

TRAINING INSTRUCTOR 1C

Approved and Adopted by the
Office of State Fire Marshal



Recommended for adoption by the
Statewide Training and Education
Advisory Committee and the
State Board of Fire Services



INSTRUCTOR GUIDE

January 2010



TRAINING INSTRUCTOR 1C

INSTRUCTIONAL DEVELOPMENT TECHNIQUES

I N S T R U C T O R G U I D E



Published by

STATE FIRE TRAINING

PO Box 944246

Sacramento, CA 94244-2460

January 2010



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Instructional Development Techniques

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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.

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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.

<p>Alicia Hamilton Fire Service Training Specialist III</p>
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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.

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

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



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Student Profile

Target Group

Personnel preparing to become a SFT Registered Instructor or a certified Training Instructor.

Prerequisites

Training Instructor 1A and Training Instructor 1B.

Desired Attendance Time Frame

None.



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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

Unit 2: Methodology

- Individual Activity 2-3-1: Levels Of Instruction
- Individual Activity 2-5-1: Special Needs And Limited English Proficiency

Unit 3: Instructional Preparation and Delivery

- Group Activity 3-3-1: Developing Behavioral Objectives
- Individual Activity 3-4-1: Cognitive Lesson Plan Development
- Individual Activity 3-4-2: Cognitive Teaching Demonstration
- Individual Activity 3-5-1: Psychomotor Lesson Plan Development
- Individual Activity 3-5-2: Psychomotor Teaching Demonstration
- Individual Activity 3-6-1: Developing Ancillary Components
- Individual Activity 3-10-1: Developing Audiovisual Training Aids
- Individual Activity 3-11-1: Evaluating A Student Instructor's Cognitive Teaching Demonstration As The Primary Evaluator
- Individual Activity 3-11-2: Evaluating A Student Instructor's Cognitive Teaching Demonstration As The Secondary Evaluator
- Individual Activity 3-11-3: Evaluating A Student Instructor's Psychomotor Teaching Demonstration As The Primary Evaluator

Unit 4: Testing

- Group Activity 4-2-1: Creating An Oral Test
- Individual Activity 4-2-2: Creating A Multiple-choice Written Test
- Individual Activity 4-2-3: Creating A True-False Written Test
- Group Activity 4-3-1: Test Administration



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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

PRESENTATION	APPLICATION
Everything you say or display Content Instructor notes	Student Participation <ul style="list-style-type: none"> • Questions • Activities • Audiovisual Cues

Psychomotor Lesson Plans

OPERATIONS	KEY POINTS
Specific actions to be performed by the students	The who, what, when, where, why, and how (the "tricks of the trade")



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Begin with a verb, followed by a noun | Safety practices

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.



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Course Outline

Course Objectives: To provide the student with...

- a) A variety of methods and techniques for developing lesson plans and tests in accordance with the latest concepts in career education.
- b) Information to develop cognitive and psychomotor lesson plans and related supplemental materials.
- c) Various testing instruments to evaluate teaching and learning efficiency.
- d) An opportunity to develop, receive feedback, and finalize instructional materials to deliver a teaching demonstration.

Course Content: **40:00**

Unit 1: Introduction

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

Unit 2: Methodology

2-1 Reasons For Lesson Plan Development..... 0:30

2-2 Sources Of References And Materials 0:30

2-3 Determining Levels Of Instruction 0:30

2-4 Employing The Four-step Method Of Instruction..... 0:30

2-5 Teaching English Learners And Students With Special Needs 0:30

Unit 3: Instructional Preparation And Delivery

3-1 Elements Of A Course Outline 0:30

3-2 Components Of Cognitive And Psychomotor Lesson Plans..... 1:00

3-3 Developing Student Behavioral Objectives 1:00

3-4 Developing A Cognitive Lesson Plan (SFT Format)..... 2:00

3-5 Developing A Psychomotor Lesson Plan (SFT Format)..... 1:30

3-6 Developing And Employing Ancillary Components 1:00

3-7 Selecting And Employing Audiovisual Training Aids 1:30

3-8 Transition Techniques Within And Between Audiovisual Training Aid Devices..... 1:00

3-9 Cleaning And Field Level Maintenance For Audiovisual Training Aid Devices..... 0:30

3-10 Developing Audiovisual Training Aids 1:30

3-11 Procedures For Evaluating Student Instructor Teaching Demonstrations 0:30

Unit 4: Testing

4-1 Purpose, Selection Criteria, And Elements Of Test Instruments 1:00

4-2 Creating Oral, Written, And Performance Tests 2:00

4-3 Methods Of Administering And Grading Test Instruments (Oral and Written)..... 1:00



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Student Instructor Teaching Demonstrations.....	17:30
Formative Tests	2:00
Summative Test.....	1:00

Texts and References

- Fire and Emergency Services Instructor, IFSTA, Seventh Edition
- Effective Supervisory Practices, ICMA, Fourth Edition
- Corps Business, David H. Freedman, 2000 Edition
- Developing Attitude Toward Learning, Robert F. Mager, 1968 Edition
- How Good People Make Tough Choices, Rushworth M. Kidder, 2003 Edition
- Legal Considerations for Fire and Emergency Services, J. Curtis Varone, 2007 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



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TRAINING INSTRUCTOR 1C PROGRESS CHART	BEGINNING DATE:						ENDING DATE:								
	CLASS SIZE: Maximum 25 Students 16 Students = 1 Master Instructor 17-25 Students = 2 Master Instructors or 1 Master Instructor/ Qualified Skills Evaluator	Activity 4-2-1	Activity 4-2-2	Activity 4-2-3	Activity 4-3-1	Formative Test #1	Formative Test #2	ATTENDANCE					SUMMATIVE TEST		
								STUDENT IDENTIFICATION	Day 1	Day 2	Day 3	Day 4	Day 5	Minimum 80% Required to Pass	PASS/ FAIL
1.															
2.															
3.															
4.															
5.															
6.															
7.															
8.															
9.															
10.															
11.															
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21.															
22.															
23.															
24.															
25.															



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Instructional Development Techniques

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 1C Student Supplement, SFT, 2010 Edition, Pages 2-5

Materials Needed:

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

References:

- Calendar of Events
- State Fire Training Procedures Manual, SFT, Current Edition

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.

A ttention (attract)	B egin
C uriosity (arouse)	A ssociation
I nterest (create)	S tudents
D esire (stimulate)	E xperience

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.



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Instructional Development Techniques

PRESENTATION	APPLICATION
<p>I. INTRODUCTIONS</p> <p>A. Introduce self and other staff</p> <p>B. Cite background</p> <ol style="list-style-type: none">1. Fire department experience2. Education and training3. Teaching history4. Contact information where instructor can be reached<ol style="list-style-type: none">a) Phone number(s)b) Emailc) Other <p>C. Facilities orientation</p> <ol style="list-style-type: none">1. Classroom location(s)2. Restrooms3. Food locations4. Smoking locations5. Break locations6. Telephones<ol style="list-style-type: none">a) Cell phone use7. Parking8. Emergency procedures <p>D. Student introductions</p> <p>NOTE: Slide will remind each student what information to include in self introduction.</p>	<p>SLIDE: #-#-1</p> <p>SLIDE: #-#-2</p> <p>SLIDE: #-#-3</p> <p><u>CLASS ACTIVITY</u></p> <p>Students are to introduce themselves.</p> <p>SLIDE: #-#-4</p>



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Instructional Development Techniques

PRESENTATION	APPLICATION
<ol style="list-style-type: none"> 1. Name 2. Department 3. Rank 4. Years of experience 5. Current assignment 6. Reason(s) for taking Fire Instructor 1C <p>E. Reasons for student introductions</p> <ol style="list-style-type: none"> 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 <p>II. COURSE DESCRIPTION</p> <p>A. Class hours</p> <ol style="list-style-type: none"> 1. 19.5 hours for lecture 2. 17.5 hours teaching demonstrations <ol style="list-style-type: none"> a) Based on 16 students 3. 3 hours for formative and summative tests <p>B. Considerable work</p> <ol style="list-style-type: none"> 1. Numerous activities 2. Substantial homework load <ol style="list-style-type: none"> a) May equal or exceed classroom hours b) All homework must be successfully completed to pass <p>C. Lunch and break times</p>	<p>Why do we have you introduce yourselves at the beginning of a class in this manner?</p> <p>SLIDE: #-#-5</p>



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PRESENTATION	APPLICATION
<p>III. CALENDAR OF EVENTS</p> <p>NOTE: Refer students to the Calendar of Events in their student supplement.</p> <ul style="list-style-type: none">A. Relates to the development and application of cognitive and psychomotor teaching materialsB. Time framesC. There will be group discussions and activities throughout the classD. Each student is required to complete two teaching presentations<ul style="list-style-type: none">1. One 30-minute cognitive presentation2. One 15-minute psychomotor presentation3. Each based on a lesson plan developed during a homework assignmentE. Each student is required to evaluate three student instructor teaching demonstrations<ul style="list-style-type: none">1. Primary Evaluators for cognitive presentations will lead a group critique2. Secondary Evaluators complete an evaluation independently <p>NOTE: Review topics to be covered in each session.</p> <p>IV. COURSE REQUIREMENTS</p> <ul style="list-style-type: none">A. Attendance<ul style="list-style-type: none">1. Must attend the entire course2. Excused absences may be considered for emergenciesB. Classroom and group participation are required	<p>SLIDE: #-#-6</p> <p>What does the calendar of events tell you about your activities?</p> <p>SLIDE: #-#-7</p>



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PRESENTATION	APPLICATION
<p>C. Required text</p> <ol style="list-style-type: none">1. <u>Fire and Emergency Services Instructor</u>, IFSTA, Seventh Edition2. <u>Training Instructor 1C Student Supplement</u>, SFT, 2010 Edition<ol style="list-style-type: none">a) Ancillary material not in the required IFSTA textb) All individual and group activities <p>V. STUDENT EVALUATION</p> <p>A. Two formative tests</p> <ol style="list-style-type: none">1. Must complete both tests2. Tests are not graded<ol style="list-style-type: none">a) Each test will be reviewed and discussed as a group3. Students can keep their tests <p>B. Activities</p> <ol style="list-style-type: none">1. Students must successfully participate in all activities <p>C. Lesson plan development</p> <ol style="list-style-type: none">1. Topic must be emergency service related2. Original lesson plan cannot be handwritten3. Evaluated for<ol style="list-style-type: none">a) Contentb) Spellingc) Grammard) Punctuatione) Format <p>D. Lesson plan rewrites</p> <ol style="list-style-type: none">1. Students failing the lesson plan development assignment may submit a rewrite	<p>SLIDE: #-#-8</p>



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PRESENTATION	APPLICATION
<ul style="list-style-type: none"> 2. A single rewrite opportunity is allowed 3. Rewrites must be accompanied by the original paperwork 4. The rewrite will be evaluated by the Primary Instructor for meeting the passing standard E. Teaching demonstrations <ul style="list-style-type: none"> 1. Each student must deliver one cognitive and one psychomotor teaching demonstration 2. The Primary Instructor must approve each topic selected by students for their teaching demonstrations <ul style="list-style-type: none"> a) Emergency service related b) No duplications c) Selected teaching demonstrations will be posted on a master list 3. Students must furnish all materials required for their teaching demonstration 4. Cognitive teaching demonstration <ul style="list-style-type: none"> a) Each student must pass the individual cognitive teaching demonstration b) The Primary Instructor, a second Master Instructor, or a qualified skills evaluator must observe all students' cognitive teaching demonstrations in their entirety 5. Psychomotor teach demonstration <ul style="list-style-type: none"> a) Will be completed as a small group activity and evaluated by other students b) The Primary Instructor monitor all groups F. Summative test <ul style="list-style-type: none"> 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 	



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PRESENTATION	APPLICATION
<ul style="list-style-type: none">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 class4. Retaking a summative test<ul style="list-style-type: none">a) The Primary Instructor may elect to administer a retake examb) Must be administered prior to returning the class materials to SFT<ul style="list-style-type: none">1) Within 15 days of the class ending date <p>NOTE: Refer students to the Student Tracking Sheet in their student supplement.</p> <p>G. Progress chart</p> <ul style="list-style-type: none">1. Uses student identification numbers instead of names2. Federal law prohibits publication of identifiable student grades<ul style="list-style-type: none">a) Family Educational Rights and Privacy Act of 1974	<p>SLIDE: #-#-9</p>



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Summary:

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 to the fullest extent 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:

Review your notes and read Training Instructor 1C Student Supplement, SFT, 2010 Edition, Pages 2-5. Study for our next session.



TRAINING INSTRUCTOR 1C

Instructional Development Techniques

Calendar of Events

DAY	TOPIC	TITLE	TIME	ACTIVITY	EVALUATION
Day 1	1-1	Orientation and Administration	1:00		
	2-1	Reasons For Lesson Plan Development	0:30		
	2-2	Sources Of References And Materials	0:30		
	2-3	Determining Levels Of Instruction	0:30	2-3-1	
	2-4	Employing The Four-step Method Of Instruction	0:30		
	2-5	Teaching English Learners And Students With Special Needs	0:30	2-5-1	
	3-1	Elements Of A Course Outline	0:30		
	3-2	Components Of Cognitive And Psychomotor Lesson Plans	1:00		
	3-3	Developing Student Behavioral Objectives	1:00	3-3-1	
	3-4	Developing A Cognitive Lesson Plan	2:00	3-4-1	
	Day 1 Total			8:00	
Day 2			1:00		Formative Test 1
	3-5	Developing A Psychomotor Lesson Plan	1:30	3-5-1	
	3-6	Developing And Employing Ancillary Components	1:00	3-6-1	
	3-7	Selecting And Employing Audiovisual Training Aids	1:30		
	3-8	Transition Techniques Within And Between Training Aid Devices	1:00		
	3-9	Cleaning And Field Level Maintenance For Audiovisual Training Aid Devices	0:30		
	3-10	Developing Audiovisual Training Aids	1:30	3-10-1	
	Day 2 Total			8:00	
Day 3	3-11	Procedures Used For Evaluating Student Instructor Teaching Demonstrations	0:30	3-11-1 3-11-2 3-11-3	
		Student Instructor Small Group Psychomotor Teaching Demonstrations	2:00	3-5-2 3-11-3	



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DAY	TOPIC	TITLE	TIME	ACTIVITY	EVALUATION
	4-1	Purpose, Selection Criteria, And Elements Of Test Instruments	1:00		
	4-2	Creating Oral, Written, And Performance Tests	2:00	4-2-1, 4-2-2, 4-2-3	
		Student Instructor Cognitive Teaching Demonstrations	2:30	3-4-2 3-11-1 3-11-2	
	Day 3 Total		8:00		
Day 4			1:00		Formative Test 2
		Student Instructor Cognitive Teaching Demonstrations	7:00	3-4-2 3-11-1 3-11-2	
	Day 4 Total		8:00		
Day 5		Student Instructor Cognitive Teaching Demonstrations	6:00	3-4-2 3-11-1 3-11-2	
	4-3	Methods Of Administering And Grading Test Instruments	1:00	4-3-1	
			1:00		Summative Test
	Day 5 Total		8:00		
Course Total			40:00		



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Topic: 2-1: Reasons For Lesson Plan Development
Time Frame: 0:30
Level of Instruction: Level II
Authority: 2008 Training Instructor CTS #2: Describe And Demonstrate The Development Of Instructional Materials

Behavioral Objective:

Condition: Given a [course final exam summative test](#)

Behavior: The student will describe the purposes and benefits of lesson plans and identify reasons for developing lesson plans

Standard: With a minimum 80% accuracy on the [course final exam summative test](#) according to the information contained in Fire and Emergency Services Instructor, IFSTA, Seventh Edition, Pages 322-323

Materials Needed:

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

References:

- Fire and Emergency Services Instructor, IFSTA, Seventh Edition, Pages 322-323

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.

A ttention (attract)	B egin
C uriosity (arouse)	A ssociation
I nterest (create)	S tudents
D esire (stimulate)	E xperience

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.



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PRESENTATION	APPLICATION
<ul style="list-style-type: none"> B. Adaption of prepared lesson plans may be more difficult <ul style="list-style-type: none"> 1. Agency-specific needs may be significantly different than generic version 2. Agency needs greater depth in subject area than what is provided C. Allows instruction to better meet the needs of the students <ul style="list-style-type: none"> 1. Lesson plans can be developed for a specific target audience D. Ensures lesson plan consistency <ul style="list-style-type: none"> 1. Agency-specific format 2. Lesson plans from several courses can be merged to create new courses 3. Cataloging and filing of lesson plans is simpler E. Enables agency to have lesson plans accurately reflect local needs <ul style="list-style-type: none"> 1. Policies 2. Procedures 3. Equipment F. Career development of instructors <ul style="list-style-type: none"> 1. Lesson plan development enhances knowledge of instructional process G. Improved documentation <ul style="list-style-type: none"> 1. In-house developed lesson plans provide more accurate documentation of the material taught 	<p>How might developing lesson plans help develop instructors?</p>



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Summary:

Lesson plans serve as an important tool in delivering consistent instruction. Many topics are adequately covered by prepared lesson plans that can be modified to meet specific agency needs. When no such prepared lesson plans are available, or when an agency has a need that can't be met by a prepared lesson plan, it may be appropriate to develop a lesson plan.

Evaluation:

The student will complete the ~~course final exam~~[summative test](#) at a time determined by the instructor.

Assignment:

Review your notes and read Fire and Emergency Services Instructor, IFSTA, Seventh Edition, Pages 322-323 in order to prepare yourself for the upcoming test. Study for our next session.



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Instructional Development Techniques

Topic: 2-2: Sources Of References And Materials
Time Frame: 0:30
Level of Instruction: Level II
Authority: 2008 Training Instructor CTS #2: Describe And Demonstrate The Development Of Instructor Materials

Behavioral Objective:

Condition: Given a [course final-examsummative test](#)

Behavior: The student will describe common sources of instructional references and considerations for determining the validity, accuracy and credibility of the information

Standard: With a minimum 80% accuracy on the [course final-examsummative test](#) according to the information contained in Fire and Emergency Services Instructor, IFSTA, Seventh Edition, Pages 433-439

Materials Needed:

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

References:

- Fire and Emergency Services Instructor, IFSTA, Seventh Edition, Pages 433-439

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.

A ttention (attract)	B egin
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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.



