
</tr>
<tr>
<td>3. wrench</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>COLUMN 1</th>
<th>COLUMN 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>11. Resources/Materials Needed</td>
<td>(14) Short descriptive title of the information covered and taken directly from the course outline</td>
</tr>
<tr>
<td>12. Level of Instruction</td>
<td>(14) Short descriptive title of the information covered and taken directly from the course outline</td>
</tr>
<tr>
<td>13. Time Frame</td>
<td>(13) May be set for each objective, can allow for variations of class size, experience level of students, an estimation</td>
</tr>
<tr>
<td>14. Job or Topic</td>
<td>(13) May be set for each objective, can allow for variations of class size, experience level of students, an estimation</td>
</tr>
<tr>
<td>15. References</td>
<td>(12) Based on NFPA job performance requirements or academically established taxonomy related to the appropriate learning domains</td>
</tr>
<tr>
<td>16. Prerequisites</td>
<td>(12) Based on NFPA job performance requirements or academically established taxonomy related to the appropriate learning domains</td>
</tr>
<tr>
<td>17. Learning Objective</td>
<td>(17) Description of the minimum acceptable behavior that a student must display at the end of an instructional period</td>
</tr>
<tr>
<td>18. Assignments</td>
<td>(17) Description of the minimum acceptable behavior that a student must display at the end of an instructional period</td>
</tr>
<tr>
<td>19. Evaluation</td>
<td>(19) Ensures that performance skills accurately reflect the ability of the student to perform the required task</td>
</tr>
<tr>
<td>20. Lesson Outline</td>
<td>(19) Ensures that performance skills accurately reflect the ability of the student to perform the required task</td>
</tr>
</tbody>
</table>

(16) Essential for any skills based training, especially live fire training evolutions
(15) Textbooks and other instructional materials for the instructor to develop depth in the subject matter
(18) Additional practice outside of class. Helps students retain skills
(20) Contains the information and skills that are to be taught using the four step method format
(11) List of all items needed to teach the number of participants in the course
11. Answer found in Fire and Emergency Services Instructor, IFSTA, Seventh Edition, Page 323
12. Answer found in Fire and Emergency Services Instructor, IFSTA, Seventh Edition, Page 323
13. Answer found in Fire and Emergency Services Instructor, IFSTA, Seventh Edition, Page 323
14. Answer found in Fire and Emergency Services Instructor, IFSTA, Seventh Edition, Page 323
15. Answer found in Fire and Emergency Services Instructor, IFSTA, Seventh Edition, Page 328
16. Answer found in Fire and Emergency Services Instructor, IFSTA, Seventh Edition, Page 328
17. Answer found in Fire and Emergency Services Instructor, IFSTA, Seventh Edition, Page 323
18. Answer found in Fire and Emergency Services Instructor, IFSTA, Seventh Edition, Page 328
19. Answer found in Fire and Emergency Services Instructor, IFSTA, Seventh Edition, Pages 328-329
20. Answer found in Fire and Emergency Services Instructor, IFSTA, Seventh Edition, Page 328
Appendix A: Formative Test #3 Answer Key

INSTRUCTIONS: This is a 21-item multiple-choice test. For each of the following questions or statements, draw a circle around the letter preceding the one best answer. You have 30 minutes to complete the test.

EXAMPLE: The Incident Command System was developed by the
   a. National Fire Protection Association
   b. fire service
   c. labor unions
   d. State Board of Fire Services

1. During performance tests, students should
   a. perform the skill to a higher level than they would on the job
   b. be tested based on their potential and not just their present ability
   ► c. be tested based on standard criteria and stated performance standards
   d. be given a written test with the performance test to show mastery of the skill
   
   Answer found in Fire and Emergency Services Instructor, IFSTA, Seventh Edition, Page 308

2. The purpose of a performance test is to
   a. measure an individual's future learning potential
   b. give instructors an opportunity to demonstrate their proficiency
   ► c. give students an opportunity to demonstrate their proficiency
   d. measure a Training Division's ability to train students in psychomotor skills
   
   Answer found in Fire and Emergency Services Instructor, IFSTA, Seventh Edition, Page 403