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Instructional Development Techniques

PRESENTATION	APPLICATION
<p>X. RESEARCH</p> <ul style="list-style-type: none">A. Need factual support for training contentB. Data collection<ul style="list-style-type: none">1. Sources depend on specific uses of the data2. Amount and detail of research and data collection depends on<ul style="list-style-type: none">a) Time availableb) Complexity of the subjectc) Importance of the subject <p>XI. COMMON INFORMATION SOURCES FOR FIRE SERVICE INSTRUCTION</p> <ul style="list-style-type: none">A. Government agenciesB. LibrariesC. Educational institutionsD. Nonprofit organizationsE. Professional organizationsF. Testing and standards organizationsG. Vendors/manufacturersH. Internet <p>XII. RELIABILITY AND CREDIBILITY OF SOURCES</p> <ul style="list-style-type: none">A. Terms used to describe types of research material<ul style="list-style-type: none">1. Primary literature<ul style="list-style-type: none">a) Written by someone with direct knowledge of event or topicb) Often considered most credible	<p>SLIDE: #-#-1</p> <p>SLIDE: #-#-2</p> <p>What are some common sources of information for fire service instructors?</p> <p>SLIDE: #-#-3</p> <p>SLIDE: #-#-4</p>



TRAINING INSTRUCTOR 1C

Instructional Development Techniques

PRESENTATION	APPLICATION
<p>B. Secondary literature</p> <ol style="list-style-type: none">1. Based on primary literature2. Written or compiled by someone not present at event or directly knowledgeable of the subject3. Acceptable if primary source(s) is accurate and evaluated4. Many texts are in this category <p>C. Tertiary literature</p> <ol style="list-style-type: none">1. Twice removed from original source2. May contain errors of translation, interpretation or context <p>XIII. INFORMATION SOURCE CONSIDERATIONS</p> <p>A. Internet</p> <ol style="list-style-type: none">1. Amount of information available is immense<ol style="list-style-type: none">a) Search engines can help organize and prioritize information sourcesb) Much of the information available in print is now also available on the web2. Verify authority<ol style="list-style-type: none">a) Not all information on internet is accurate, valid, or currentb) Determine who produced or sponsored informationc) Watch for misleading Uniform Resource Locators (URLs)<ol style="list-style-type: none">1) Document by listing the complete URL and the date obtained	<p>SLIDE: #-#-5</p> <p>What are some considerations for determining the reliability of an internet source?</p>



TRAINING INSTRUCTOR 1C

Instructional Development Techniques

PRESENTATION	APPLICATION
<ul style="list-style-type: none"> e) United States Fire Administration (USFA) f) Department of Transportation (DOT) g) Centers for Disease Control (CDC) <p>NOTE: List additional agencies as noted by the students.</p>	<p>What State agencies produce material and information useful to the instructor?</p>
<p>2. State</p> <ul style="list-style-type: none"> a) California State Fire Marshal (CSFM) b) Office of Emergency Services (OES) <ul style="list-style-type: none"> 1) Also called the Governor's Office of Emergency Services c) Office of Homeland Security (OHS) d) Occupational Safety and Health Administration (Cal/OSHA) <p>NOTE: List additional agencies as noted by the students.</p>	<p>What agencies or departments in your local area would be good sources of information?</p>
<p>3. Local</p> <p>NOTE: List additional agencies as noted by the students.</p> <ul style="list-style-type: none"> C. Libraries D. Educational entities <ul style="list-style-type: none"> 1. Community colleges 2. California Fire Fighter Joint Apprenticeship Committee (CFFJAC) 3. Regional Occupational Program (ROP) 4. Career/Technical education 5. State colleges and universities <p>NOTE: List additional agencies as noted by the students.</p>	



TRAINING INSTRUCTOR 1C

Instructional Development Techniques

PRESENTATION	APPLICATION
<p>E. Professional organizations</p> <ol style="list-style-type: none">1. International Association of Fire Chiefs (IAFC)2. International Association of Fire Fighters (IAFF)3. California Professional Firefighters (CPF)4. Training Resource and Data Exchange (TRADE)5. California Fire Chiefs Association (CFCA)6. CFCA Training Officers <p>NOTE: List additional organizations as noted by the students.</p> <p>F. Testing and standards organizations</p> <ol style="list-style-type: none">1. National Fire Protection Association (NFPA)2. Underwriters Laboratory (UL)3. Factory Mutual (FM) <p>NOTE: List additional agencies as noted by the students.</p> <p>G. Vendors/manufacturers</p> <p>H. Nonprofit organizations</p> <p>XIV. VALIDITY AND REFERENCE CITATIONS</p> <p>A. Instructors must determine the accuracy and validity of the information sources</p> <ol style="list-style-type: none">1. Credibility2. Accuracy3. Reasonableness4. Support <p>B. Use standard styles to cite references</p> <ol style="list-style-type: none">1. American Psychiatric Association (APA)2. Modern Language Association (MLA)3. Chicago Style Manual (CSM)	<p>SLIDE: #-#-6</p> <p>What can you, as researchers, ask to help assess the validity of information sources?</p>



TRAINING INSTRUCTOR 1C

Instructional Development Techniques

Summary:

There are many sources of information available for instructional development. The volume of information available and the ease of publishing information on the internet can lead to inaccurate, invalid, and out of date material. Instructors must determine and verify the validity and accuracy of reference materials.

Evaluation:

The student will complete the ~~course final exam~~[summative test](#) at a time determined by the instructor.

Assignment:

Review your notes and read Fire and Emergency Services Instructor, IFSTA, Seventh Edition, Pages 433-439 in order to prepare yourself for the upcoming test. Study for our next session.



TRAINING INSTRUCTOR 1C

Instructional Development Techniques

Topic: 2-3: Determining Levels Of Instruction
Time Frame: 0:30
Level of Instruction: Level II
Authority: 2008 Training Instructor CTS # 2: Describe And Demonstrate The Development Of Instructional Materials

Behavioral Objective:

Condition: Given an activity and a summative test

Behavior: The student will determine the levels of instruction used in the fire service, recognize the instructor's role in each level of instruction, and identify the evaluation principles utilized in each level of instruction

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 142 and 531, Training Instructor 1C Student Supplement, SFT, 2010 Edition, Pages 9-14, and successfully completing Individual Activity 2-3-1

Materials Needed:

- Writing board/pad with markers/erasers
- Appropriate audiovisual training aids and devices
- Individual Activity 2-3-1: Levels of Learning

References:

- Fire and Emergency Services Instructor, IFSTA, Seventh Edition, Pages 142 and 531

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.

A ttention (attract)	B egin
C uriosity (arouse)	A ssociation
I nterest (create)	S tudents
D esire (stimulate)	E xperience

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.



TRAINING INSTRUCTOR 1C

Cognitive Lesson Delivery

PRESENTATION	APPLICATION
<p>XVII. LEVEL II - COMPETENT</p> <p>A. Student applies learned knowledge and skills</p> <p>B. Instructor as information source</p> <ol style="list-style-type: none"> 1. Presentation emphasis is switched from "what" to "how" and "why" 2. Students asked to explain concepts, relationships, and principles 3. Students asked to apply knowledge and skills to day-to-day problems <p>C. Evaluations</p> <ol style="list-style-type: none"> 1. Tests may be objective or subjective 2. Psychomotor tests focus on competence 3. Student efficiently melds knowledge and skills to accomplish a task or solve similarly structured problems <p>XVIII. LEVEL III - HIGHLY PROFICIENT</p> <p>A. Student is able to apply knowledge and skills from earlier learning to new situations and problems</p> <p>B. Instructor monitors and facilitates</p> <ol style="list-style-type: none"> 1. Instructor presents increasingly challenging and unique problems 2. Students develop, implement, and evaluate solutions to the problems <ol style="list-style-type: none"> a) Student based knowledge and skill development 	<p>SLIDE: #-#-10</p> <p>How does the information emphasis change between Level I and Level II?</p> <p>SLIDE: #-#-11</p> <p>SLIDE: #-#-12</p> <p>What is the instructor's role in Level III instruction?</p>



TRAINING INSTRUCTOR 1C

Cognitive Lesson Delivery

PRESENTATION	APPLICATION
<p>3. Students show mastery of psychomotor skills and can show others how to perform the task</p> <p>C. Evaluations</p> <p>1. Tests may be both objective and subjective</p> <ul style="list-style-type: none">a) Written and performance basedb) Simulated situationsc) Exercisesd) Day-to-day observation of performance <p>NOTE: Refer students to <u>Individual Activity 2-3-1: Levels of Learning</u> in their student supplement.</p>	<p>SLIDE: #-#-13</p> <p>Should Level III testing be limited to objective written tests?</p> <p>CLASS ACTIVITY: Complete Individual Activity 2-3-1.</p>



TRAINING INSTRUCTOR 1C

Cognitive Lesson Delivery

Summary:

The levels of instruction are a critical concept for an instructor to understand. They shape the extent to which a given topic will be covered, and guide the student behavioral objectives tied to the lesson. Utilized appropriately, the levels of instruction guide an instructor to meet the needs of the students in an efficient and consistent manner.

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 142 and 531 and Training Instructor 1C Student Supplement, SFT, 2010 Edition, Pages 9-14 in order to prepare yourself for the upcoming test. Study for our next session.



TRAINING INSTRUCTOR 1C

Cognitive Lesson Delivery

INDIVIDUAL ACTIVITY 2-3-1 INSTRUCTOR ANSWER KEY

Title: Levels Of Instruction

Time Frame: 0:10

Materials Needed:

- Training Instructor 1C Student Supplement, SFT, 2010 Edition, Pages 9-14
- Pen or pencil

Introduction: This activity provides the students the opportunity to match the appropriate levels of instruction with their corresponding verbs.

Directions:

1. Listed below are common lesson topics that are often included in training programs.
2. Place the appropriate level of instruction in the box next to the topic.
3. You have 5 minutes to complete this activity.
4. Be prepared to discuss your answers with the class.

	Topic	Level
1.	Identify the components of the fire tetrahedron	I
2.	How to operate a circular saw	II
3.	Evaluate training program effectiveness	III
4.	How to conduct a pre-trip inspection	II
5.	How to ventilate a pitched roof	II
6.	Identify three types of fire extinguishers	I
7.	Create a training program for a newly acquired apparatus	III
8.	Locate a 10-foot attic ladder	I
9.	How to calculate the friction loss on an attack line	II
10.	Revise hybrid/electric vehicle extrication SOPs	III
11.	Determine pump pressure	II
12.	Memorize the department's mission statement	I
13.	How to inventory the forcible entry compartment	II
14.	Describe appropriate PPE for a vehicle fire	II
15.	Determine the level of instruction	II



TRAINING INSTRUCTOR 1C

Instructional Development Techniques

- Topic:** 2-4: Employing The Four-step Method Of Instruction
- Time Frame:** 0:30
- 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 purposes of and techniques used during each step of the four-step method of instruction
 - 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 Company Officer, IFSTA, Fourth Edition, Pages 265-266
 - Fire and Emergency Services Instructor, IFSTA, Seventh Edition, Pages 193-196
- 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.
- | | |
|-----------------------------|---------------------|
| A ttention (attract) | B egin |
| C uriosity (arouse) | A ssociation |
| I nterest (create) | S tudents |
| D esire (stimulate) | E xperience |
- 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.



TRAINING INSTRUCTOR 1C

Instructional Development Techniques

PRESENTATION	APPLICATION
<p>XXI. PRESENTATION</p> <p>A. Purpose</p> <ol style="list-style-type: none">1. To communicate content developed to change the behavior of students2. To present new information to the learner<ol style="list-style-type: none">a) Skillsb) Conceptsc) Procedures3. Instruct, motivate and educate students <p>B. How to accomplish</p> <ol style="list-style-type: none">1. Select the appropriate presentation style for the audience, subject, and desired outcome2. Present lectures, demonstrations, and activities3. Use audiovisual training aids4. Use ancillary components<ol style="list-style-type: none">a) Information sheetsb) Skills sheetsc) Worksheets/Activity sheets5. Clarify procedures6. Emphasize key points7. Explain<ol style="list-style-type: none">a) Conceptsb) Philosophiesc) Principlesd) Implications	<p>SLIDE: #-#-20</p> <p>What is the purpose for the presentation step?</p> <p>SLIDE: #-#-21</p> <p>SLIDE: #-#-22</p>



TRAINING INSTRUCTOR 1C

Instructional Development Techniques

PRESENTATION	APPLICATION
<ol style="list-style-type: none">8. Proceed from the known to the unknown and from simple to complex9. Use textbooks and other reference materials10. Apply active learning principles11. Summarize key points and concepts12. Encourage students to take notes	<p>How should the presentation of information proceed?</p> <p>Of the four steps in the four-step method, which is the most important?</p> <p>SLIDE: #-#-23</p>
<p>XXII. APPLICATION</p> <ol style="list-style-type: none">A. Most important stepB. Can be combined with the presentation stepC. Purpose<ol style="list-style-type: none">1. To provide the opportunity for students to apply theory, critical thinking, critical decision-making, or psychomotor skills to practical situations2. Demonstrate skills-based knowledge through appropriate means3. Provide students the opportunity to perform under supervision4. Involve students actively in the learning process5. Provide the opportunity to practice and master critical skills<ol style="list-style-type: none">a) Controlled, nonemergency environmentb) Under supervision	<p>What is the purpose of the application step?</p> <p>SLIDE: #-#-24</p> <p>SLIDE: #-#-25</p> <p>SLIDE: #-#-26</p>



TRAINING INSTRUCTOR 1C

Instructional Development Techniques

PRESENTATION	APPLICATION
<ol style="list-style-type: none">4. Have students demonstrate and explain tasks5. Have students observe and critique other student performances 6. Conduct summative tests7. Evaluate<ol style="list-style-type: none">a) Notebooksb) Projectsc) Assignmentsd) Activities8. Have students complete course and instructor evaluation forms9. Have instructors complete course evaluation forms	<p>SLIDE: #-#-30</p>



TRAINING INSTRUCTOR 1C

Instructional Development Techniques

Summary:

The four-step method of instruction is a proven, effective method of delivering career-technical education. The four steps are: 1) Preparation, where the instructor and student are prepared for the learning process, 2) Presentation, where new information is imparted to the student, 3) Application, the most important step where the student becomes involved in the learning process, and 4) Evaluation, where the learning process is evaluated. By employing this method in instructional delivery, there is a greater success rate.

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.



TRAINING INSTRUCTOR 1C

Instructional Development Techniques

Topic: 2-5: Teaching English Learners And Students With Special Needs

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 considerations for instructing English learners and students with special needs

Standard: With a minimum 80% accuracy on the summative test according to the information contained in Training Instructor 1C Student Supplement, SFT, 2010 Edition, Pages 18-26 and successfully completing Individual Activity 2-5-1

Materials Needed:

- Writing board/pad with markers/erasers
- Appropriate audiovisual training aids and devices
- Individual Activity 2-5-1: Special Needs and Limited English Proficiency

References:

- 2008 Proposed Program Quality Standards for Career Technical Education (CTE) #13: Teaching English Learners
- 2008 Proposed Program Quality Standards for Career Technical Education (CTE) #14: Teaching Students with Special Needs
- Practical Guidelines for the Education of English Language Learners: Research-Based Recommendations for Instruction and Academic Interventions, University of Houston, Center on Instruction, 2006 Edition
<http://www.centeroninstruction.org/files/ELL1-Interventions.pdf>

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



TRAINING INSTRUCTOR 1C

Instructional Development Techniques

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.



TRAINING INSTRUCTOR 1C

Instructional Development Techniques

PRESENTATION	APPLICATION
<p>XXIV. LIMITED ENGLISH PROFICIENT (LEP) STUDENTS</p> <p>A. Many individuals preparing to enter workplace are LEP</p> <p>B. According to the 1998 Perkins Vocational and Technical Education Act, an LEP individual</p> <ol style="list-style-type: none">1. Secondary school student, adult or out-of-school youth2. Limited ability to speak, read, write or understand English, and<ol style="list-style-type: none">a) Whose native language is not English, orb) Who lives in a family or community environment where a language other than English is dominant <p>C. Literacy levels of LEP students</p> <ol style="list-style-type: none">1. Literacy in English2. Literacy in native language3. Oral proficiency in English confused with English-or native-language literacy<ol style="list-style-type: none">a) May speak English proficientlyb) Some unable to read or write Englishc) Inability to read or write native language	<p>SLIDE: #-#-31</p> <p>What is meant by the term "Limited English Proficiency?"</p> <p>SLIDE: #-#-32</p> <p>What literacy challenges do LEP students face?</p> <p>SLIDE: #-#-33</p> <p>How is a person's proficiency in speaking English misleading regarding language literacy?</p>



TRAINING INSTRUCTOR 1C

Instructional Development Techniques

PRESENTATION	APPLICATION
<p>D. English as a Second Language (ESL)</p> <ol style="list-style-type: none">1. English language development2. Covers all aspects of English<ol style="list-style-type: none">a) Grammarb) Vocabularyc) Pronunciation3. Not specific to content/context of language <p>E. Specially Designed Academic Instruction in English (SDAIE)</p> <ol style="list-style-type: none">1. Originally called "Sheltered English"<ol style="list-style-type: none">a) Focuses on <u>content</u> comprehensionb) Language acquired because of <u>context</u>2. Four major components of SDAIE lesson design<ol style="list-style-type: none">a) Hands-on activitiesb) Visual cluesc) Cooperative learningd) Guarded vocabulary3. Lesson design<ol style="list-style-type: none">a) Hands-on activities<ol style="list-style-type: none">1) Provides context for content language	<p>What is the role of ESL education?</p> <p>SLIDE: #-#-34</p> <p>SLIDE: #-#-35</p> <p>How is language acquired under SDAIE compared to ESL?</p> <p>SLIDE: #-#-36</p> <p>SLIDE: #-#-37</p> <p>How can a hands-on activity help LEP students comprehend context?</p>



TRAINING INSTRUCTOR 1C

Instructional Development Techniques

PRESENTATION	APPLICATION
<p>2) Reference point to build language</p> <p>3) Understanding meaning of content vocabulary through real experiences</p> <p>4) Looking up terms in a glossary alone takes language out of <u>context</u></p> <p>b) Visual clues</p> <p>1) Pictures, models, mock-ups</p> <p>2) The real thing</p> <p>3) Demonstrations</p> <p>4) Make abstract concepts concrete</p> <p>5) Associate the vocabulary with the image</p> <p>c) Cooperative learning</p> <p>1) Using small teams for problem-solving</p> <ul style="list-style-type: none"> • Students work together • Held individually accountable <p>2) Takes advantage of strengths to build on student weaknesses</p> <p>3) Requires careful planning and team selection</p> <p>4) Lowers student's "affective filter"</p> <ul style="list-style-type: none"> • Reduces student's stress level 	<p>Why is the process of looking up the definition in a glossary insufficient for LEP individuals?</p> <p>SLIDE: #-#-38</p> <p>What types of clues may be used to provide a visual way to describe key words and concepts?</p> <p>What is the main idea behind using visual clues?</p> <p>SLIDE: #-#-39</p>



TRAINING INSTRUCTOR 1C

Instructional Development Techniques

PRESENTATION	APPLICATION
<ul style="list-style-type: none"> • Interference with language acquisition <p>5) Instructor must monitor process</p> <p>6) Benefit to LEP individuals</p> <ul style="list-style-type: none"> • Provides peer support • Exposes students to other ways to solve complex problems • Develops social skills • Provides excellent vehicle to practice oral language skills <p>d) Guarded vocabulary</p> <ol style="list-style-type: none"> 1) Selection of language used 2) How introduced, practiced, and incorporated into lesson 3) Teacher monitors their own language <ul style="list-style-type: none"> • Rate of speech • Syntax • Language structure <p>4. SDAIE teaching strategies</p> <p>a) Plan activities requiring students to provide evidence of learning (observable actions)</p>	<p>How does stress impact LEP students?</p> <p>How is cooperative learning beneficial?</p> <p>SLIDE: #-#-40</p> <p>SLIDE: #-#-41</p> <p>How can the instructor best implement the components of SDAIE when teaching fire service curricula?</p> <p>SLIDE: #-#-42</p>



TRAINING INSTRUCTOR 1C

Instructional Development Techniques

PRESENTATION	APPLICATION
<ul style="list-style-type: none"> b) Speak clearly, not overly fast c) Avoid idiomatic expressions d) Use academic language consistently <ul style="list-style-type: none"> 1) Avoid multiple versions of same term 2) Use terms in correct context e) Reinforce lecture with written material, outline, etc. f) Incorporate group activities where students will use the academic language g) Ask questions appropriate for student knowledge level h) Use visual aids that include terminology with illustrations i) Clarify objectives of reading assignments 	<p>SLIDE: #-#-43</p>
<p>XXV. STUDENTS WITH SPECIAL NEEDS</p> <ul style="list-style-type: none"> 1. Disability <ul style="list-style-type: none"> a) Physical or mental impairment substantially limiting one or more major life activities b) Seeing, hearing, speaking, learning, working 2. Qualified individual with a disability <ul style="list-style-type: none"> a) Meets legitimate skill, experience, education or other requirements of an employment position b) Can perform essential functions of position with or without reasonable accommodation 	<p>According to the Americans with Disabilities Act (ADA), what are some likely disabilities requiring accommodation?</p> <p>SLIDE: #-#-44</p> <p>Who is a "qualified individual with a disability?"</p>



TRAINING INSTRUCTOR 1C

Instructional Development Techniques

PRESENTATION	APPLICATION
<p>3. Reasonable accommodation</p> <ul style="list-style-type: none"> a) Any modification or adjustment to a job or work environment b) Enables qualified applicant with a disability to participate in application process or perform essential job functions c) Includes adjustments to ensure equal rights in employment d) Required to accommodate "known" disability <ul style="list-style-type: none"> 1) Requested by individual with disability 2) Appropriate accommodation suggested by <ul style="list-style-type: none"> • Individual with disability • Disabled Student Service Center 3) Accommodations made on individual basis 4) Employer not obligated to provide accommodation, unless <ul style="list-style-type: none"> • Individual's known disability impairs ability to know, or communicate need for, accommodation obvious to employer • "Undue hardship" imposed on employer's business operations 	<p>What is "reasonable accommodation?"</p> <p>SLIDE: #-#-45</p> <p>When are reasonable accommodations required?</p> <p>SLIDE: #-#-46</p> <p>If the individual does not request accommodation, what is the employer's obligation?</p>



TRAINING INSTRUCTOR 1C

Instructional Development Techniques

PRESENTATION	APPLICATION
<ul style="list-style-type: none"> e) Undue hardship <ul style="list-style-type: none"> 1) Action requiring significant difficulty or expense 2) Determined on case-by-case basis f) Accommodations for tests or examinations <ul style="list-style-type: none"> 1) May be needed to measure actual ability of individual to perform job function 2) Given in format that does not require use of impaired skill, unless it is job-related skill that test is designed to measure 4. Performance standards <ul style="list-style-type: none"> a) For essential functions, employer can hold individuals with disabilities to same standards <ul style="list-style-type: none"> 1) As similarly situated employees without disabilities 2) With or without reasonable accommodation b) For marginal functions <ul style="list-style-type: none"> 1) Reasonable accommodations must be provided 2) Job restructuring may be required 	<p>What is meant by "undue hardship?"</p> <p>SLIDE: #-#-47</p> <p>Can employers be required make accommodations in the way a test is given?</p> <p>SLIDE: #-#-48</p> <p>Can employers maintain existing performance standards for employees with a disability?</p> <p>SLIDE: #-#-49</p>



TRAINING INSTRUCTOR 1C

Instructional Development Techniques

PRESENTATION	APPLICATION
<p>B. Learning disability</p> <ol style="list-style-type: none">1. Neurobiological disorder in which an individual's brain is structured differently2. Affects an individual's ability to interpret what is seen and heard3. May interfere with ability to see, hear, write, spell, recall, reason, organize information, and do math4. Processing speed and memory also affected	<p>What is meant by the term "learning disability?"</p> <p>SLIDE: #-#-50</p> <p>SLIDE: #-#-51</p>
<p>XXVI. ASSISTIVE TECHNOLOGY (AT)</p> <p>A. Items, equipment, or systems that can assist, maintain, or improve functional capabilities of individuals with learning disabilities</p> <ol style="list-style-type: none">1. Can be high-tech or low-tech tools2. Helps individuals work around specific deficits to reach their full potential <p>B. Examples</p> <ol style="list-style-type: none">1. Organizational skills, memory, time management<ol style="list-style-type: none">a) Highlightersb) Index cardsc) Personal data managers2. Auditory/Listening<ol style="list-style-type: none">a) Tape recorderb) Books on discc) Pressure-sensitive paper	<p>What is the purpose of assistive technology?</p> <p>What are some examples of assistive technologies?</p> <p>SLIDE: #-#-52</p>



TRAINING INSTRUCTOR 1C

Instructional Development Techniques

PRESENTATION	APPLICATION
<ul style="list-style-type: none">d) Laptop computere) Video tapes with closed captions/subtitles3. Visual processing<ul style="list-style-type: none">a) Tape recordersb) Software programsc) Large print media & transparencies4. Math<ul style="list-style-type: none">a) Color-coding columnsb) Hand-held calculatorsc) On screen computer calculator programs5. Reading<ul style="list-style-type: none">a) Voice output/Text-to-speech systemsb) Speech synthesis/screen review systemc) Tape recordersd) Books on disc6. Written language<ul style="list-style-type: none">a) Spell checkerb) Grammar checkc) Software writing programsC. Academic accommodations for classroom and fieldwork<ul style="list-style-type: none">1. Classroom<ul style="list-style-type: none">a) Offer opportunity to discuss academic needs in a statement on syllabusb) Recommend students visit Disabled Student Services for assessment and recommendation for accommodations	<p>What are some academic accommodations the instructor should consider?</p> <p>SLIDE: #-#-53</p>



TRAINING INSTRUCTOR 1C

Instructional Development Techniques

PRESENTATION	APPLICATION
<ul style="list-style-type: none">c) Face class when speakingd) Repeat discussion questions e) Verbally describe visual aidsf) Never use less than a 24-point font size on computer-generated presentationsg) Printed material should be at least a 12 point font size without serifsh) Provide electronic format of written materialsi) Show videos and DVDs with closed captions	<p>SLIDE: #-#-54</p> <p>What accommodations would be appropriate for fieldwork?</p> <p>SLIDE: #-#-55</p>
<p>D. Fieldwork</p> <ul style="list-style-type: none">1. Discuss safety concerns with student and Disabled Student Services2. Assign group projects/skills to allow all students to contribute according to ability3. Have students verbalize operations and key points while performing manipulative-performance skills4. Teach complex skills in smaller segments<ul style="list-style-type: none">a) Individual elements of evolution taught first (e.g., ladder lift, carry, raise taught separately, then assembled as single ladder evolution)	<p>What accommodations would be appropriate for conducting examinations?</p> <p>SLIDE: #-#-56</p>
<p>E. Examinations</p> <ul style="list-style-type: none">1. Measure knowledge and comprehension rather than physical performance unless necessary2. Allow extra time to complete exams	



TRAINING INSTRUCTOR 1C

Instructional Development Techniques

PRESENTATION	APPLICATION
<p>3. Arrange for Disabled Student Services to administer written examinations</p> <p>XXVII. TEACHING LEP AND SPECIAL NEEDS STUDENTS</p> <p>A. Audience</p> <ol style="list-style-type: none">1. Instruct using language appropriate to your audience<ol style="list-style-type: none">a) Fire fightersb) Pre-employment studentsc) General public2. Careful consideration of word choice and terminology for pre-employment students<ol style="list-style-type: none">a) Instructor's fire agency terms versus IFSTAb) Use of initials versus spelled-out terms3. Include all students<ol style="list-style-type: none">a) Avoid actions that single out studentsb) LEP and special needs students may suffer stress in learning material if "singled-out" <p>B. Course syllabus</p> <ol style="list-style-type: none">1. Offer opportunity for students to discuss need for reasonable accommodation2. Discuss syllabus, course policies, and expectations at beginning of class	<p>How should an instructor design a class that all students, including LEP and special needs students, have the best opportunity for success?</p> <p>SLIDE: #-#-57</p> <p>What can an instructor do to include all students in the classroom?</p> <p>SLIDE: #-#-58</p>



TRAINING INSTRUCTOR 1C

Instructional Development Techniques

PRESENTATION	APPLICATION
<p>3. Discuss text/student manual, layout, study questions, how assignments are completed</p> <p>C. Hands-on activities</p> <p>1. In-class</p> <ul style="list-style-type: none"> a) Design activities that apply to lesson b) Group activities allow students to discuss, using terminology appropriate to lesson c) Assign responsibility to each student in group so that all participate (small teams) d) Balance small teams with strong and weak students <p>2. Field</p> <ul style="list-style-type: none"> a) Have students verbally identify parts and functions of equipment b) Saying while doing psychomotor performance c) Require all safety commands while performing evolutions d) Have students repeat skills instruction <p>D. Audiovisual</p> <p>1. Label diagrams, models, charts, illustrations</p>	<p>What are some considerations for in-class activities to increase LEP/special needs students' chances for success?</p> <p>SLIDE: #-#-59</p> <p>SLIDE: #-#-60</p> <p>What are some audiovisual aid considerations to help LEP/special needs students?</p> <p>SLIDE: #-#-61</p>



TRAINING INSTRUCTOR 1C

Instructional Development Techniques

PRESENTATION	APPLICATION
<ul style="list-style-type: none"> 2. Use large fonts without serifs in computer-generated presentations (e.g., PowerPoint®) 3. Attach the label to the illustration 4. Use closed captioned or subtitled video 	<p>SLIDE: #-#-62</p>
<p>E. Printed materials</p> <ul style="list-style-type: none"> 1. Ensure student materials reinforce lessons 2. Discuss how to use student materials to complete assignments and meet objectives 	<p>What are some presentation techniques that help LEP/special needs students?</p> <p>SLIDE: #-#-63</p>
<p>F. Presentation</p> <ul style="list-style-type: none"> 1. Speak clearly, not too fast 2. Face students while speaking 3. Ask questions appropriate to student knowledge level 4. Provide opportunity for all students to apply what is taught 	<p>SLIDE: #-#-64</p>
<p>G. Assignments</p> <ul style="list-style-type: none"> 1. Recommend use of AT for all students 2. Provide examples of appropriate use of AT <ul style="list-style-type: none"> a) Index cards for study questions b) Highlighters to identify discussion points 	<p>SLIDE: #-#-65</p>
<p>H. Examinations</p> <ul style="list-style-type: none"> 1. Provide sufficient time for exams <ul style="list-style-type: none"> a) Allow enough time for all students to complete exams 	



TRAINING INSTRUCTOR 1C

Instructional Development Techniques

PRESENTATION	APPLICATION
<ul style="list-style-type: none">b) Offer opportunity for students with special needs to take exams through Disabled Student Services2. Be sure questions are clear and appropriate to the level of learning <p>I. General assessment</p> <ul style="list-style-type: none">1. Recommend English/math placement test for pre-employment students in college courses<ul style="list-style-type: none">a) Determine if student has basic English/math skills to be successful in fire technology courseb) Recommend remedial community college education to improve success potential2. Learning disability<ul style="list-style-type: none">a) Discuss with student concerns regarding academic performanceb) Recommend student to Disabled Student Services Program for testingc) Program can determine appropriate accommodation based on test results	<p>What can an instructor do to help pre-employment students determine if they are sufficiently academically prepared?</p> <p>SLIDE: #-#-66</p> <p>If the instructor suspects a student has a learning disability, but the student has not requested accommodation, what should the instructor do?</p>



TRAINING INSTRUCTOR 1C

Instructional Development Techniques

Summary:

Whether instructing limited English proficiency students or students with special needs, the preparation and delivery of instruction can make a significant difference in the potential success of the student meeting the behavioral objectives. Adapting lesson plans, instructional delivery, activities and assignments to accommodate students with these learning challenges will benefit all students in the learning process.

Evaluation:

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

Assignment:

Review your notes and read Training Instructor 1C Student Supplement, SFT, 2010 Edition Pages 18-26 in order to prepare yourself for the upcoming test. Study for our next session.



TRAINING INSTRUCTOR 1C

Instructional Development Techniques

INDIVIDUAL ACTIVITY 2-5-1: INSTRUCTOR ANSWER KEY

Title: Special Needs and Limited English Proficiency

Time Frame: Homework

Materials Needed:

- Training Instructor 1C Student Supplement, SFT, 2010 Edition, Pages 18-26
- Pen or pencil

Introduction: As an instructor, you have an obligation to provide the very best learning opportunity for all your students. Oftentimes this will mean taking extra time to develop specific teaching strategies to accommodate varied levels of learning disabilities. The following exercise will reinforce what we discussed in this lesson and give you the opportunity to choose different assistive methods.

Directions:

1. Review your notes for this lesson.
2. Read Training Instructor 1C Student Supplement, SFT, 2010 Edition, Pages 18-26.
3. Write your responses to the four items below in the space provided.
4. Be prepared to discuss your responses with the class.



TRAINING INSTRUCTOR 1C

Instructional Development Techniques

1. What accommodations are instructors required to make for a disabled person when performing an essential job function?

None; an instructor can hold individuals with disabilities to same standards as similarly situated students without disabilities, with or without reasonable accommodation

Answer found in Training Instructor 1C Student Supplement, SFT, 2010 Edition, Pages 21-22

2. What are three assistive technologies (AT) for organizational skills, memory, and time management?

1) Highlighters

2) Index cards

3) Personal data managers

Answer found in Training Instructor 1C Student Supplement, SFT, 2010 Edition, Page 22

3. List three potential benefits to the student when you employ cooperative learning strategies.

1) Lowering students "affective filter" (reducing stress level)

2) Providing peer support

3) Exposing students to other ways to solve complex problem

4) Developing social skills

5) Providing an excellent vehicle to practice oral language skills

Answer found in Training Instructor 1C Student Supplement, SFT, 2010 Edition, Page 20

4. What are the four main components of SDAIE lessons?

1) Hands-on activities

2) Visual clues

3) Cooperative learning

4) Guarded vocabulary

Answer found in Training Instructor 1C Student Supplement, SFT, 2010 Edition, Page 19



TRAINING INSTRUCTOR 1C

Instructional Development Techniques

5. List five areas an instructor should consider to design and deliver an effective course that meets the needs of all students. ***During the review, ask the students to identify one recommendation for an area they chose.***

1) Audience

2) Course syllabus

3) Hands-on activities

4) Audiovisual

5) Printed materials

6) Presentation

7) Assignments

8) Examinations

9) General assessment

Answer found in Training Instructor 1C Student Supplement, SFT, 2010 Edition, Pages 24-26



TRAINING INSTRUCTOR 1C

Instructional Development Techniques

Topic: 3-1: Elements Of A Course Outline

Time Frame: 0:30

Level of Instruction: Level II

Authority: 2008 Training Instructor CTS #7: Describe The Elements Of A Course Outline

Behavioral Objective:

Condition: Given a summative test

Behavior: The student will describe the elements of a course outline

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 528-538 and Training Instructor 1C Student Supplement, SFT, 2010 Edition, Pages 30-32

Materials Needed:

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

References:

- Course Information and Required Materials Manual, SFT
- Curriculum Development Guidelines, SFT
- Fire and Emergency Services Instructor, IFSTA, Seventh Edition, Pages 528-538

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.

A ttention (attract)	B egin
C uriosity (arouse)	A ssociation
I nterest (create)	S tudents
D esire (stimulate)	E xperience

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.



TRAINING INSTRUCTOR 1C

Instructional Development Techniques

PRESENTATION	APPLICATION
<ul style="list-style-type: none"> a) Understandable by instructors, students, members of the organization, and accrediting agencies b) Appropriate to the topic area and certification standard c) Identifies the knowledge and skills expected of students at the end of the course d) Supportive of the use of a range of teaching and learning styles, evaluation instruments, and training resources e) Supports learning achievements measured by individual lesson objectives f) Written for the instructor <ul style="list-style-type: none"> 1) Guides the instructor g) Describes the learning outcomes <p>C. Course content</p> <ul style="list-style-type: none"> 1. List of lessons that need to be taught to meet the desired course objectives <ul style="list-style-type: none"> a) Organized in teaching sequence <ul style="list-style-type: none"> 1) Most basic knowledge is taught first 2) Subsequent lessons build on the basic knowledge 3) Students should not advance to higher levels until current level has been mastered 2. Can include cognitive, psychomotor, or both 3. Include items for in class work, periodic tests, reviews, and summative tests/certification exams <p>D. Teaching times</p> <ul style="list-style-type: none"> 1. Teaching time for each individual lesson 2. Total teaching time available for the course 	<p>How should lessons be organized in the course outline?</p>



TRAINING INSTRUCTOR 1C

Instructional Development Techniques

PRESENTATION	APPLICATION
<ul style="list-style-type: none">3. Course objectives4. Instructional materials neededE. Texts and references<ul style="list-style-type: none">1. Books and materials that the course is based on2. Provides instructor with sources to review prior to delivering course3. Provides student with extra reading/reference sources	<p>What is the purpose of items listed in the "Texts and Reference" section?</p>



TRAINING INSTRUCTOR 1C

Instructional Development Techniques

Summary:

Course objectives are listed on the course outline. The course outline also includes a list of all of the lessons that must be taught in order to achieve these objectives. When preparing to teach a course, an instructor should review the course outline to ensure that s/he understands the course objectives and can develop and deliver the lessons to meet course objectives.

Even with all this careful planning, the instructor must remain flexible and make needed adjustments. What looked good on paper may not work out during the actual delivery. Also, what worked on one occasion may not do the same in another situation.

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 528-538 and Training Instructor 1C Student Supplement, SFT, 2010 Edition, Pages 30-32 in order to prepare yourself for the upcoming test. Study for our next session.



TRAINING INSTRUCTOR 1C

Instructional Development Techniques

Topic: 3-2: Cognitive And Psychomotor Lesson Plans Components And Their Function

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 define, describe, and differentiate the components of cognitive and 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 321-354

Materials Needed:

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

References:

- Curriculum Development Guidelines, SFT
- Fire and Emergency Services Instructor, IFSTA, Seventh Edition, Pages 321-354

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.

A ttention (attract)	B egin
C uriosity (arouse)	A ssociation
I nterest (create)	S tudents
D esire (stimulate)	E xperience

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.