3. When using more than one test evaluator during a performance test, the lead instructor should
   a. test his or her performance abilities before conducting the test
   b. have all adjunct instructors read the test instructions silently before the test
   c. conduct an instructor consensus vote on test criteria
   ► d. provide direction to all instructors about what they should look for during the test
   
   Answer found in Fire and Emergency Services Instructor, IFSTA, Seventh Edition, Page 403
4. Select the correct statement regarding liability
   a. Organizations, but not instructors, can be held legally liable for actions
   b. Instructors, but not organizations, can be held legally liable for actions
   ▶ c. Both organizations and instructors can be held legally liable for actions
   d. Neither organizations nor instructors can be held legally liable because of immunity

   Answer found in Fire and Emergency Services Instructor, IFSTA, Seventh Edition, Page 70

5. Which of the following types of law is usually the result of a legal precedent?
   a. Historical law
   ▶ b. Judiciary law
   c. Legislative law
   d. Administrative law

   Answer found in Fire and Emergency Services Instructor, IFSTA, Seventh Edition, Page 67

6. What legislative law restricts access to personal information?
   a. Civil Rights Act
   b. Americans with Disabilities Act
   ▶ c. Privacy Act or Buckley Amendment
   d. Affirmative action policies

   Answer found in Fire and Emergency Services Instructor, IFSTA, Seventh Edition, Page 66

7. Which governing body has the responsibility for approving equipment and enacting policies and procedures for the jurisdiction?
   a. National Fire Protection Association (NFPA)
   b. Occupational Safety and Health Administration (OSHA)
   ▶ c. Authority having jurisdiction (AHJ)
   d. International Association of Fire Chiefs (IAFC)

   Answer found in Fire and Emergency Services Instructor, IFSTA, Seventh Edition, Page 63

8. The law that requires employers to provide reasonable accommodations for disabled employees is the
   a. Civil Rights Act
   b. Buckley Amendment
   c. Affirmative action policies
   ▶ d. Americans with Disabilities Act

   Answer found in Fire and Emergency Services Instructor, IFSTA, Seventh Edition, Page 65
9. An organization or instructor may be considered negligent if they
   a. require minimum standards for students
   b. limit class size for instructional purposes
   c. teach topics in which information changes
   d. teach a topic the instructor is unqualified to teach

   Answer found in Fire and Emergency Services Instructor, IFSTA, Seventh Edition, Page 70

10. When conducting outdoor psychomotor drills, instructors should be concerned with activities which could effect the environment’s water, atmosphere, and soil, and should therefore comply with the regulations of the
   a. Department of Homeland Security
   b. Environmental Protection Agency (EPA)
   c. National Environmental Commission
   d. Occupational Safety and Health Administration (OSHA)

   Answer found in Fire and Emergency Services Instructor, IFSTA, Seventh Edition, Page 76

11. Which of the following terms refers to a body of law established either by legislative or administrative agencies with rule-making authority that is designed to regulate, within its scope, or the topic to which it relates?
   a. Code
   b. Guide
   c. Standard
   d. Regulation

   Answer found in Fire and Emergency Services Instructor, IFSTA, Seventh Edition, Page 62

12. What law prohibits asking certain personal questions of job applicants?
   a. Civil Rights Act
   b. Privacy Act
   c. Title VII of the Civil Rights Act
   d. Americans with Disabilities Act

   Answer found in Fire and Emergency Services Instructor, IFSTA, Seventh Edition, Page 65
13. Which of the following refers to liability that is placed on the employer for the acts and omissions of employees during the normal course of their employment?
   a. Secondary liability
   ► b. Vicarious liability
   c. Employer liability
   d. Tertiary liability

   Answer found in Fire and Emergency Services Instructor, IFSTA, Seventh Edition, Page 71

14. Placing a new student under the guidance of a more experienced professional or another student who acts as tutor, guide, and motivator is known as
   a. coaching
   b. counseling
   ► c. mentoring
   d. positive teaching

   Answer found in Fire and Emergency Services Instructor, IFSTA, Seventh Edition, Page 182

15. Which of the following is a guideline to be used when creating performance tests?
   a. Generally explain overall performance concepts to be evaluated
   b. Select a process that will compare students to each other
   ► c. Use more than one evaluator
   d. For team evaluations, make sure each student is evaluated in only one position in an evolution