TRAINING INSTRUCTOR 1C

Instructional Development Techniques

PRESENTATION	APPLICATION
<p>B. Time frame</p> <ol style="list-style-type: none">1. Estimated time for delivery of the lesson plan2. Time estimates need to take into consideration the behavioral objective, class size, and class experience3. Include the time that is needed to complete the application step in a psychomotor domain lesson plan4. Time frames can be dictated by outside influences such as Chief's directives, predetermined time frames, or mandates <p>C. Level of instruction</p> <ol style="list-style-type: none">1. Desired learning level that the students will reach by the end of the instructional period2. May be based on the National Fire Protection Association (NFPA) job performance requirements (JPRs)3. Levels of learning based on the taxonomy appropriate for the domains<ol style="list-style-type: none">a) Level I – Basic knowledgeb) Level II – Competentc) Level III – Highly proficient	<p>SLIDE: #-#-73</p> <p>What are some considerations when estimating time frames?</p> <p>SLIDE: #-#-74</p> <p>What are some considerations when selecting levels of learning?</p> <p>What are the levels of learning we commonly use?</p>



TRAINING INSTRUCTOR 1C

Instructional Development Techniques

PRESENTATION	APPLICATION
<p data-bbox="207 325 511 357">F. Materials needed</p> <ol data-bbox="267 504 1047 756" style="list-style-type: none"><li data-bbox="267 504 941 577">1. List all items needed to teach the number of students in the course<ol data-bbox="324 598 1039 661" style="list-style-type: none"><li data-bbox="324 598 1039 661">a) Consider the quantity of students that will be in the learning environment<li data-bbox="267 682 1047 756">2. Consider activities that need instructional materials, handouts, or tools and equipment <p data-bbox="207 829 454 861">G. Prerequisites</p> <ol data-bbox="267 882 1031 1291" style="list-style-type: none"><li data-bbox="267 882 1031 987">1. This element is not a component with California's State Fire Training format, but may exist in lesson plans from agencies in other states<li data-bbox="267 1092 1031 1197">2. List of information, skills, or previous requirements that students must have prior to entering the course or starting the lesson<li data-bbox="267 1218 1031 1291">3. Consider the requirements for either cognitive or psychomotor lesson plans <p data-bbox="207 1354 430 1386">H. References</p> <ol data-bbox="267 1407 1023 1785" style="list-style-type: none"><li data-bbox="267 1407 950 1480">1. List specific documents or resources used to develop the lesson plan<li data-bbox="267 1501 1023 1701">2. List reference materials that would be good for an instructor to pursue to prepare for an upcoming class<ol data-bbox="324 1627 990 1701" style="list-style-type: none"><li data-bbox="324 1627 990 1701">a) Identify page numbers so the instructor can develop depth in the subject matter<li data-bbox="267 1722 893 1785">3. Also beneficial as a source for additional information for inquisitive students	<p data-bbox="1104 378 1461 483">What are some factors to consider regarding materials needed?</p> <p data-bbox="1104 766 1315 808">SLIDE: #-#-78</p> <p data-bbox="1104 997 1421 1071">What is listed in the prerequisites section?</p> <p data-bbox="1104 1302 1315 1344">SLIDE: #-#-79</p>



TRAINING INSTRUCTOR 1C

Instructional Development Techniques

PRESENTATION	APPLICATION
<p>I. Lesson summary</p> <ol style="list-style-type: none"> 1. Sometimes referred as the "conclusion" 2. Restatement or emphasis of the key points 3. Clarify uncertainties, clear up misconceptions 4. Increase learning and improve retention 5. Some instructors simply go back to the beginning of the presentation step and re-emphasize key points in the lesson material <p>J. Assignments</p> <ol style="list-style-type: none"> 1. Reinforcement and emphasis on key components of the lesson 2. Reading, practice, research, or other outside class requirements for students 3. Utilize an activity as a tool for the students to complete the additional reinforcement <p>K. Comments (optional)</p> <ol style="list-style-type: none"> 1. Some lesson plan formats may incorporate this item 2. Again, this is not included in California format <p>XXXII. LESSON OUTLINE</p> <p>A. This is the actual information or skills to be taught using the four-step method</p> <ol style="list-style-type: none"> 1. Preparation step <ol style="list-style-type: none"> a) Instructor stimulates motivation within the student 	<p>SLIDE: #-#-80</p> <p>What is the purpose of a summary for instructors?</p> <p>Why should instructors give assignments to the student?</p> <p>SLIDE: #-#-81</p> <p>SLIDE: #-#-82</p>



TRAINING INSTRUCTOR 1C

Instructional Development Techniques

PRESENTATION	APPLICATION
<ul style="list-style-type: none"> 2. Presentation step <ul style="list-style-type: none"> a) Where the instructor imparts information to the students 3. Application step <ul style="list-style-type: none"> a) Most important step b) Provides an opportunity for the students to practice a skill or reinforce information 4. Evaluation step <ul style="list-style-type: none"> a) To confirm that learning has occurred B. This will include each step or the activities to be performed by the instructor C. This will include everything that a student would do to reinforce learning 	<p>SLIDE: #-#-83</p> <p>What is the purpose of the application step?</p> <p>SLIDE: #-#-84</p>
<p>XXXIII. EVALUATION</p> <ul style="list-style-type: none"> A. Types of performance evaluation that the instructor uses to determine if the students have met the objectives of the lesson B. Cognitive lesson plans are evaluated with written or oral test items <ul style="list-style-type: none"> 1. Role-play 2. Discussion 3. Research project 4. Assignments C. Psychomotor lesson plans are evaluated with performance skill evaluation techniques 	<p>How can instructors evaluate psychomotor domain lesson plans?</p>



TRAINING INSTRUCTOR 1C

Instructional Development Techniques

PRESENTATION	APPLICATION
<ul style="list-style-type: none">1. Confirms the ability of the student to perform the identified objective2. Level of performance or success is predetermined by the student behavioral objective <p>D. Two basic functions are confirmed with the evaluation step</p> <ul style="list-style-type: none">1. Confirms that learning has occurred with the students2. Confirms that instruction has occurred as performed by the instructor <p>E. Must be consistent with level of instruction and student behavioral objective</p>	<p>What two basic functions are confirmed with the evaluation step?</p> <p>SLIDE: #-#-85</p>



TRAINING INSTRUCTOR 1C

Instructional Development Techniques

Summary:

In this lesson, we have reviewed and clarified the components of cognitive and psychomotor lesson plans. We discussed how each component supports the four-step method of instruction and how the level of instruction and evaluation must be consistent with the condition, behavior, and standard. Each element of the course outline has an important relationship with each lesson plan.

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 321-354 in order to prepare yourself for the upcoming test. Study for our next session.



TRAINING INSTRUCTOR 1C

Instructional Development Techniques

- Topic:** 3-3: Developing Student Behavioral Objectives
- 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 an activity and a summative test
 - Behavior:** The student will describe the components and purposes of student behavioral objectives (SBOs), develop a student behavioral objective for a cognitive lesson plan, and develop a student behavioral objective for a psychomotor lesson plan using the State Fire Training format
 - 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 329-332 and successfully completing Group Activity 3-3-1
- Materials Needed:**
- Writing board/pad with markers/erasers
 - Appropriate audiovisual training aids and devices
 - Group Activity 3-3-1: Developing Behavioral Objectives
- References:**
- Fire and Emergency Services Instructor, IFSTA, Seventh Edition, Pages 329-332
 - Measuring Instructional Results, Robert F. Meager, 1997
- 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.
- | | |
|-----------------------------|---------------------|
| A ttention (attract) | B egin |
| C uriosity (arouse) | A ssociation |
| I nterest (create) | S tudents |
| D esire (stimulate) | E xperience |
- 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.



TRAINING INSTRUCTOR 1C

Instructional Development Techniques

PRESENTATION	APPLICATION
<ul style="list-style-type: none">• Know• Understand• Appreciate• Realize• Really appreciate• Believe• Fully benefit• Grasp the significance <p>2) Measurable behavioral objectives are words with few interpretations</p> <ul style="list-style-type: none">• Write• Recite• Identify• Differentiate• Solve• Discuss• Construct• Compare• List• Contrast• Assemble• Inspect• Draw• Describe• Operate	<p>What are some examples of words that are measurable and have few interpretations?</p>



TRAINING INSTRUCTOR 1C

Instructional Development Techniques

Summary:

Learning does not necessarily depend on instruction. However, instruction does depend on learning! Behavioral objectives are statements that lend direction to instruction and are a necessary part of this process, as they influence student learning in many ways. Understanding what behavioral objectives are and how to construct them is a critical step in lesson plan development. When constructed properly and adhered to, behavioral objectives increase the instructor's accountability while reducing potential liability.

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 329-332 in order to prepare yourself for the upcoming test. Study for our next session.



TRAINING INSTRUCTOR 1C

Instructional Development Techniques

GROUP ACTIVITY 3-3-1: DEVELOPING BEHAVIORAL OBJECTIVES

Time Frame: 0:45

Materials Needed:

- Fire and Emergency Services Instructor, IFSTA, Seventh Edition, Pages 329-332
- Writing board/pad with markers/erasers

Introduction: This activity provides students the opportunity to practice developing student behavioral objectives.

Directions:

1. Individually, decide on one cognitive lesson plan topic for your 30-minute teaching demonstration.
2. Individually, decide on one psychomotor lesson plan topic for your 15-minute teaching demonstration.
3. The Primary Instructor will ask for each student's two topic titles and approve them prior to continuing this activity.
4. In your group, share your two topic titles and record them on the writing board or conference pad.
5. As a group, develop a student behavioral objective for each topic title in your group.
6. Each group has 20 minutes to complete the activity.
7. Each group will discuss their student behavioral objectives with the class and stress the importance of clear objectives.



TRAINING INSTRUCTOR 1C

Instructional Development Techniques

- Topic:** 3-4: Developing A Cognitive Lesson Plan (SFT Format)
- Time Frame:** 2:00
- Level of Instruction:** Level II
- Authority:** 2008 Training Instructor CTS #2: Describe And Demonstrate The Development Of Instructional Materials
2008 Training Instructor CTS #3: Describe And Demonstrate The Presentation Of Psychomotor And Cognitive Lesson Plans
- Behavioral Objective:**
- Condition:** Given an activity and a summative test
- Behavior:** The student will describe and demonstrate the development of an illustrated lecture cognitive lesson plan and determining its effectiveness
- 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 236-237, 321-339, 352-353 and successfully completing Individual Activities 3-4-1 and 3-4-2
- Materials Needed:**
- Writing board/pad with markers/erasers
 - Appropriate audiovisual training aids and devices
 - Individual Activity 3-4-1: Cognitive Lesson Plan Development
 - Individual Activity 3-4-2: Cognitive Teaching Demonstration
- References:**
- Curriculum Development Guidelines, SFT
 - Fire and Emergency Services Instructor, IFSTA, Seventh Edition, Pages 236-237, 321-339, and 352-353
- 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.
- | | |
|-----------------------------|---------------------|
| A ttention (attract) | B egin |
| C uriosity (arouse) | A ssociation |
| I nterest (create) | S tudents |
| D esire (stimulate) | E xperience |
- 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.



TRAINING INSTRUCTOR 1C

Instructional Development Techniques

PRESENTATION	APPLICATION
<p>XXXVII. LESSON PLAN FORMATS</p> <ul style="list-style-type: none"> A. Not all lesson plans are alike B. Some components may not be included on lesson plans that you receive from other sources <ul style="list-style-type: none"> 1. This is especially true when networking with fire agencies outside of California C. The goal is to develop lesson plans that include all of the components as identified in State Fire Training’s Curriculum Development Guidelines (CDG) <ul style="list-style-type: none"> 1. Utilizing the CDG format would benefit fire agencies to develop a standard <p>XXXVIII. LESSON PLAN CREATION</p> <ul style="list-style-type: none"> A. The student text outlines steps that should be followed when instructors prepare lesson plans B. Instructors will develop their own style for developing lesson plans <p>NOTE: Refer to <u>Fire and Emergency Services Instructor</u>, IFSTA, Seventh Edition, Pages 338-339.</p> <ul style="list-style-type: none"> 1. Instructors may develop portions of the lesson plan out of sequence 2. Most of the steps will be performed for a complete cognitive lesson plan considering the CDG format <p>NOTE: This lesson focuses on developing a lesson plan consistent with SFT’s Curriculum Development Guidelines. A cognitive lesson plan format and sample are in the <u>Training Instructor 1C Student Supplement</u>, SFT, 2010 Edition.</p>	<p>SLIDE: #-#-93</p> <p>SLIDE: #-#-94</p> <p>Are all lesson plans alike?</p> <p>Does an instructor have to follow the steps in order of the sequence?</p> <p>SLIDE: #-#-96</p>



TRAINING INSTRUCTOR 1C

Instructional Development Techniques

PRESENTATION	APPLICATION
<ol style="list-style-type: none"> 1. Compile a list of materials that will be needed to teach the lesson plan 2. The list should include everything an instructor would need for successful delivery <ol style="list-style-type: none"> a) Audiovisual equipment and materials b) Nonprojected media items and props c) Activity and information sheets d) Learning environment dimensions and requirements e) Special equipment needs 3. Ensure that materials used will not cause an instructor to violate copyright law 4. This list may change after the development of the lesson plan outline <p>G. References</p> <ol style="list-style-type: none"> 1. List specific references used when developing the lesson plan 2. List additional study aids for instructors to gain additional knowledge of the topic and enhance the lesson <ol style="list-style-type: none"> a) Books b) Manuals c) Bulletins d) Scripts 3. Ensure the documents are the most current available and properly cited <p>H. Preparation</p> <ol style="list-style-type: none"> 1. Develop the preparation component 	<p>SLIDE: #-#-98</p> <p>How can the reference help an instructor prepare to teach the lesson?</p>



TRAINING INSTRUCTOR 1C

Instructional Development Techniques

PRESENTATION	APPLICATION
<p>2. The instructor helps to motivate the student to WANT to learn the topic</p> <p>I. Presentation</p> <p>1. Determine the order for instructing the material</p> <p>a) Establish the order in which the knowledge and skills will be taught</p> <p>b) Should be done in a logical sequence</p> <p>1) Methods of sequencing</p> <ul style="list-style-type: none"> • Known to unknown • Simple to complex • Whole to part • Part to whole • Step-by-step • Chronological <p>c) May also include a quick review of prerequisite and corequisite knowledge and skills</p> <p>2. Write the outline</p> <p>a) Major points</p> <p>b) Subpoints</p> <p>c) Supporting detail</p> <p>J. Application</p> <p>1. Write questions to ask the students</p> <p>2. List audiovisual cues</p>	<p>What is the purpose of the preparation statement?</p> <p>SLIDE: #-#-99</p> <p>What are some sequences in which material can be taught?</p> <p>SLIDE: #-#-100</p> <p>What is included as application?</p>



TRAINING INSTRUCTOR 1C

Instructional Development Techniques

PRESENTATION	APPLICATION
<p>K. Lesson summary</p> <ol style="list-style-type: none"> 1. Emphasize important, critical, or key information that was covered throughout the lesson 2. Bring the lesson to a close 3. Do not include new information <p>L. Evaluation</p> <ol style="list-style-type: none"> 1. Identify how and when the students will be evaluated on the information presented in the lesson <p>M. Assignment</p> <ol style="list-style-type: none"> 1. Reinforces the information presented in the lesson 2. Additional reading or activity 3. Not meant to merely keep the students busy <ol style="list-style-type: none"> a) Confirms and emphasizes the information 	<p>SLIDE: #-#-101</p> <p>What is the purpose of an assignment?</p>
<p>XL. DETERMINING EFFECTIVENESS OF COGNITIVE LESSON PLANS</p> <p>A. Review student testing results</p> <ol style="list-style-type: none"> 1. If a majority of students passed the test, lesson plan may not need revision 2. If a significant number of students did not pass the test, determine the cause <ol style="list-style-type: none"> a) Review instructor and course evaluations b) Review student training records c) Interview students who failed the test <p>B. Review instructor and course evaluations</p> <ol style="list-style-type: none"> 1. Look for comments consistent about presentation style 	<p>SLIDE: #-#-102</p> <p>How might test results indicate a need to revise a lesson plan?</p>



TRAINING INSTRUCTOR 1C

Instructional Development Techniques

PRESENTATION	APPLICATION
<p>2. Facility factors</p> <p>3. External factors</p> <p>C. Review the lesson plan</p> <ol style="list-style-type: none">1. Clear learning objectives2. Appropriate audiovisual equipment and materials3. Appropriate facility4. Appropriate testing criteria5. Conditions and expectations clearly explained6. Other factors <p>D. If problems with the lesson plan are found</p> <ol style="list-style-type: none">1. Make necessary revisions to the lesson plan2. Ensure that revisions are cost and time effective <p>NOTE: Review <u>Individual Activity 3-4-1: Cognitive Lesson Plan Development</u> with the students. Be sure you have approved all the topics selected by the students before they begin lesson plan development.</p> <p>NOTE: Review <u>Individual Activity 3-4-2: Cognitive Teaching Demonstration</u> with the students. Provide each student with the date and approximate time they will complete their cognitive teaching demonstration, then post the schedule. Allow 1 hour for set-up, presentation, and evaluation for each student.</p>	<p>SLIDE: #-#-103</p> <p>What are some aspects of the lesson plan that should be reviewed?</p> <p>CLASS ACTIVITY: Complete Individual Activity 3-4-1. Start in class and finish as homework.</p> <p>CLASS ACTIVITY: Prepare for Individual Activity 3-4-2.</p>



TRAINING INSTRUCTOR 1C

Instructional Development Techniques

Summary:

A cognitive lesson plan is the instructional tool that is utilized by instructors to ensure a standard delivery of information to develop skills, knowledge, and abilities of students. We recognize that there are three formats for lesson plans as identified in the text. However, we only concentrated on the SFT's Curriculum Development Guidelines format for constructing cognitive lesson plans. The cognitive lesson plan will be just one tool that provides the instructor a conduit to allow for the student's success. The cognitive lesson plan will help instructors manage their instructional time as well as maintain instructional standards.

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 236-237, 321-339, 352-353 in order to prepare yourself for the upcoming test. Study for our next session.



TRAINING INSTRUCTOR 1C

Instructional Development Techniques

INDIVIDUAL ACTIVITY 3-4-1: COGNITIVE LESSON PLAN DEVELOPMENT

Time Frame: 1:00 in-class; completed as homework

- Materials Needed:***
- Fire and Emergency Services Instructor, IFSTA, Seventh Edition, Pages 321-354
 - Cognitive lesson plan format and sample
 - Previously prepared course outline
 - Pen or pencil, paper

Introduction: This activity provides the students the opportunity to develop their personal skills by developing a lesson plan. The lesson plan is a guide for the instructor. The lesson plan will list, in an organized sequence, those things that instructors must say and do to help their students learn. This will assist instructors to effectively manage the learning time while preventing over teaching or under teaching of the particular topic for the teaching session.

- Directions:***
1. Review a previously prepared course outline and develop a cognitive lesson plan.
 2. Due: _____



TRAINING INSTRUCTOR 1C

Instructional Development Techniques

INDIVIDUAL ACTIVITY 3-4-2: COGNITIVE TEACHING DEMONSTRATION

Time Frame:

Homework

Materials Needed:

- Self-prepared lesson plan
- Appropriate audiovisual training aids
- Sample Passing and Sample Failing Student Instructor Cognitive Teaching Demonstration Evaluations

Introduction:

This activity provides the student with the opportunity to deliver a cognitive lesson from a self-prepared lesson plan. Instructor led presentations require an awareness of the students' knowledge base and several factors regarding the learning environment. Such things as seating arrangement, lighting, comfort, instructor demeanor, voice volume, eye contact, and distracting teaching methods are all important considerations.

Directions:

1. Your teaching demonstration is scheduled for:

(Enter Day, Date, and Approximate Time)

2. Review the Sample Passing Student Instructor Cognitive Teaching Demonstration Evaluation form.
3. Sample Failing Student Instructor Cognitive Teaching Demonstration Evaluation form.
4. Prepare to teach a 30-minute presentation from your self-prepared cognitive lesson plan following the four-step method of instruction.
 - Include a clearly stated student behavioral objective.
 - Use presentation methods and teaching strategies that create interest and involve the students.
 - Follow your lesson plan.
 - Use a minimum of two forms of an audiovisual training aid to enhance and reinforce teaching points.
 - Video use limited to a maximum of two minutes.
 - Conclude the presentation with a summary and assignment, if appropriate.
5. Your presentation time must be at least 25 minutes and no longer than 35 minutes.
6. You will be evaluated by both student evaluators and the Primary Instructor for the class or a qualified Skills Evaluator.



TRAINING INSTRUCTOR 1C

Instructional Development Techniques

- Topic:** 3-5: Developing A Psychomotor Lesson Plan (SFT Format)
- Time Frame:** 1:30
- Level of Instruction:** Level II
- Authority:** 2008 Training Instructor CTS #2: Describe And Demonstrate The Development Of Instructional Materials
- Behavioral Objective:**
- Condition:** Given an activity and a summative test
 - Behavior:** The student will describe and demonstrate the development of a psychomotor lesson plan and determine its effectiveness
 - 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 127, 321-339 and successfully completing Individual Activities 3-5-1 and 3-5-2
- Materials Needed:**
- Writing board/pad with markers/erasers
 - Appropriate audiovisual training aids and devices
 - Individual Activity 3-5-1: Psychomotor Lesson Plan Development
 - Individual Activity 3-5-2: Psychomotor Teaching Demonstration
- References:**
- Fire and Emergency Services Instructor, IFSTA, Seventh Edition, Pages 127, 321-339
 - Curriculum Development Guidelines, State Fire Training
- 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.
- | | |
|-----------------------------|---------------------|
| A ttention (attract) | B egin |
| C uriosity (arouse) | A ssociation |
| I nterest (create) | S tudents |
| D esire (stimulate) | E xperience |
- 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.



TRAINING INSTRUCTOR 1C

Instructional Development Techniques

PRESENTATION	APPLICATION
<p>2. Operations</p> <ul style="list-style-type: none"> a) A step or the smallest aspect in performing a task b) Doing or performance units c) Listed in the order in which they are done <ul style="list-style-type: none"> 1) On left side (column) of page <p>3. Key Points</p> <ul style="list-style-type: none"> a) Information that aids in knowing or understanding operations that enable the student to perform the task correctly b) Knowledge units c) Developed by asking <ul style="list-style-type: none"> 1) Which? 2) Where? 3) Why? 4) How? d) Safety factors e) Listed with the corresponding Operations <ul style="list-style-type: none"> 1) On right side (column) of page <p>4. The instructor must present the skill in the same way the student will be evaluated</p>	<p>What are Operations?</p> <p>SLIDE: #-#-111</p> <p>What are Key Points?</p> <p>SLIDE: #-#-112</p>
<p>J. Application</p> <ul style="list-style-type: none"> 1. For psychomotor lesson plans, application typically directs students to practice the skill under supervision 	<p>What constitutes the application step of psychomotor instruction?</p>



TRAINING INSTRUCTOR 1C

Instructional Development Techniques

PRESENTATION	APPLICATION
<p>K. Evaluation</p> <ol style="list-style-type: none">1. Identify how and when the students will be evaluated on the skill2. Students must perform the skill without guidance to a standard that includes either time or quality or both3. The standard used must be the same as the standard in the behavioral objective <p>XLIII. DETERMINING EFFECTIVENESS OF PSYCHOMOTOR LESSON PLANS</p> <p>A. Review student testing results</p> <ol style="list-style-type: none">1. If a majority of students passed the performance test, lesson plan may not need revision2. If a significant number of students did not pass the test, determine the cause<ol style="list-style-type: none">a) Review instructor and course evaluationsb) Review student training recordsc) Interview students who failed the test <p>B. Review instructor and course evaluations</p> <ol style="list-style-type: none">1. Comment consistency about presentation style2. Facility factors3. External factors <p>C. Review the lesson plan</p> <ol style="list-style-type: none">1. Clear learning objectives2. Appropriate equipment and facility	<p>SLIDE: #-#-113</p> <p>How might test results indicate a need to revise a lesson plan?</p> <p>SLIDE: #-#-114</p> <p>What are some aspects of the lesson plan that should be reviewed?</p>



TRAINING INSTRUCTOR 1C

Instructional Development Techniques

PRESENTATION	APPLICATION
<ul style="list-style-type: none">3. Appropriate testing criteria4. Conditions and expectations clearly explained5. Other factors <p>D. If problems with the lesson plan are found</p> <ul style="list-style-type: none">1. Make necessary revisions to the lesson plan2. Ensure that revisions are cost and time effective <p>NOTE: Review <u>Individual Activity 3-5-1: Psychomotor Lesson Plan Development</u> with the students. The students must choose a topic for a piece of equipment that they have access to and can bring to class for their teaching demonstration. Approve the topics selected by the students before they begin lesson plan development.</p> <p>NOTE: Review <u>Individual Activity 3-5-2: Psychomotor Teaching Demonstration</u> with the students. Divide the class into groups (maximum size is four students per group). Tell the groups when and where the activity will be completed. Advise the groups to allow 30 minutes for set-up, presentation, and evaluation for each demonstration.</p>	<p>CLASS ACTIVITY: Complete Individual Activity 3-5-1. Start in the class and finish as homework.</p> <p>CLASS ACTIVITY: Prepare for Individual Activity 3-5-2.</p>



TRAINING INSTRUCTOR 1C

Instructional Development Techniques

Summary:

When a psychomotor skill for which no lesson plan is available needs to be taught, the instructor will have to develop a new psychomotor lesson plan. A properly developed and formatted lesson plan will ensure consistent instruction of the skill.

A lesson plan is the instructional tool that is utilized by instructors to ensure the standard delivery of information and skills to be taught to students by utilizing educational resources, the learning environment, and appropriate support materials. The lesson plan provides the instructor the teaching purpose for the subject delivery, which provides for the student's success. The lesson plan will help instructors manage their instructional.

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 127, 321-339 in order to prepare yourself for the upcoming test. Study for our next session.



TRAINING INSTRUCTOR 1C

Instructional Development Techniques

INDIVIDUAL ACTIVITY 3-5-1: PSYCHOMOTOR LESSON PLAN DEVELOPMENT

Time Frame: 1:00 in-class; completed as homework

Materials Needed:

- Fire and Emergency Services Instructor, IFSTA, Seventh Edition, Pages 321-354
- Psychomotor lesson plan format and sample
- Pen or pencil, paper

Introduction: This activity provides the students the opportunity to develop their personal skills by developing a lesson plan. The lesson plan is a guide for the instructor. The lesson plan will list, in an organized sequence, those things that instructors must say and do to help their students learn. This will assist instructors to effectively manage the learning time while preventing over teaching or under teaching of the particular topic for the teaching session.

Directions:

1. Review Fire and Emergency Services Instructor, IFSTA, Seventh Edition, Pages 321-354.
2. Develop a psychomotor lesson plan based on your selected topic.
3. Bring your original documents and a second complete package for your instructor.
4. Due: _____
5. If you do not meet the passing criteria, you will have one opportunity to submit a rewrite of your adapted lesson plan.
6. You will use these adapted materials for your upcoming teaching demonstration.



TRAINING INSTRUCTOR 1C

Instructional Development Techniques

INDIVIDUAL ACTIVITY 3-5-2: PSYCHOMOTOR TEACHING DEMONSTRATION

Time Frame: Homework

- Materials Needed:**
- Self-prepared 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 a self-prepared 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.

- 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 self-prepared 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 a student evaluator.



TRAINING INSTRUCTOR 1C

Instructional Development Techniques

- Topic:** 3-6: Developing And Employing Ancillary Components
- 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 an activity and a summative test
 - Behavior:** The student will describe ancillary components included with a lesson plan and develop an information sheet and activity
 - 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 339-349 and successfully completing Individual Activity 3-6-1
- Materials Needed:**
- Writing board/pad with markers/erasers
 - Appropriate audiovisual training aids and devices
 - Individual Activity 3-6-1: Developing Ancillary Components
- References:**
- Fire and Emergency Services Instructor, IFSTA, Seventh Edition, Pages 339-349
- 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.
- | | |
|-----------------------------|---------------------|
| A ttention (attract) | B egin |
| C uriosity (arouse) | A ssociation |
| I nterest (create) | S tudents |
| D esire (stimulate) | E xperience |
- 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.



TRAINING INSTRUCTOR 1C

Instructional Development Techniques

PRESENTATION	APPLICATION
<p>XLIV. ANCILLARY COMPONENTS</p> <p>A. Purpose</p> <ol style="list-style-type: none">1. Provide students with background or resource information that is<ol style="list-style-type: none">a) Not available in the textbookb) Not easily copied from other sources<ol style="list-style-type: none">1) Copyrighted standards2) Lengthy protocols2. May list performance steps that students can follow while practicing skills or evolutions3. Enable students to apply, study, and practice the lesson content <p>B. Types of ancillary components</p> <ol style="list-style-type: none">1. Assignment sheet2. Information sheet3. Skills sheet4. Study sheet5. Worksheet or activity sheet <p>XLV. INFORMATION SHEET</p> <p>NOTE: Refer to <u>Fire and Emergency Services Instructor</u>, IFSTA, Seventh Edition, Page 340, Figure 14.6.</p> <p>A. A type of handout or fact sheet that provides additional background information on a topic supplemental to the information provided in the text or other course resources</p>	<p>SLIDE: #-#-115</p> <p>SLIDE: #-#-116</p> <p>SLIDE: #-#-117</p> <p>What are some examples of ancillary components?</p> <p>SLIDE: #-#-118</p>



TRAINING INSTRUCTOR 1C

Instructional Development Techniques

PRESENTATION	APPLICATION
<p>B. Reasons for information sheets</p> <ol style="list-style-type: none"> 1. Information unavailable to some students 2. Students would have to consult numerous sources to get information 3. Information is not available in any texts <p>C. Developing information sheets</p> <ol style="list-style-type: none"> 1. Create a title that indicates the subject 2. Introduce the information with a brief description that explains its importance <ol style="list-style-type: none"> a) Relate the information to the primary text or part of the lesson 3. Present the information <ol style="list-style-type: none"> a) Detailed text or outline format <ol style="list-style-type: none"> 1) Easy to read and follow b) Include charts, tables, or illustrations 4. Develop test questions based on the information sheet <ol style="list-style-type: none"> a) So students can assess whether they have achieved the lesson objectives <p>XLVI. SKILLS SHEET</p> <p>A. Divides a task into parts by listing the operational steps and their key points or steps for completing each operation</p> <p>B. Used in psychomotor lesson plans</p> <p>NOTE: Skills sheets are discussed in detail in Training Instructor 1C, Lesson 3-5</p>	<p>What are some reasons for providing students with information sheets?</p> <p>SLIDE: #-#-119</p> <p>SLIDE: #-#-120</p> <p>SLIDE: #-#-121</p>
	<p>When are skills sheets used?</p>



TRAINING INSTRUCTOR 1C

Instructional Development Techniques

PRESENTATION	APPLICATION
<p>XLVII. WORKSHEET OR ACTIVITY SHEET</p> <p>NOTE: Refer to <u>Fire and Emergency Services Instructor</u>, IFSTA, Seventh Edition, Page 345, Figure 14.9.</p> <ul style="list-style-type: none">A. Provide the students with opportunities to apply rules, analyze and evaluate objects and situations, or use multiple skills while completing activitiesB. May be used to generate discussions on a topicC. May not require scoring or grading by the instructorD. Developing activity sheets<ol style="list-style-type: none">1. Create a title that reflects the subject2. List all the materials and resources that students need in order to complete the activity3. Introduce the activity with a brief introduction that motivates students to complete the activity<ol style="list-style-type: none">a) Relate the information to the lesson objectives4. Provide clear directions that explain how to complete the worksheet5. Provide answers or solutions on a separate page<ol style="list-style-type: none">a) May be given either with the worksheet or after the worksheet is completed	<p>What is the purpose of an activity sheet?</p> <p>SLIDE: #-#-122</p> <p>SLIDE: #-#-123</p>
<p>XLVIII. STUDY SHEET</p> <p>NOTE: Refer to <u>Fire and Emergency Services Instructor</u>, IFSTA, Seventh Edition, Page 347, Figure 14.10.</p> <ul style="list-style-type: none">A. An instructional document designed to arouse student interest in a topic and explain to students the specific areas to study	<p>What is a study sheet?</p> <p>SLIDE: #-#-124</p>



TRAINING INSTRUCTOR 1C

Instructional Development Techniques

PRESENTATION	APPLICATION
<p>B. May be distributed to students to use during instruction or for them to use as self-study aides</p> <p>C. Including a study sheet test enables the students and instructor to measure how well students understood the material</p> <p>D. Developing study sheets</p> <ol style="list-style-type: none"> 1. Create a title that reflects the subject 2. List all the materials and resources that students need in order to complete the study sheet 3. Introduce the activity with a brief introduction that motivates students to complete the study sheet 4. Design the study sheet to present the study information 5. Design study questions to make students think and assess understanding of all aspects of the topic 6. Include a study sheet test (optional) on a separate sheet of paper <p>XLIX. ASSIGNMENT SHEET</p> <p>NOTE: Refer to <u>Fire and Emergency Services Instructor</u>, IFSTA, Seventh Edition, Page 348, Figure 14.11.</p> <p>A. Contains information about a specific activity or project that the student is expected to perform without supervision</p> <p>B. Activity may be done in class or outside of class</p> <p>C. Should contain the three components of the Mager Model</p> <ol style="list-style-type: none"> 1. Performance 	<p>When might students use a study sheet?</p> <p>SLIDE: #-#-125</p> <p>What information does an assignment sheet contain?</p> <p>SLIDE: #-#-126</p>



TRAINING INSTRUCTOR 1C

Instructional Development Techniques

PRESENTATION	APPLICATION
<p>2. Conditions</p> <p>3. Criteria</p> <p>D. Assignment sheets differ from worksheets in that the assignment is required and results in a graded activity</p> <p>NOTE: SFT uses activity sheets for required/graded activities. Refer to <u>Fire and Emergency Services Instructor</u>, IFSTA, Seventh Edition, Page 346, for justification.</p> <p>E. Developing assignment sheets</p> <ol style="list-style-type: none">1. Create a title that reflects the subject2. List all the materials and resources that students need in order to complete the assignment3. Introduce the activity with a brief introduction that motivates students to complete the activity4. Design the assignment sheet to present the information5. Include the scoring and grading criteria for the assignment6. Describe the form and format that the final product must be in along with the due date<ol style="list-style-type: none">a) Essay, table, graphic, etc.b) Handwritten, typed, model, etc. <p>L. CONSIDERATIONS FOR USING ANCILLARY COMPONENTS</p> <p>A. Information sheets</p> <ol style="list-style-type: none">1. Distributed at end of the lesson to minimize distraction<ol style="list-style-type: none">a) If distributed during the lesson, pause the class until all copies have been distributed	<p>How does an assignment sheet differ from a worksheet?</p> <p>SLIDE: #-#-127</p> <p>SLIDE: #-#-128</p> <p>When should information sheets be distributed?</p>



TRAINING INSTRUCTOR 1C

Instructional Development Techniques

PRESENTATION	APPLICATION
<p>2. Introduce the information sheet</p> <ul style="list-style-type: none"> a) Discuss <p>3. Bring closure prior to returning to your lesson</p> <p>B. Skills sheets</p> <p>1. Instructor demonstration is the presentation step of the four-step method of instruction</p> <ul style="list-style-type: none"> a) The instructor should demonstrate <ul style="list-style-type: none"> 1) Full speed 2) Slow speed, step-by-step while verbalizing 3) Full speed again <p>2. The student practicing a skill using a skills sheet is the application step</p> <ul style="list-style-type: none"> a) The student should practice <ul style="list-style-type: none"> 1) While reciting operations and key points 2) As though they are being tested, according to the skills sheet, prior to the actual test <p>C. Worksheets/activity sheets/study sheets/assignment sheets</p> <p>1. Distributed at the end of the lesson or as indicated by the lesson plan</p> <ul style="list-style-type: none"> a) If distributed during the lesson, pause the class until all copies have been distributed <p>2. Introduce and discuss the material</p> <p>3. Be familiar with the exercise to explain it to the students</p> <p>4. Due dates and times need to be communicated during the introduction</p>	<p>SLIDE: #-#-129</p> <p>How are skills sheets used?</p> <p>SLIDE: #-#-130</p> <p>When should these sheets be distributed?</p>



TRAINING INSTRUCTOR 1C

Instructional Development Techniques

PRESENTATION	APPLICATION
<p>NOTE: Refer students to <u>Individual Activity 3-6-1: Developing Ancillary Components</u> in their student supplement.</p>	<p><u>CLASS ACTIVITY:</u> Complete Individual Activity 3-6-1. Start in the class and finish as homework if necessary.</p>



TRAINING INSTRUCTOR 1C

Instructional Development Techniques

Summary:

During training, students are expected to retain a large amount of information. While much of this information is available in texts or other sources that the student has ready access to, sometimes information covered in a lesson plan is not otherwise available to the students. Instructors can develop and use a variety of ancillary components to assist students with retaining information that has been presented.

Instructors can develop a variety of ancillary components for their lesson plans to assist students with the retention of material. These ancillary components should be created when information is not otherwise readily available to students, when students need to be given further direction on studying, or when activities are assigned to students. Ancillary components may include Information Sheets, Skills Sheets, Worksheets, Study Sheets, and Assignment Sheets.

Evaluation:

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

Assignment:

Review your notes and read Fire and Emergency Services Instructor, IFSTA, Seventh Edition, Pages 339-349 in order to prepare yourself for the upcoming test. Complete Individual Activity 3-6-1. Study for our next session.



TRAINING INSTRUCTOR 1C

Instructional Development Techniques

INDIVIDUAL ACTIVITY 3-6-1: DEVELOPING ANCILLARY COMPONENTS

Time Frame: 0:30 (in-class) and homework

Materials Needed:

- Fire and Emergency Services Instructor, IFSTA, Seventh Edition, Pages 339-349
- Computer with word processing software and printer
- Lesson plan developed in Individual Activity 3-4-2

Introduction: This activity provides the students the opportunity to develop a variety of ancillary components for a lesson plan.

Directions:

1. Review Fire and Emergency Services Instructor, IFSTA, Seventh Edition, Pages 339-349
2. Following the guidelines in the text, develop the following three ancillary components for your cognitive lesson plan:
 - Information sheet
 - Study sheet
 - Worksheet or activity sheet
3. Assignments must be computer printed.
4. Assignments will be graded on completeness, accuracy, content, format, and presentation.
5. The assignment is due on _____.



TRAINING INSTRUCTOR 1C

Instructional Development Techniques

Topic: 3-7: Selecting And Employing Audiovisual Training Aids
Time Frame: 1:30
Level of Instruction: Level II
Authority: 2008 Training Instructor CTS #9: Describe And Demonstrate The Use Of Audiovisual Equipment And Materials

Behavioral Objective:

Condition: Given a [course final-examsummative test](#)

Behavior: The student will describe the selection and use of audiovisual training aids used in instruction

Standard: With a minimum 80% accuracy on the [course final-examsummative test](#) according to the information contained in Fire and Emergency Services Instructor, IFSTA, Seventh Edition, Pages 249-272

Materials Needed:

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

References:

- Fire and Emergency Services Instructor, IFSTA, Seventh Edition, Pages 249-272

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.