   Answer found in Fire and Emergency Services Instructor, IFSTA, Seventh Edition, Page 403

16. The most direct means of determining how well an individual can accomplish a job is
   a. an annual performance evaluation
   b. a fitness for duty evaluation
   c. an oral examination
   ► d. a performance test

   Answer found in Fire and Emergency Services Instructor, IFSTA, Seventh Edition, Pages 402-403

17. One disadvantage of a performance test is
   ► a. its unreliability because of proctor subjectivity
   b. its lack of reliability even when tests are constructed properly
   c. it reduces student motivation
   d. its lack of validity compared to written tests on the same material

   Answer found in Fire and Emergency Services Instructor, IFSTA, Seventh Edition, Page 405
18. One advantage of a performance test is
   a. its ease of construction
   b. its ease of scoring
   c. its comprehensiveness
   ▶ d. a sense of accomplishment

   Answer found in Fire and Emergency Services Instructor, IFSTA, Seventh Edition, Page 405

19. In order to have positive results, positive feedback must be
   a. focused on the skill and the student
   b. generalized and broad
   c. delayed to be accurate and given face-to-face
   ▶ d. focused on one skill or behavior

   Answer found in Fire and Emergency Services Instructor, IFSTA, Seventh Edition, Page 316

20. Prior to conducting a training evolution in an acquired structure, the instructor
   a. must have verbal permission from the rightful property owner
   b. should allow companies to plan hose line deployment as part of the drill to increase realism of the drill
   ▶ c. should hold a briefing with all participants to explain the training evolutions
   d. refrain from notifying neighbors as this might alarm them, foster observers, and cause them to complain to an administrative body

   Answer found in Fire and Emergency Services Instructor, IFSTA, Seventh Edition, Page 114

21. "Provides the skill steps the student needs to know, practice, and allows them to practice in groups on their own as they coach each other" best describes
   a. a course outline
   ▶ b. a skills sheet
   c. a lesson plan
   d. an assignment sheet

   Answer found in Fire and Emergency Services Instructor, IFSTA, Seventh Edition, Page 341
Appendix B: Formative Test #1

INSTRUCTIONS: This is a 20-item multiple-choice test. For each of the following questions or statements, draw a circle around the letter preceding the one best answer. You have 30 minutes to complete the test.

EXAMPLE: The Incident Command System was developed by the
a. military
b. fire service
b. fire service
c. government
d. NRA standards

1. What is the first learning step in the psychomotor domain?
   a. Imitation
   b. Observation
   c. Performance
   d. Perfection

2. In the fire and emergency services training, what is the most commonly used form of learning?
   a. The cognitive domain
   b. On-the-job training
   c. The psychomotor domain
   d. Trial-and-error on the fireground

3. Considering the levels of learning in the psychomotor domain, in which step does the student modify and personalize the motor activity?
   a. Imitation
   b. Adaptation
   c. Performance
   d. Perfection
4. In psychomotor learning, the coaching process includes
   a. mentoring, monitoring, and manipulation
   b. observation, evaluation, and suggestions for improvement
   c. firmness, fairness, and friendship
   d. evaluation, discipline, and termination

5. In which step of the four-step method of instruction does most learning take place, making this step critically important?
   a. Preparation
   b. Presentation
   c. Application
   d. Evaluation

6. Students that are required to say what they are doing while they perform an activity have
   a. made a mistake and need remediation
   b. a chance to retain 90% of the information
   c. no chance of ever doing the task without speaking it at the same time
   d. have a 50-50 chance of learning the task

7. The act of showing how to do something or how something operates or acts best describes the definition of
   a. illustrated lecture
   b. discussion
   c. lecture
   d. demonstration

8. When instructors provide new information, students take that information and
   a. place it in a memory recall file
   b. try to link it to other new information
   c. try to link it to what they already know
   d. place it according to the stimulus package it was delivered in
9. Which of the following is an **advantage** of the demonstration method of instruction?
   a. Students receive feedback at a later time when they can concentrate on the feedback
   b. Other students can determine whether learning objectives have been met
   c. Students have a high level of interest when performing
   d. Instructors save time by using the demonstration method as preparation and cleanup time is minimized