A ttention (attract)	B egin
C uriosity (arouse)	A ssociation
I nterest (create)	S tudents
D esire (stimulate)	E xperience

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.



TRAINING INSTRUCTOR 1C

Instructional Development Techniques

PRESENTATION	APPLICATION
<p>LI. AUDIOVISUAL TRAINING AIDS</p> <p>A. Purpose is to enhance the learning process</p> <p>B. Presents information to different senses</p> <ol style="list-style-type: none">1. Sight2. Sound3. Touch <p>LII. BENEFITS TO AUDIOVISUAL TRAINING AIDS</p> <p>A. Enhance student understanding</p> <ol style="list-style-type: none">1. Address many learning styles <p>B. Increase student acceptance</p> <ol style="list-style-type: none">1. Design messages through the three senses <p>C. Add interest to a lecture</p> <p>D. Clarify, prove, or emphasize a key point</p> <p>E. Enhance memory</p> <p>F. Help students organize ideas</p> <ol style="list-style-type: none">1. ICS charts <p>G. Gain and maintain student attention</p> <p>H. Illustrate a sequence of events or steps in a process</p> <p>I. Save lecture time</p> <ol style="list-style-type: none">1. A picture is worth a thousand words	<p>SLIDE: #-#-131</p> <p>SLIDE: #-#-132</p> <p>Which senses should audiovisual training aids and props appeal to most?</p> <p>What are some benefits of using audiovisual training aids?</p> <p>SLIDE: #-#-133</p> <p>SLIDE: #-#-134</p>



TRAINING INSTRUCTOR 1C

Instructional Development Techniques

PRESENTATION	APPLICATION
<p>B. Advantages</p> <ol style="list-style-type: none">1. Easy to use2. Lower chance of malfunction3. Relatively inexpensive <p>C. Disadvantages</p> <ol style="list-style-type: none">1. Can slow class pace2. Can disengage younger audiences <p>D. Considerations for use</p> <ol style="list-style-type: none">1. Training aids support instruction<ol style="list-style-type: none">a) They do not replace2. Talk to the students<ol style="list-style-type: none">a) Not the training aid3. Ensure adequate size or quantity for class size4. Use multiple colors <p>E. Marker boards</p> <ol style="list-style-type: none">1. Types<ol style="list-style-type: none">a) Chalk boardb) Dry erase marker boardc) Electronic or interactive boards	<p>What are the benefits of nonprojected training aids over high-tech projected training aids?</p> <p>SLIDE: #-#-137</p> <p>SLIDE: #-#-138</p> <p>SLIDE: #-#-139</p> <p>SLIDE: #-#-140</p> <p>What are some types of marker boards that a fire service instructor may encounter?</p>



TRAINING INSTRUCTOR 1C

Instructional Development Techniques

PRESENTATION	APPLICATION
<p>2. Advantages</p> <ul style="list-style-type: none">a) Relatively low costb) Low maintenancec) Low potential for equipment failured) Versatility <p>3. Disadvantages</p> <ul style="list-style-type: none">a) Penmanship issues <ul style="list-style-type: none">1) Spelling2) Legibility <ul style="list-style-type: none">b) Inability to save presentationsc) Can be ineffective with large audiences <p>4. Considerations for use</p> <ul style="list-style-type: none">a) Write only what is necessaryb) Write large and legiblyc) Draw complex diagrams prior to class <ul style="list-style-type: none">1) Keep pictures covered until needed2) Completely erase after use <p>F. Easel pads</p> <p>1. Advantages</p> <ul style="list-style-type: none">a) Still considered a very versatile tool for indoor and outdoor learning environments	<p>What types of penmanship issues does an instructor need to consider?</p> <p>How can an instructor keep the pictures from distracting the students?</p> <p>What can be considered as a very versatile tool deployed in the learning environment?</p> <p>SLIDE: #-#-141</p>



TRAINING INSTRUCTOR 1C

Instructional Development Techniques

PRESENTATION	APPLICATION
<ul style="list-style-type: none">b) Suit a variety of learning stylesc) Show orientations and relationships that are difficult to explain <p>3. Disadvantages</p> <ul style="list-style-type: none">a) Can become distractions <p>4. Considerations for use</p> <ul style="list-style-type: none">a) Do not hold in front of you while instructingb) Place on an easel <ul style="list-style-type: none">c) Remove from view when not in use<ul style="list-style-type: none">1) Can draw student's attention away from the instructor <p>H. Duplicated materials</p> <p>1. Examples</p> <ul style="list-style-type: none">a) Student handoutsb) Worksheetsc) Information Sheetsd) Activity Sheets <p>2. Advantages</p> <ul style="list-style-type: none">a) Reinforces presentationb) Students can keep for reference <p>3. Disadvantages</p> <ul style="list-style-type: none">a) Can be a distraction <p>4. Considerations for use</p> <ul style="list-style-type: none">a) Ensure legibility	<p>What should an instructor do with an illustration or diagram once it is no longer in use?</p> <p>SLIDE: #-#-143</p> <p>What are some examples of duplicated materials?</p>



TRAINING INSTRUCTOR 1C

Instructional Development Techniques

PRESENTATION	APPLICATION
<p>b) Comply with copyright laws</p> <p>c) Staple multiple pages</p> <p>d) Three-hole punch handouts</p> <p>e) Information to include</p> <ul style="list-style-type: none">1) Course name/topic2) Date3) Instructor name <p>f) Provide sufficient copies</p> <p>g) Provide space for notes</p> <p>I. Models</p> <ul style="list-style-type: none">1. Examples<ul style="list-style-type: none">a) Miniaturesb) Cutawaysc) Anatomical modelsd) Actual tools and equipment2. Advantages<ul style="list-style-type: none">a) Illustrates<ul style="list-style-type: none">1) Mechanics<ul style="list-style-type: none">• Fire pumps• Braking systems2) Spatial relationships<ul style="list-style-type: none">• Organs of the abdomenb) Saves lecture time	<p>What simple things can an instructor do to make handouts easier for the students to use?</p> <p>SLIDE: #-#-144</p> <p>What types of information are models particularly effective at presenting?</p>



TRAINING INSTRUCTOR 1C

Instructional Development Techniques

PRESENTATION	APPLICATION
<p>3. Disadvantages</p> <ul style="list-style-type: none"> a) Can be large/expensive b) Can distract student if in view and unused during instruction <p>4. Considerations for use</p> <ul style="list-style-type: none"> a) Introduce when presenting that piece of equipment b) Follow appropriate safety procedures <p>J. Audio recordings</p> <p>1. Advantages</p> <ul style="list-style-type: none"> a) Appeals to sense of hearing b) Presents sounds that cannot be described with words alone <ul style="list-style-type: none"> 1) Lung sounds 2) Pump cavitation <p>2. Disadvantages</p> <ul style="list-style-type: none"> a) Possibility of malfunction b) Hearing impaired students c) No volume control <p>3. Considerations for use</p> <ul style="list-style-type: none"> a) Ensure equipment functions b) Ensure appropriate volume <ul style="list-style-type: none"> 1) Loud enough 2) Not too loud c) Play multiple times if needed 	<p>What are some disadvantages of models?</p> <p>SLIDE: #-#-145</p> <p>What types of sounds might need recordings to be effectively presented?</p>



TRAINING INSTRUCTOR 1C

Instructional Development Techniques

PRESENTATION	APPLICATION
LV. PROJECTED TRAINING AIDS	
<p>A. Types</p> <ol style="list-style-type: none">1. Projectors and screens2. Visual presentations and displays3. Television and video4. Slide projectors5. Overhead projectors and transparencies	<p>SLIDE: #-#-146</p>
<p>B. Advantages</p> <ol style="list-style-type: none">1. Vivid images2. Visible to large audience3. Stimulate multiple senses4. Can add previously prepared overhead transparencies by writing on them	<p>SLIDE: #-#-147</p> <p>What are some advantages of projected training aids?</p>
<p>C. Disadvantages</p> <ol style="list-style-type: none">1. Large investment in equipment2. Projection equipment can block some students' view3. Can become abused<ol style="list-style-type: none">a) Becomes presentation instead of supporting presentation4. Requires electricity and screens<ol style="list-style-type: none">a) Potential for equipment and power failure	<p>SLIDE: #-#-148</p> <p>What is meant by abusing projected training aids?</p>
<p>D. Considerations for use</p> <ol style="list-style-type: none">1. Ensure all equipment connects and communicates	<p>SLIDE: #-#-149</p>



TRAINING INSTRUCTOR 1C

Instructional Development Techniques

PRESENTATION	APPLICATION
<p>2. Eliminate keystoneing</p> <p>NOTE: Demonstrate keystoneing.</p> <ul style="list-style-type: none">a) Adjust screenb) Adjust projector <p>3. Set image size and focus</p> <p>4. Present instruction to the students</p> <ul style="list-style-type: none">a) Not the screen <p>5. Ensure all students can see the screen</p> <p>6. Ensure safety</p> <ul style="list-style-type: none">a) Electricalb) Firec) Trip hazards<ul style="list-style-type: none">1) Power cords <p>7. Have spare projector bulbs</p> <p>8. Prepare nonprojector-based presentation in case of power failure or equipment malfunction</p> <p>E. Video and multimedia projectors/large screen images</p> <ul style="list-style-type: none">1. Examples<ul style="list-style-type: none">a) Video projectorsb) Multimedia projectors2. Advantages<ul style="list-style-type: none">a) Large, high quality displayb) Can often be used in lighted room	<p>SLIDE: #-#-150</p> <p>What are some safety considerations when using projected training aids?</p> <p>SLIDE: #-#-151</p> <p>What are some advantages of video/multimedia projectors?</p>



TRAINING INSTRUCTOR 1C

Instructional Development Techniques

PRESENTATION	APPLICATION
<p>c) Wide variety of images projected</p> <ul style="list-style-type: none">1) Computer screens2) Video3) Photos <p>3. Disadvantages</p> <ul style="list-style-type: none">a) High initial costb) High cost of replacement bulbsc) External speakers may be needed <p>4. Considerations for use</p> <ul style="list-style-type: none">a) Larger classroomb) Seating arrangement for all students to seec) Power cords<ul style="list-style-type: none">1) Safety2) Tripping hazards <p>F. Visual presenters/displays</p> <ul style="list-style-type: none">1. Combines functions of overhead projector with a multimedia projector2. Advantages<ul style="list-style-type: none">a) Can display a small object to a large audience3. Disadvantages<ul style="list-style-type: none">a) High initial costb) External speakers may be needed <p>G. Television and video presentations</p> <ul style="list-style-type: none">1. Advantages<ul style="list-style-type: none">a) Suited to distance learningb) Widely availablec) Can be produced in-house	<p>What can be projected onto a screen?</p> <p>SLIDE: #-#-152</p> <p>SLIDE: #-#-153</p>



TRAINING INSTRUCTOR 1C

Instructional Development Techniques

PRESENTATION	APPLICATION
<p>2. Disadvantages</p> <ul style="list-style-type: none"> a) Not easily adapted b) Not interactive <p>3. Considerations for use</p> <ul style="list-style-type: none"> a) Preview video prior to use b) Emphasize key points prior to use and review following c) Cue to desired point d) Stop video for discussion e) Do not leave room during video <p>H. Slide projectors/slides</p> <p>1. Advantages</p> <ul style="list-style-type: none"> a) High resolution b) Can be archived <p>2. Disadvantages</p> <ul style="list-style-type: none"> a) Rarely used b) Difficult to find supplies/support c) PowerPoint® presentations are easier to develop <p>3. Considerations for use</p> <ul style="list-style-type: none"> a) Preview slides prior to use b) Number slides in case of a tray spill c) Black out screen or use blank slide to return focus to the instructor during discussions 	<p>Do television or video presentations really draw upon active learning principles?</p> <p>SLIDE: #-#-154</p> <p>Why are slides and projectors becoming rarely used?</p> <p>SLIDE: #-#-155</p>



TRAINING INSTRUCTOR 1C

Instructional Development Techniques

PRESENTATION	APPLICATION
<p>I. Overhead projectors/transparencies</p> <ol style="list-style-type: none">1. Advantages<ol style="list-style-type: none">a) Low costb) Easy to control flow of information2. Disadvantages<ol style="list-style-type: none">a) Low resolutionb) Instructor geographically tied to projector3. Considerations for use<ol style="list-style-type: none">a) Utilize reveal techniqueb) Use pointer on stage for emphasis	<p>What are some advantages of overhead projectors?</p> <p>How can an instructor emphasize a discussion point on an overhead transparency?</p>
<p>LVI. SIMULATORS</p> <p>A. Types</p> <ol style="list-style-type: none">1. Electronic<ol style="list-style-type: none">a) Simulate situations or environments<ol style="list-style-type: none">1) Theatrical smoke machines2) Alarm/detection systems2. Display boards<ol style="list-style-type: none">a) Parts or systems mounted on a board for ease of viewing<ol style="list-style-type: none">1) Vehicle air braking system3. Smoke simulators<ol style="list-style-type: none">a) Models or software that simulates smoke movement in building such as high rises or shopping malls	<p>SLIDE: #-#-156</p> <p>What is a display board?</p>



TRAINING INSTRUCTOR 1C

Instructional Development Techniques

PRESENTATION	APPLICATION
<p>4. Computer simulators</p> <ul style="list-style-type: none">a) Simulated scenarios<ul style="list-style-type: none">1) Structure/wildland fires2) Hazardous materialsb) Static or dynamic <p>5. Virtual reality</p> <ul style="list-style-type: none">a) Immerses student in simulated environmentb) Reinforces procedure or protocol based skills<ul style="list-style-type: none">1) ICS2) EMS skills <p>6. Anatomical/physiological mannequins</p> <p>B. Advantages</p> <ul style="list-style-type: none">1. Allow training that is otherwise impractical <p>C. Disadvantages</p> <ul style="list-style-type: none">1. High cost2. Suited for training individuals or small groups <p>D. Considerations for use</p> <ul style="list-style-type: none">1. Reinforces simulated skills while using real time confirmed by agency standards2. Try to add skill sets of less experienced command officers <p>LVII. ANCILLARY EQUIPMENT</p> <p>A. Television monitors/projection screens</p>	<p>What types of incidents can be simulated with computers?</p> <p>SLIDE: #-#-157</p> <p>Are simulators well suited to large groups?</p> <p>SLIDE: #-#-158</p>



TRAINING INSTRUCTOR 1C

Instructional Development Techniques

PRESENTATION	APPLICATION
<p>1. Preferred display set-up</p> <ul style="list-style-type: none">a) Front corner of classroomb) 45° angle <p>2. Size guideline</p> <ul style="list-style-type: none">a) 2 x 6 rule<ul style="list-style-type: none">1) Front row<ul style="list-style-type: none">• Minimum distance from the screen is twice width of the projected image• Maximum width of a row is twice the width of the projected image2) Back row<ul style="list-style-type: none">• Maximum distance from screen is six times the width of the projected image• Maximum width of a row is six times the width of the projected image <p>NOTE: <u>Fire and Emergency Services Instructor, IFSTA, Seventh Edition, Page 272</u> incorrectly refers to the width of the screen rather than the projected image. IFSTA's monitor guideline of "1 inch per student" on this same page is not a reasonable guideline.</p> <p>B. Presentation software/hardware</p> <p>1. Types of software</p> <ul style="list-style-type: none">a) PowerPoint® (Microsoft)b) Key Note (Apple/Macintosh)c) Open Officed) Harvard	<p>What is a guideline for the distance students should be from a screen?</p> <p>SLIDE: #-#-159</p> <p>What are some of the software programs that are utilized for presentations?</p>



TRAINING INSTRUCTOR 1C

Instructional Development Techniques

PRESENTATION	APPLICATION
<p>2. Standard hardware components</p> <ul style="list-style-type: none">a) Computer<ul style="list-style-type: none">1) Central processing unit (CPU)<ul style="list-style-type: none">• The brainb) Projector<ul style="list-style-type: none">1) Types of projectors<ul style="list-style-type: none">• Liquid crystal display (LCD)• Digital light projection (DLP)• Fiber optics future generation presentation displaysc) Remote<ul style="list-style-type: none">1) Tools to assist with the presentation2) Many have different features3) There can be conflicts with instructors in neighboring classrooms4) Some remotes have options of changing frequencies5) Instructors need to be familiar with their toolsd) Sound system<ul style="list-style-type: none">1) Do not rely on sound systems built into projection equipment2) Need to consider external speakers if presentation includes audio	<p>SLIDE: #-#-160</p> <p>What are the standard hardware components needed to deliver a presentation?</p> <p>What types of projectors can be selected for presentations?</p>



TRAINING INSTRUCTOR 1C

Instructional Development Techniques

PRESENTATION	APPLICATION
<p>3) Consider classroom size and number of students to ensure all can hear clearly</p> <p>C. Preparing to use ancillary equipment</p> <ol style="list-style-type: none">1. Check to make sure it works2. Become familiar with operation3. Bring needed supplies<ol style="list-style-type: none">a) Power cords/outlet stripsb) Other cords and connectorsc) Spare bulbsd) Spare equipment4. Check room for compatibility with equipment<ol style="list-style-type: none">a) Adequate power sourcesb) Screen availabilityc) Ability to darken room5. Set up equipment prior to class<ol style="list-style-type: none">a) Ensure compatibility of equipmentb) Last minute adjustmentsc) Tape down cords in traffic areas6. Classrooms with preinstalled ancillary equipment<ol style="list-style-type: none">a) Will need to adjust your own personal delivery style	<p>SLIDE: #-#-161</p> <p>What can be achieved by checking the equipment before use?</p> <p>SLIDE: #-#-162</p> <p>What are some things that an instructor needs to check in the classroom relative to the use of audiovisual media?</p>



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Instructional Development Techniques

PRESENTATION	APPLICATION
<p>7. Troubleshooting</p> <ul style="list-style-type: none">a) Make sure all power supplies/switches are onb) Make sure all connections are correct and securec) If computer image is not projecting<ul style="list-style-type: none">1) Toggle display using "function key with appropriate combination key" on computer<ul style="list-style-type: none">• As specified in the computer user's guide2) Toggle image source on projector<ul style="list-style-type: none">• As specified in the projector user's guide3) Video RAM (memory) in computer may be insufficient to display on computer screen and projection device simultaneously<ul style="list-style-type: none">• Generally not an issue on newer computers	<p>What are some simple troubleshooting steps to get ancillary equipment working?</p> <p>SLIDE: #-#-163</p>



TRAINING INSTRUCTOR 1C

Instructional Development Techniques

Summary:

As the saying goes, a picture is worth a thousand words. Proper selection of audiovisual media equipment can make or break a presentation. Used effectively, training aids can add interest and reinforce learning objectives. A quality instructor will use these tools to support the presentation, and give the student the best chance to comprehend and retain the lesson information.

Evaluation:

The student will complete the [course final exam summative test](#) at a time determined by the instructor.