10. Which of the following is **not** a limitation of the demonstration method of instruction?
    a. Instructors must plan for extensive preparation time and cleanup
    b. Careful lesson planning is important because assembly and practice time can use much of the class time
    c. Excessive practice of skills leads to student burnout and safety degradation
    d. Skills that must be performed or practiced outside depend on weather conditions

11. Which of the following is **not** one of the guidelines an instructor should follow when preparing for a demonstration?
    a. Know clearly what is to be demonstrated and its learning objective
    b. Acquire all equipment and accessories, ensure that they work, and arrange them for use
    c. Arrange the room or demonstration area so that all students can see and hear the demonstration
    d. Have a general understanding of every step of the demonstration and discuss this with all instructors involved

12. What happens as training becomes more realistic?
    a. The benefit to the student decreases and potential risk increases
    b. The benefit to the student increases and potential risk decreases
    c. The benefit to the student decreases and potential risk decreases
    d. The benefit to the student increases and potential risk increases
13. When preparing for a demonstration, the instructor should
   a. have the students arrange the equipment to be used
   b. wait until the demonstration begins to test equipment
   c. know clearly what is to be demonstrated and its learning objective
   d. repeat the demonstration step-by-step in front of the students

14. What student advantage is there for using multiple instructors during a skills presentation?
   a. Provides a clear and narrow view of presentation methods
   b. Offers a clear view of skills objectives
   c. Allows contact with more than one instructor during a lesson
   d. Provides contact with only one instructor during a lesson

15. Which of the following is a solution to the challenge of ensuring safe training environments?
   a. Do not train at remote and unfamiliar sites
   b. Limit the time devoted to practical evolutions
   c. Be familiar with safety regulations as they apply to training
   d. Allow only advanced students to perform practical training evolutions

16. Which of the following is a disadvantage of the demonstration presentation format?
   a. Participants can receive feedback immediately
   b. Instructors can readily observe a change in behavior
   c. Students have a high level of interest when participating
   d. Instructors must plan for extensive preparation and cleanup times

17. Which NFPA standard addresses guidelines for live-fire training evolutions?
   a. NFPA 1403
   b. NFPA 1410
   c. NFPA 1500
   d. NFPA 1660
18. A multistory, multipurpose structure that may be open or enclosed and should be optimally six stories in height best describes
   a. a drill tower 
   b. an acquired midrise structure
   c. a live-fire building
   d. a prefab smoke building

19. The "ACID" acronym applies to which step of the four-step method of instruction?
   a. Preparation 
   b. Presentation
   c. Application 
   d. Evaluation

20. Which ancillary component of a lesson plan divides a task into parts by listing the operational steps and their key points for completing each operation?
   a. Job sheet 
   b. Skills sheet
   c. Activity sheet 
   d. Assignment sheet
Appendix B: Formative Test #2

INSTRUCTIONS: This is a 20-item multiple-choice test. For each of the following questions or statements, draw a circle around the letter preceding the one best answer. You have 30 minutes to complete the test.

EXAMPLE: The Incident Command System was developed by the
   a. school system
   b. fire service
   c. state legislature
   d. NFPA

1. A good guideline to follow when using audiovisual training aids is to
   a. use as many as possible
   b. use visual aids that are complex and present multiple ideas
   c. rehearse with the training aids before giving a lecture
   d. not spend a lot of preparation time for visual aids

2. Which of the following is a strategy for avoiding distractions when using audiovisual training aids?
   a. Avoid eye contact with students when using a visual aid
   b. Use multiple training aids simultaneously whenever possible
   c. Introduce audiovisual training aids at the time they are to be viewed
   d. Display projected visual training aids below the eye level of seated students

3. An excellent medium for illustrating mechanical or spatial concepts is
   a. a model
   b. an easel pad
   c. a handout or duplicated material
   d. an illustration or diagram display
4. Audiovisual training aids can enhance psychomotor lesson presentations by
   a. decreasing necessary repetitive repetitions
   b. increasing necessary repetitive repetitions
   c. decreasing memory
   d. enhancing memory

5. Instructors sometimes improperly use the illustration method as a substitute for
   a. the discussion method
   b. the lecture method
   c. self-directed learning
   d. the demonstration method

6. Which of the following is not a benefit of using audiovisual aids?
   a. Increases lecture time
   b. Adds interest to a lecture
   c. Helps students organize ideas
   d. Enhances student understanding

7. "A step or the smallest aspect in performing a task" best describes
   a. an operation
   b. a skills sheet
   c. a course outline
   d. a job or topic

8. "May include information that aids in knowing or understanding operations that enable
   the student to perform the task correctly" best describes
   a. a key point
   b. a skills sheet
   c. an operation
   d. a job or topic
9. The first step in a skills demonstration includes
   a. an explanation of the skill
   b. the students practicing the steps
   c. a demonstration of the skill at normal speed
   d. a demonstration of the skill at a slow speed

10. Whether creating a new lesson plan or adapting an existing lesson plan, instructors start at the same step, which is to
   a. begin at a level of student understanding
   b. start with the desired learning outcomes
   c. create lesson plans around time frames given for the topic
   d. build a testing mechanism so that the lesson plan is developed properly

Complete Section II on the following page.
SECTION II

INSTRUCTIONS: Section II is a matching test. Select the one response in Column 2 that most nearly matches an item in Column 1. Write the number of the item from Column 1 in the parenthesis that precedes the appropriate response in Column 2.

EXAMPLE:

<table>
<thead>
<tr>
<th>COLUMN 1</th>
<th>COLUMN 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. hammer</td>
<td>(2) Tool used to cut</td>
</tr>
<tr>
<td>2. saw</td>
<td>(1) Tool used to drive nails</td>
</tr>
<tr>
<td>3. wrench</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>COLUMN 1</th>
<th>COLUMN 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>11. Resources/Materials Needed</td>
<td>(____) Short descriptive title of the information covered and taken directly from the course outline</td>
</tr>
<tr>
<td>12. Level of Instruction</td>
<td>(____) May be set for each objective, can allow for variations of class size, experience level of students, an estimation</td>
</tr>
<tr>
<td>13. Time Frame</td>
<td>(____) Based on NFPA job performance requirements or academically established taxonomy related to the appropriate learning domains</td>
</tr>
<tr>
<td>14. Job or Topic</td>
<td>(____) Description of the minimum acceptable behavior that a student must display at the end of an instructional period</td>
</tr>
<tr>
<td>15. References</td>
<td>(____) Ensures that performance skills accurately reflect the ability of the student to perform the required task</td>
</tr>
<tr>
<td>16. Prerequisites</td>
<td>(____) Essential for any skills based training, especially live fire training evolutions</td>
</tr>
<tr>
<td>17. Learning Objective</td>
<td>(____) Textbooks and other instructional materials for the instructor to develop depth in the subject matter</td>
</tr>
<tr>
<td>18. Assignments</td>
<td>(____) Additional practice outside of class. Helps students retain skills</td>
</tr>
<tr>
<td>19. Evaluation</td>
<td>(____) Contains the information and skills that are to be taught using the four step method format</td>
</tr>
<tr>
<td>20. Lesson Outline</td>
<td>(____) List of all items needed to teach the number of participants in the course</td>
</tr>
</tbody>
</table>
Appendix B: Formative Test #3

INSTRUCTIONS: This is a 21-item multiple-choice test. For each of the following questions or statements, draw a circle around the letter preceding the one best answer. You have 30 minutes to complete the test.

EXAMPLE: The Incident Command System was developed by the
a. National Fire Protection Association
b. fire service
   c. labor unions
d. State Board of Fire Services

1. During performance tests, students should
   a. perform the skill to a higher level than they would on the job
   b. be tested based on their potential and not just their present ability
   c. be tested based on standard criteria and stated performance standards
   d. be given a written test with the performance test to show mastery of the skill

2. The purpose of a performance test is to
   a. measure an individual's future learning potential
   b. give instructors an opportunity to demonstrate their proficiency
   c. give students an opportunity to demonstrate their proficiency
   d. measure a Training Division's ability to train students in psychomotor skills