Assignment:

Review your notes and read Fire and Emergency Services Instructor, IFSTA, Seventh Edition, Pages 249-272 in order to prepare yourself for the upcoming test. Study for our next session.



TRAINING INSTRUCTOR 1C

Instructional Development Techniques

- Topic:** 3-8: Transition Techniques Within And Between Audiovisual Training Aid Devices
- Time Frame:** 1:00
- Level of Instruction:** Level II
- Authority:** 2008 Training Instructor CTS #9: Describe And Demonstrate The Use Of Audiovisual Equipment And Materials
- Behavioral Objective:**
- Condition:** Given a [course final exam summative test](#)
 - Behavior:** The student will describe the purpose and methods of employing transition techniques within and between training aid devices
 - Standard:** With a minimum 80% accuracy on the [course final exam summative test](#) according to the information contained in Fire and Emergency Services Instructor, IFSTA, Seventh Edition, Pages 255-258
- Materials Needed:**
- Writing board/pad with markers/erasers
 - Appropriate audiovisual training aids and devices
- References:**
- Curriculum Development Guidelines, SFT
 - Fire and Emergency Services Instructor, IFSTA, Seventh Edition, Pages 255-258
- 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.



TRAINING INSTRUCTOR 1C

Instructional Development Techniques

PRESENTATION	APPLICATION
<p>LVIII. TRANSITIONS IN PRESENTATIONS</p> <p>A. Importance of transitions</p> <ol style="list-style-type: none">1. Move students from one portion of a lesson to next2. Connects lesson without losing students' attention <p>B. Purpose of transitions</p> <ol style="list-style-type: none">1. Maintain interest in lesson2. Maintain continuity of information flow3. Maintain consistency between seemingly unrelated topics<ol style="list-style-type: none">a) Transitions between lessons within a course4. Establish relationships<ol style="list-style-type: none">a) Tie parts of topic together to illustrate relationshipb) Relate upcoming concept or skill to previous one5. Provide previews of what to expect in the next portion of the material6. Provide summary to end the previous idea or topic <p>C. Transitions identified in the lesson plan</p> <ol style="list-style-type: none">1. Lesson plan should contain location of necessary transitions	<p>SLIDE: #-#-164</p> <p>Why is it important to use transitions?</p> <p>SLIDE: #-#-165</p> <p>How do transitions support the presentation?</p> <p>SLIDE: #-#-166</p> <p>SLIDE: #-#-167</p> <p>In the cognitive lesson plan, where should audiovisual transitions be noted?</p>



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Instructional Development Techniques

PRESENTATION	APPLICATION
<p>2. Audiovisual transitions are noted on the "Application" side of the cognitive lesson plan</p> <ul style="list-style-type: none"> a) Slide or transparency number <ul style="list-style-type: none"> 1) May include a description <p>D. Timing transitions</p> <ul style="list-style-type: none"> 1. When to use transitions is a question of timing <p>2. Transitions used when needed in following ways</p> <ul style="list-style-type: none"> a) End one topic and begin another b) End a complete lesson within a series or a course c) Start a new lesson within a series or course d) Move from one teaching method into another e) Provide rest breaks for students and instructors <p>3. Length of allotted transition time</p> <ul style="list-style-type: none"> a) Varies according to use b) Inclusion in lesson plan helps establish total lesson time 	<p>During the presentation, when does an instructor need to employ transitions?</p> <p>SLIDE: #-#-168</p> <p>How long should transition time take to employ?</p> <p>SLIDE: #-#-169</p> <p>Should transition time be calculated into the overall lesson plan time?</p>



TRAINING INSTRUCTOR 1C

Instructional Development Techniques

PRESENTATION	APPLICATION
	<p>Once the instructor has determined when to use transitions, what is the next issue?</p>



TRAINING INSTRUCTOR 1C

Instructional Development Techniques

PRESENTATION	APPLICATION
<p>4. Determine the types of transitions needed and how to create them</p> <ul style="list-style-type: none"> a) Two types of transitions for oral communications <ul style="list-style-type: none"> 1) Verbal 2) Nonverbal b) Creation of transitions in computer-generated media presentations <p>LIX. VERBAL TRANSITIONS</p> <ul style="list-style-type: none"> A. Must be as smooth as possible to avoid distraction B. Transition words or phrases <ul style="list-style-type: none"> 1. Recommended phrases <ul style="list-style-type: none"> a) "In addition to" b) "In other words" c) "As well" d) "Therefore" e) "In summary" f) "Not only" 2. Phrases to avoid <ul style="list-style-type: none"> a) "Finally" b) "In conclusion" c) Above phrases give students permission to stop listening 	<p>What are the different types of transitions?</p> <p>SLIDE: #-#-171</p> <p>What are some words or phrases an instructor should include in the transitional statements?</p> <p>What are some statements to avoid?</p>



TRAINING INSTRUCTOR 1C

Instructional Development Techniques

PRESENTATION	APPLICATION
<p>5. Physically moving from one point to another within a space</p> <p>C. Must be smooth and <u>not</u> distracting</p> <p>D. May be used to move from one teaching method into another</p> <ol style="list-style-type: none"> 1. Involves obvious change 2. Transitions may disturb student concentration <ol style="list-style-type: none"> a) Altering light b) Turning on audiovisual equipment c) Assembling a model <p>E. Methods when equipment assembly is needed</p> <ol style="list-style-type: none"> 1. Another instructor or aide does assembly 2. Assembly time used for rest break <ol style="list-style-type: none"> a) Break time and transition must coincide 	<p>What is an important factor for an instructor to remember when using nonverbal transitions?</p> <p>SLIDE: #-#-174</p> <p>How can an instructor effectively transition the presentation when equipment assembly is necessary?</p> <p>SLIDE: #-#-175</p> <p>When an instructor uses computer-generated media, what types of transitions are often employed?</p> <p>SLIDE: #-#-176</p>
<p>LXI. MEDIA TRANSITIONS AND ANIMATIONS</p> <p>A. Computer-generated presentations</p> <ol style="list-style-type: none"> 1. Transitions between slides 	



TRAINING INSTRUCTOR 1C

Instructional Development Techniques

PRESENTATION	APPLICATION
<p>2. Animation effects within slides</p> <ul style="list-style-type: none"> a) Animations may become overused/abused b) Some effects are not appropriate for training <p>B. Guidelines for media transitions and animations</p> <ol style="list-style-type: none"> 1. Create one heading for each slide or image <ul style="list-style-type: none"> a) Expand with subheadings b) Add illustrations (graphs, charts, photos) 2. Keep backgrounds simple <ul style="list-style-type: none"> a) Should <u>not</u> conflict with text or graphics 3. Use transitions and animations sparingly 4. Use variety in composition of slide elements <ul style="list-style-type: none"> a) Intersperse graphs, charts, photos, clipart 5. Vary transition style <ul style="list-style-type: none"> a) One style for major topics b) Different style for subtopics 6. Use blackout screens in the presentations to bring the focus back to the instructor 	<p>What is the main issue with animation effects?</p> <p>What are some general guidelines that an instructor should follow when selecting the type of media transitions and/or animations for a computer-generated presentation?</p> <p>SLIDE: #-#-177</p> <p>What are some of the pitfalls to avoid when selecting media transitions and/or animations?</p>



TRAINING INSTRUCTOR 1C

Instructional Development Techniques

PRESENTATION	APPLICATION
<p>C. Media transition pitfalls</p> <ol style="list-style-type: none">1. Fancy, involved, visually stimulating transitions and animations<ol style="list-style-type: none">a) Will be distractingb) Keep focus on information, <u>not</u> animation2. Transitions with too much motion3. Sound effects included with software<ol style="list-style-type: none">a) Not generally appropriate for training sessionsb) Avoid, unless necessary to convey message	



TRAINING INSTRUCTOR 1C

Instructional Development Techniques

Summary:

For consistency and continuity of presentation, the well-prepared instructor should use verbal, nonverbal and media transitions where they will be most effective to move students from one portion of a lesson to the next with minimal distraction. By following the general guidelines for creating transitions applicable to the lesson and method of delivery, the instructor will be well on the way toward delivery of a quality presentation.

Evaluation:

The student will complete the [course final exam summative test](#) at a time determined by the instructor.

Assignment:

Review your notes and read Fire and Emergency Services Instructor, IFSTA, Seventh Edition, Pages 255-258 in order to prepare yourself for the upcoming test. Study for our next session.



TRAINING INSTRUCTOR 1C

Instructional Development Techniques

- Topic:** 3-9: Cleaning And Field Level Maintenance For Audiovisual Training Aid Devices
- Time Frame:** 0:30
- Level of Instruction:** Level II
- Authority:** 2008 Training Instructor CTS #9: Describe And Demonstrate The Use Of Audiovisual Equipment And Materials
- Behavioral Objective:**
- Condition:** Given a [course final exam summative test](#)
 - Behavior:** The student will describe cleaning and field level maintenance of audiovisual training aid devices
 - Standard:** With a minimum 80% accuracy on the [course final exam summative test](#) according to the information contained in Fire and Emergency Services Instructor, IFSTA, Seventh Edition, Pages 272-274
- Materials Needed:**
- Writing board/pad with markers/erasers
 - Appropriate audiovisual training aids and devices
- References:**
- Fire and Emergency Services Instructor, IFSTA, Seventh Edition, Pages 272-274
- 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.
- | | |
|-----------------------------|---------------------|
| A ttention (attract) | B egin |
| C uriosity (arouse) | A ssociation |
| I nterest (create) | S tudents |
| D esire (stimulate) | E xperience |
- 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.



TRAINING INSTRUCTOR 1C

Instructional Development Techniques

PRESENTATION	APPLICATION
<ul style="list-style-type: none"> 6. Clean chalk and whiteboards completely when finished using them 7. Clean filters as necessary 8. Clean audio and video heads according to manufacturer recommended methods and intervals 	<p>SLIDE: #-#-184</p>
<p>LXIV. CARE</p> <ul style="list-style-type: none"> A. Proper care will prevent damage and extend the life of audiovisual materials and equipment B. General care guidelines <ul style="list-style-type: none"> 1. Do not leave electronic equipment or media in vehicles during extreme temperatures or in direct sunlight 2. Storage <ul style="list-style-type: none"> a) Media (slides, transparencies, memory sticks) <ul style="list-style-type: none"> 1) In appropriate storage containers 2) Temperature-controlled areas 3) Out of direct sunlight b) Mannequins <ul style="list-style-type: none"> 1) In carrying cases or closed cabinets c) Projectors <ul style="list-style-type: none"> 1) According to manufacturer's guidelines d) Power cords <ul style="list-style-type: none"> 1) Wrap securely 3. Use dust covers on equipment that is not being used 4. Use lens caps on all optical lenses 5. Wear cotton gloves when <ul style="list-style-type: none"> a) Handling transparencies and slides 	<p>SLIDE: #-#-185</p> <p>What are some storage considerations for media?</p>



TRAINING INSTRUCTOR 1C

Instructional Development Techniques

PRESENTATION	APPLICATION
<ul style="list-style-type: none"> b) Touching lenses or changing light bulbs in projectors 6. Allow projectors sufficient cool-down time when powering down <ul style="list-style-type: none"> a) Extends the life of the bulb 	<p>Why is it important to allow bulbs to cool down?</p> <p>SLIDE: #-#-186</p>
<p>LXV. MAINTENANCE</p> <ul style="list-style-type: none"> A. Only qualified personnel should perform specialized maintenance of audiovisual equipment B. When performing basic maintenance <ul style="list-style-type: none"> 1. Follow manufacturers' guidelines 2. Unplug electrical power cords and remove batteries <ul style="list-style-type: none"> a) To prevent shock C. Instructors should be able to perform some basic maintenance <ul style="list-style-type: none"> 1. Replace projector bulbs <ul style="list-style-type: none"> a) Always wear cotton gloves to prevent skin oil contamination of the bulb 2. Lubricate gears and moving parts <ul style="list-style-type: none"> a) Follow manufacturer's recommendations 3. Tighten loose screws and connections <ul style="list-style-type: none"> a) Do not over-tighten 4. Periodically clean air filters in multimedia projectors <ul style="list-style-type: none"> a) Clogged filters cause cooling fans to work harder and decreases the life of the unit 	<p>SLIDE: #-#-187</p> <p>What are some basic maintenance tasks that instructors should be able to perform?</p>



TRAINING INSTRUCTOR 1C

Instructional Development Techniques

Summary:

Instructors can improve the dependability and service life of audiovisual equipment by performing regular inspections, caring for, and cleaning the equipment. In the event that equipment should fail, the ability to perform basic maintenance tasks may help the instructional delivery to continue as planned.

Evaluation:

The student will complete the ~~course final exam~~[summative test](#) at a time determined by the instructor.

Assignment:

Review your notes and read Fire and Emergency Services Instructor, IFSTA, Seventh Edition, Pages 272-274 in order to prepare yourself for the upcoming test. Study for our next session.



TRAINING INSTRUCTOR 1C

Instructional Development Techniques

Topic: 3-10: Developing Audiovisual Training Aids
Time Frame 1:30
Level of Instruction: Level II
Authority: 2008 Training Instructor CTS #9: Describe And Demonstrate The Use Of Audiovisual Equipment And Materials

Behavioral Objective:

Condition: Given an activity and a [course final exam summative test](#)

Behavior: The student will describe and demonstrate the development of audiovisual training aids to be used during the delivery of a cognitive lesson plan

Standard: With a minimum 80% accuracy on the [course final exam summative test](#) according to the information contained in Fire and Emergency Services Instructor, IFSTA, Seventh Edition, Pages 73-75, 149-152, 248-274, 349-352, Training Instructor 1C Student Supplement, SFT, 2010 Edition, Page 69, and successfully completing Individual Activity 3-10-1

Materials Needed:

- Writing board/pad with markers/erasers
- Appropriate audiovisual equipment
- Appropriate audiovisual materials
- Individual Activity 3-10-1: Developing Audiovisual Media

References:

- Curriculum Development Guidelines, SFT
- Fire and Emergency Services Instructor, IFSTA, Seventh Edition, Pages 73-75, 149-152, 248-274, and 349-352
- www.copyright.gov

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.

A ttention (attract)	B egin
C uriosity (arouse)	A ssociation
I nterest (create)	S tudents
D esire (stimulate)	E xperience

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.



TRAINING INSTRUCTOR 1C

Instructional Development Techniques

PRESENTATION	APPLICATION
<p>LXVI. CONSIDERATIONS WHEN DEVELOPING AUDIOVISUAL MATERIALS</p> <p>A. Ensure audiovisual materials support the behavioral objective/learning outcomes</p> <ol style="list-style-type: none">1. Domains of learning<ol style="list-style-type: none">a) Cognitiveb) Psychomotorc) Affective2. Styles and methods of learning<ol style="list-style-type: none">a) Audiob) Visualc) Kinesthetic3. Laws of learning<ol style="list-style-type: none">a) Readinessb) Exercisec) Effectd) Disusee) Associationf) Recencyg) Primaryh) Intensity4. Theories of learning and remembering<ol style="list-style-type: none">a) Sensory stimulation theory<ol style="list-style-type: none">1) For people to change, they must invest their senses in the process	<p>SLIDE: #-#-188</p> <p>SLIDE: #-#-189</p> <p>What domains of learning do they support?</p> <p>What are some of the laws of learning?</p>



TRAINING INSTRUCTOR 1C

Instructional Development Techniques

PRESENTATION	APPLICATION
<p>2) During a learning session, instructors stimulate what students</p> <ul style="list-style-type: none"> • See • Hear • Touch • Smell • Taste <p>b) Cone of learning</p> <ol style="list-style-type: none"> 1) Used in the fire service for many years 2) Illustrates that students retain the following amounts of information <ul style="list-style-type: none"> • 10% of what they read • 20% of what they hear • 30% of what they see • 50% of what they see and hear • 70% of what they say or repeat • 90% of what they say while doing what they are talking about <p>5. Instructor needs to perform an assessment</p> <ol style="list-style-type: none"> a) Consider what is the best way for your audience <p>6. This is why we use an illustrated lecture</p> <p>B. Copyright</p> <ol style="list-style-type: none"> 1. Fixation <ol style="list-style-type: none"> a) Putting an original creation into a tangible form which allows people to perceive it 	<p>How do students achieve the greatest amount of retention?</p> <p>What are the major elements of copyright?</p>



TRAINING INSTRUCTOR 1C

Instructional Development Techniques

PRESENTATION	APPLICATION
<p>2. Originality</p> <ul style="list-style-type: none"> a) Requires work to be a product of the author's own mind b) Cannot copyright facts or theories <p>3. Expression: the work must be an "expression" and not an "idea." Ideas cannot be copyrighted, although one's expression of that theory could be.</p> <p>C. Fair use</p> <ul style="list-style-type: none"> 1. Under the Fair Use Doctrine rule of copyright law, an author may make limited use of another author's work without asking permission 2. The fair use privilege is perhaps the most significant limitation on a copyright owner's exclusive rights 3. If you write or publish, you need a basic understanding of what is and is not fair use <p>D. Plagiarism</p> <ul style="list-style-type: none"> 1. Presenting someone else's work as your own 2. If you use it – give credit where credit is warranted <p>E. Obtain permission for use</p> <p>NOTE: Allow discussion of students' personal experiences.</p> <p>LXVII. DEVELOPMENT GUIDELINES</p> <p>A. Typefaces</p> <ul style="list-style-type: none"> 1. Serif fonts <ul style="list-style-type: none"> a) Have curly ends on the beginning or ending of the font b) Sometimes referred to as tails or feet c) Hard to see by a good portion of your audience 2. Sans-serif fonts 	<p>SLIDE: #-#-190</p> <p>What are the typefaces used with developing audiovisual materials?</p>



TRAINING INSTRUCTOR 1C

Instructional Development Techniques

PRESENTATION	APPLICATION
<p>5. Guideline: use parallel structure on each slide</p> <ul style="list-style-type: none">a) Start phrases with nounsb) Start bullets with verbs <p>LXVIII. INSTRUCTOR COMPETENCY</p> <ul style="list-style-type: none">A. Remember, audiovisual aids are not a crutchB. Audiovisual software does not replace the instructorC. Instructors must practice using audiovisual aids in order to reinforce the behavioral objectives<ul style="list-style-type: none">1. Be prepared to use audiovisual material that has been developed for the instructionD. Practice and become comfortable with the strategic placement of the computer and projected imageE. Avoid reading off the screen F. A well prepared instructor has a "Plan B" as an alternative if the technology fails or other issues arise with audiovisual materials <p>NOTE: Refer students to <u>Individual Activity 3-10-1: Developing Audiovisual Training Aids</u> in their student supplements.</p>	<p>SLIDE: #-#-191</p> <p>What do instructors do when the audiovisual materials fails?</p> <p>CLASS ACTIVITY: Complete Individual Activity 3-10-1. Start in the class and finish as homework if necessary.</p>



TRAINING INSTRUCTOR 1C

Instructional Development Techniques

Summary:

Audiovisual media is an important tool for enhancing the learning process. While developing the media, you must remember the most important consideration – the media must support the behavioral objective. Keeping in line with the principles of learning and audiovisual development guidelines will ensure that your product is effective.

Evaluation:

The student will complete the [course final exam summative test](#) at a time determined by the instructor.