3. When using more than one test evaluator during a performance test, the lead instructor should
   a. test his or her performance abilities before conducting the test
   b. have all adjunct instructors read the test instructions silently before the test
   c. conduct an instructor consensus vote on test criteria
   d. provide direction to all instructors about what they should look for during the test
4. Select the correct statement regarding liability
   a. Organizations, but not instructors, can be held legally liable for actions
   b. Instructors, but not organizations, can be held legally liable for actions
   c. Both organizations and instructors can be held legally liable for actions
   d. Neither organizations nor instructors can be held legally liable because of immunity

5. Which of the following types of law is usually the result of a legal precedent?
   a. Historical law
   b. Judiciary law
   c. Legislative law
   d. Administrative law

6. What legislative law restricts access to personal information?
   a. Civil Rights Act
   b. Americans with Disabilities Act
   c. Privacy Act or Buckley Amendment
   d. Affirmative action policies

7. Which governing body has the responsibility for approving equipment and enacting policies and procedures for the jurisdiction?
   a. National Fire Protection Association (NFPA)
   b. Occupational Safety and Health Administration (OSHA)
   c. Authority having jurisdiction (AHJ)
   d. International Association of Fire Chiefs (IAFC)

8. The law that requires employers to provide reasonable accommodations for disabled employees is the
   a. Civil Rights Act
   b. Buckley Amendment
   c. Affirmative action policies
   d. Americans with Disabilities Act
9. An organization or instructor may be considered negligent if they
   a. require minimum standards for students
   b. limit class size for instructional purposes
   c. teach topics in which information changes
   d. teach a topic the instructor is unqualified to teach

10. When conducting outdoor psychomotor drills, instructors should be concerned with activities which could effect the environment’s water, atmosphere, and soil, and should therefore comply with the regulations of the
   a. Department of Homeland Security
   b. Environmental Protection Agency (EPA)
   c. National Environmental Commission
   d. Occupational Safety and Health Administration (OSHA)

11. Which of the following terms refers to a body of law established either by legislative or administrative agencies with rule-making authority that is designed to regulate, within its scope, or the topic to which it relates?
   a. Code
   b. Guide
   c. Standard
   d. Regulation

12. What law prohibits asking certain personal questions of job applicants?
   a. Civil Rights Act
   b. Privacy Act
   c. Title VII of the Civil Rights Act
   d. Americans with Disabilities Act
13. Which of the following refers to liability that is placed on the employer for the acts and omissions of employees during the normal course of their employment?
   a. Secondary liability
   b. Vicarious liability
   c. Employer liability
   d. Tertiary liability

14. Placing a new student under the guidance of a more experienced professional or another student who acts as tutor, guide, and motivator is known as
   a. coaching
   b. counseling
   c. mentoring
   d. positive teaching

15. Which of the following is a guideline to be used when creating performance tests?
   a. Generally explain overall performance concepts to be evaluated
   b. Select a process that will compare students to each other
   c. Use more than one evaluator
   d. For team evaluations, make sure each student is evaluated in only one position in an evolution

16. The most direct means of determining how well an individual can accomplish a job is
   a. an annual performance evaluation
   b. a fitness for duty evaluation
   c. an oral examination
   d. a performance test

17. One disadvantage of a performance test is
   a. its unreliability because of proctor subjectivity
   b. its lack of reliability even when tests are constructed properly
   c. it reduces student motivation
   d. its lack of validity compared to written tests on the same material
18. One **advantage** of a performance test is
   a. its ease of construction
   b. its ease of scoring
   c. its comprehensiveness
   d. a sense of accomplishment

19. In order to have positive results, positive feedback must be
   a. focused on the skill and the student
   b. generalized and broad
   c. delayed to be accurate and given face-to-face
   d. focused on one skill or behavior

20. Prior to conducting a training evolution in an acquired structure, the instructor
   a. must have verbal permission from the rightful property owner
   b. should allow companies to plan hose line deployment as part of the drill to increase realism of the drill
   c. should hold a briefing with all participants to explain the training evolutions
   d. refrain from notifying neighbors as this might alarm them, foster observers, and cause them to complain to an administrative body

21. "Provides the skill steps the student needs to know, practice, and allows them to practice in groups on their own as they coach each other" best describes
   a. a course outline
   b. a skills sheet
   c. a lesson plan
   d. an assignment sheet