Assignment:

Review your notes and read Fire and Emergency Services Instructor, IFSTA, Seventh Edition, Pages 73-75, 149-152, 248-274, 349-352, and Training Instructor 1C Student Supplement, SFT, 2010 Edition, Pages 69 in order to prepare yourself for the upcoming test. Complete Individual Activity 3-10-1. Study for our next session.



TRAINING INSTRUCTOR 1C

Instructional Development Techniques

INDIVIDUAL ACTIVITY 3-10-1: DEVELOPING AUDIOVISUAL TRAINING AIDS

Time Frame: 0:30 in-class; completed as homework

Materials Needed:

- Fire and Emergency Services Instructor, IFSTA, Seventh Edition, Pages 73-75, 149-152, 248-274, and 349-352
- Audiovisual Checklist

Introduction: As an instructor, you have an obligation to develop audiovisual materials to support your lessons. This activity provides the students the opportunity to develop audiovisual materials to use during the cognitive lesson plan teaching demonstration. The instructor will be available for assistance during the classroom portion.

Directions:

1. Review your notes for this lesson.
2. Read Fire and Emergency Services Instructor, IFSTA, Seventh Edition, Pages 73-75, 149-152, 248-274, and 349-352.
3. Prepare a minimum of two (2) types of audiovisual aids to be presented with the delivery of your cognitive lesson plan.
 - One must be projected and one nonprojected
4. Use the information in your student supplement as a guide to make sure your audiovisual materials support your lesson.



TRAINING INSTRUCTOR 1C

Instructional Development Techniques

Topic: 3-11: Procedures For Evaluating Student Instructor Teaching Demonstrations

Time Frame: 0:30

Level of Instruction: Level II

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

Behavioral Objective:

Condition: Given activities and a [course final exam summative test](#)

Behavior: The student will describe and demonstrate procedures for evaluating student instructor psychomotor and cognitive teaching demonstrations, including providing feedback, making constructive suggestions for improvement, and completing evaluation forms

Standard: With a minimum 80% accuracy on the [course final exam summative test](#) according to the information contained in Fire and Emergency Services Instructor, IFSTA, Seventh Edition, Pages 359-362 and successfully completing Individual Activities 3-11-1, 3-11-2, and 3-11-3

Materials Needed:

- Writing board pad with markers/erasers
- Appropriate audiovisual training aids and devices
- Blank Student Instructor Cognitive Teaching Demonstration Evaluation Form
- Blank Student Instructor Psychomotor Teaching Demonstration Evaluation Form
- Individual Activity 3-11-1: Evaluating A Student Instructor's Cognitive Teaching Demonstration As The Primary Evaluator
- Individual Activity 3-11-2: Evaluating A Student Instructor's Cognitive Teaching Demonstration As The Secondary Evaluator
- Individual Activity 3-11-3: Evaluating A Student Instructor's Psychomotor Teaching Demonstration As The Primary Evaluator

References:

- Fire and Emergency Services Instructor, IFSTA, Seventh Edition, Pages 359-362



TRAINING INSTRUCTOR 1C

Instructional Development Techniques

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.



TRAINING INSTRUCTOR 1C

Instructional Development Techniques

PRESENTATION	APPLICATION
<p>LXIX. INSTRUCTOR EVALUATIONS</p> <p>A. The purpose is to assess the effectiveness of a presentation and to provide constructive criticism for improvement</p> <ol style="list-style-type: none">1. Focused on objective criteria<ol style="list-style-type: none">a) Easily defined or observable<ol style="list-style-type: none">1) What you saw2) What you heard3) Examples<ul style="list-style-type: none">• She spoke with good clarity and volume• He made eye contact with students in the front row but did not look at the rest of the class2. Avoid subjective criteria<ol style="list-style-type: none">a) Not easily defined or observable<ol style="list-style-type: none">1) What you felt2) Examples<ul style="list-style-type: none">• He spoke well• Her eye contact was O.K. <p>LXX. PROCEDURES FOR EVALUATION</p> <p>A. Before the evaluation</p> <ol style="list-style-type: none">1. Review the evaluation materials<ol style="list-style-type: none">a) Evaluation form2. Become familiar with evaluation criteria	<p>SLIDE: #-#-192</p> <p>SLIDE: #-#-193</p> <p>What makes something objective?</p> <p>What is an example of a subjective statement?</p> <p>SLIDE: #-#-194</p>



TRAINING INSTRUCTOR 1C

Instructional Development Techniques

PRESENTATION	APPLICATION
<p>5. Presentation techniques</p> <ul style="list-style-type: none"> a) Verbal communication <ul style="list-style-type: none"> 1) Volume 2) Clarity 3) Lack of interferences b) Nonverbal communication <ul style="list-style-type: none"> 1) Eye contact 2) Gestures 3) Lack of distracting mannerisms c) Audiovisual training aids <ul style="list-style-type: none"> 1) Easily seen 2) Support presentation 3) Used effectively d) Active learning environment <ul style="list-style-type: none"> 1) Frequent use of questioning techniques 2) Active student/instructor interaction 3) Active student/student interaction <p>6. Appropriate time management</p> <p>LXXII. AFTER THE EVALUATION</p> <ul style="list-style-type: none"> A. Complete evaluation form B. Provide objective feedback to student instructor <p>1. Note strengths</p>	<p>What criteria will we be using to evaluate the instructor's use of training aids?</p> <p>SLIDE: #-#-196</p> <p>What aspects of the presentation will the evaluation give the student instructor feedback on?</p>



TRAINING INSTRUCTOR 1C

Instructional Development Techniques

PRESENTATION	APPLICATION
<p>2. Mention areas of possible improvement</p> <ul style="list-style-type: none">a) Provide constructive suggestions <p>NOTE: Refer students to <u>Individual Activity 3-11-1: Evaluating A Student Instructor's Cognitive Teaching Demonstration As The Primary Evaluator</u>, <u>Individual Activity 3-11-2: Evaluating A Student Instructor's Cognitive Teaching Demonstration As The Secondary Evaluator</u>, and <u>Individual Activity 3-11-3: Evaluating A Student Instructor's Psychomotor Teaching Demonstration As The Primary Evaluator</u> in their student supplements.</p>	<p>CLASS ACTIVITY: Complete Individual Activities 3-11-1, 3-11-2, and 3-11-3 during the remainder of the class.</p>



TRAINING INSTRUCTOR 1C

Instructional Development Techniques

Summary:

The teaching evaluations you will receive and deliver in this class will be an invaluable tool to assist you on your way to becoming an effective instructor. Participating in this process will allow you to begin to see what works, and what does not when you are developing and presenting instruction. These evaluations will help you refine your techniques and become the most effective instructor possible.

Evaluation:

The student will complete activities and ~~course final exam~~[summative test](#) at a time determined by the instructor.

Assignment:

Review your notes and read Fire and Emergency Services Instructor, IFSTA, Seventh Edition, Pages 359-362 for the upcoming test. Study for our next session.



TRAINING INSTRUCTOR 1C

Instructional Development Techniques

Individual Activity 3-11-1: Evaluating a Student Instructor's Cognitive Teaching Demonstration as the Primary Evaluator

Time Frame: 0:45

- Materials Needed:**
- Blank Cognitive Teaching Demonstration Evaluation Form
 - Sample Passing Student Instructor Cognitive Teaching Demonstration Evaluation
 - Sample Failing Student Instructor Cognitive 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 1C course and give constructive, positive feedback to their fellow students.

- Directions:**
1. Review the blank Cognitive Teaching Demonstration Evaluation form.
 2. Review the Sample Passing Student Instructor Cognitive Teaching Demonstration Evaluation form. Pay special attention to the details of the remarks in each category.
 3. Review the Sample Failing Student Instructor Cognitive Teaching Demonstration Evaluation form. 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.



TRAINING INSTRUCTOR 1C

Instructional Development Techniques

Individual Activity 3-11-2: Evaluating a Student Instructor's Cognitive Teaching Demonstration as the Secondary Evaluator

Time Frame: 0:45

- Materials Needed:**
- Blank Cognitive Teaching Demonstration Evaluation Form
 - Sample Passing Student Instructor Cognitive Teaching Demonstration Evaluation
 - Sample Failing Student Instructor Cognitive 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 1C course and give constructive, positive feedback to their fellow students.

- Directions:**
1. Review the blank Cognitive Teaching Demonstration Evaluation form.
 2. Review the Sample Passing Student Instructor Cognitive Teaching Demonstration Evaluation form. Pay special attention to the details of the remarks in each category.
 3. Review the Sample Failing Student Instructor Cognitive Teaching Demonstration Evaluation form. 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.



TRAINING INSTRUCTOR 1C

Instructional Development Techniques

Individual Activity 3-11-3: 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 1C course and give constructive, positive feedback to their fellow students.

- Directions:**
1. Review the blank Psychomotor Student Teaching Demonstration Evaluation Form.
 2. Review the Sample Passing Student Instructor Psychomotor Teaching Demonstration Evaluation form. Pay special attention to the details of the remarks in each category.
 3. Review the Sample Failing Student Instructor Psychomotor Teaching Demonstration Evaluation form. 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.



TRAINING INSTRUCTOR 1C

Instructional Development Techniques

Student Instructor Cognitive Teaching Demonstration Evaluation Form

Student Instructor: _____ Demo #: [] 1st [] 2nd

Topic: _____

Date: _____ Level of Instruction: _____

Student Evaluator: _____ Primary [] Secondary []

EVALUATED COMPONENTS	CONSIDER	YES	NO	Pass or Fail
1. CLASSROOM MANAGEMENT	Seating arrangement, lighting, distractions	<input type="checkbox"/>	<input type="checkbox"/>	P or F
Comments:				
2. LEARNING OBJECTIVE	Must include Condition, Behavior, Standard	<input type="checkbox"/>	<input type="checkbox"/>	P or F
Comments:				
3. PREPARATION	ACID BASE, Effective	<input type="checkbox"/>	<input type="checkbox"/>	P or F
Comments:				
4. PRESENTATION				
4a. Content	Appropriate lesson flow, known to unknown	<input type="checkbox"/>	<input type="checkbox"/>	P or F
Comments:				
4b. Verbal Communication	Volume, clarity, interferences	<input type="checkbox"/>	<input type="checkbox"/>	P or F
Comments:				
4c. Nonverbal Communication	Eye contact, gestures, distracting mannerisms	<input type="checkbox"/>	<input type="checkbox"/>	P or F
Comments:				
5. APPLICATION				
5a. Audiovisual Training Aids	Easily seen, support lecture, used effectively	<input type="checkbox"/>	<input type="checkbox"/>	P or F
Comments:				



TRAINING INSTRUCTOR 1C

Instructional Development Techniques

EVALUATED COMPONENTS	CONSIDER	YES	NO	Pass or Fail
5b. Active Learning Environment	Questioning techniques, interaction, feedback	<input type="checkbox"/>	<input type="checkbox"/>	P or F
Comments:				
6. SUMMARY		<input type="checkbox"/>	<input type="checkbox"/>	P or F
Comments:				
7. EVALUATION:		<input type="checkbox"/>	<input type="checkbox"/>	P or F
8. ASSIGNMENT		<input type="checkbox"/>	<input type="checkbox"/>	P or F
- Critical Component: Failure on this component results in failure of the teaching demonstration				

Primary Evaluator: _____ Actual Teaching Time
 Grade: Pass [] Fail []

Secondary Evaluator: _____ Actual Teaching Time
 Grade: Pass [] Fail []

Comments:

Comments:

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

Comments:



TRAINING INSTRUCTOR 1C

Instructional Development Techniques

Student Instructor Psychomotor Teaching Demonstration Evaluation Form

Student Instructor: _____ Demo #: [] 1st [] 2nd
 Topic: _____
 Date: _____ Level of Instruction: _____
 Student Evaluator: _____ Primary [] Secondary []

EVALUATED COMPONENTS		CONSIDER	YES	NO	Pass or Fail
1. MANAGED TRAINING ENVIRONMENT	Disruptions, distractions				P or F
Comments:					
2. LEARNING OBJECTIVE	Must include Condition, Behavior, Standard				P or F
Comments:					
3. PREPARATION	Effective, ACID BASE				P or F
Comments:					
4. PRESENTATION					
4a. Content	Appropriate lesson flow, known to unknown				P or F
Comments:					
4b. Training Aids and Props	Same as what the students will use, easily seen, used effectively and safely				P or F
Comments:					
4c. Performed Skill At Full-speed Using Skill Sheet	Using skill sheet, promoting safety				P or F
Comments:					
4d. Performed Again Slowly, Verbalizing Operations And Key Points	Appropriate speed, verbalizing operations and key points, emphasizing safety				P or F
Comments:					
4e. Verbal Communication	Volume, clarity, interferences				P or F
Comments:					



TRAINING INSTRUCTOR 1C

Instructional Development Techniques

EVALUATED COMPONENTS		CONSIDER	YES	NO	Pass or Fail
4f. Nonverbal Communication	Eye contact, gestures, distracting mannerisms				P or F
Comments:					
5. APPLICATION					
5a. Student Skill Performance	Completes all operations, checking key points, emphasizing safety, correcting errors				P or F
Comments:					
5b. Active Learning Environment	Questioning techniques, interaction, feedback				P or F
Comments:					
6. EVALUATION	Student performs without assistance, feedback				P or F
7. ASSIGNMENT					P or F
- Critical Component: Failure on this component results in failure of the teaching demonstration					

Student Instructor: _____

Demo #: [] 1st [] 2nd

Primary Evaluator: _____ Actual Teaching Time

Secondary Evaluator: _____ Actual Teaching Time

Grade: Pass [] Fail []

Grade: Pass [] Fail []

Comments: _____

Comments: _____

Master Instructor
or Skills Evaluator: _____ Actual Teaching Time

Grade: Pass [] Fail []

Comments: _____



TRAINING INSTRUCTOR 1C

Instructional Development Techniques

Topic: 4-1: Purpose, Selection Criteria, And Elements Of Test Instruments

Time Frame: 1:00

Level of Instruction: Level II

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

Behavioral Objective:

Condition: Given a ~~course final exam~~summative test

Behavior: The student will describe the purpose, criteria for selection, and elements of test instruments

Standard: With a minimum 80% accuracy on the ~~course final exam~~summative test according to the information contained in Fire and Emergency Services Instructor, IFSTA, Seventh Edition, Pages 303-318, 375-405, 410 and Training Instructor 1C Student Supplement, SFT, 2010 Edition, Pages 80-82

Materials Needed:

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

References:

- Fire and Emergency Services Instructor, IFSTA, Seventh Edition, Pages 303-318, 375-405, and 410

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.

A ttention (attract)	B egin
C uriosity (arouse)	A ssociation
I nterest (create)	S tudents
D esire (stimulate)	E xperience

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.



TRAINING INSTRUCTOR 1C

Instructional Development Techniques

PRESENTATION	APPLICATION
<p>LXXIII. PURPOSES OF TEST INSTRUMENTS</p> <p>NOTE: Refer to <u>Fire and Emergency Services Instructor</u>, IFSTA, Seventh Edition, Pages 303-318.</p> <ul style="list-style-type: none">A. Serves as the final step of the four-step method of instruction to<ul style="list-style-type: none">1. Evaluate the student understanding2. Evaluate teaching effectivenessB. Evaluate student understanding - provide feedback to students on<ul style="list-style-type: none">1. What has been learned2. What should have been learned3. What still needs to be learnedC. Evaluate teaching effectiveness - allows instructors to evaluate<ul style="list-style-type: none">1. Progress that students make during a course2. Effectiveness of instructional materials and techniquesD. Test process terms<ul style="list-style-type: none">1. Evaluation<ul style="list-style-type: none">a) Process used to assess<ul style="list-style-type: none">1) A student's achievements2) The effectiveness of learning experiencesb) Made against a defined criteria or standard	<p>SLIDE: #-#-197</p> <p>What are some purposes of test instruments?</p> <p>SLIDE: #-#-198</p> <p>How can a test instrument evaluate teaching effectiveness?</p> <p>SLIDE: #-#-199</p>



TRAINING INSTRUCTOR 1C

Instructional Development Techniques

PRESENTATION	APPLICATION
<p>2. Testing</p> <ul style="list-style-type: none"> a) Process of evaluation that implies standardization b) Student is compared against a defined criteria or standard <p>3. Validity</p> <ul style="list-style-type: none"> a) Extent to which a test measures what it was designed to measure <ul style="list-style-type: none"> 1) Did students learn the desired outcome or did they guess the right answer? 2) Did students learn the objectives, but due to poor test design, they were unable to identify the correct answers? <p>4. Reliability</p> <ul style="list-style-type: none"> a) Condition that ensures that the test is dependable <ul style="list-style-type: none"> 1) Assures it yields the same results each time it is given b) A reliable test is free from <ul style="list-style-type: none"> 1) Ambiguous items or directions 2) Vague scoring criteria 3) Environmental distractions 4) Opportunities for cheating or guessing <p>LXXIV. TEST CLASSIFICATIONS</p> <p>A. Interpretation classification (two types)</p> <ul style="list-style-type: none"> 1. This test classification is based on interpreting test results in one of two ways 	<p>Relative to evaluation and testing, what is validity?</p> <p>Relative to evaluation and testing, what is reliability?</p> <p>SLIDE: #-#-200</p>



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Instructional Development Techniques

PRESENTATION	APPLICATION
<p>a) Criterion-referenced tests</p> <ol style="list-style-type: none">1) Compare performance against appropriate minimum standards2) Majority of fire and emergency service tests are criterion-referenced3) Criteria established through<ul style="list-style-type: none">• NFPA professional qualifications standards• Federal, state, or local requirements• Other professionally accepted requirements	<p>SLIDE: #-#-201</p> <p>To what do criterion-referenced tests compare student performance?</p>
<p>b) Norm-referenced tests</p> <ol style="list-style-type: none">1) Rate student performance compared to other students based on broad sampling2) Grading "on a curve"3) Should not be used as end-of-course or certification test4) May be used for promotional examinations	<p>SLIDE: #-#-202</p> <p>How do norm-referenced tests rate student performance?</p>
<p>B. Purpose classification (three types)</p> <ol style="list-style-type: none">1. Prescriptive tests (pretest)<ol style="list-style-type: none">a) Given before the instructionb) Measures a student's current level of knowledge to measure two following elements	<p>SLIDE: #-#-203</p>



TRAINING INSTRUCTOR 1C

Instructional Development Techniques

PRESENTATION	APPLICATION
<ul style="list-style-type: none">1) Readiness<ul style="list-style-type: none">• Determines if the student has the necessary knowledge and skills to perform in the course• Identifies the need for remedial training2) Placement<ul style="list-style-type: none">• Determines if the student has already achieved the behavioral objectives• Identifies students that can move on to the next course2. Formative tests<ul style="list-style-type: none">a) Evaluates progressb) Given during the coursec) Measure improvementd) Give the instructor and student feedback on learning progress3. Summative tests<ul style="list-style-type: none">a) Comprehensive testsb) Evaluates success of teaching and learningc) Typically given at the middle and/or end of instructionC. Administration classification (three types)<ul style="list-style-type: none">1. Determining which type to use is based on the type of learning that is being evaluated	<p>SLIDE: #-#-204</p> <p>What do formative tests measure?</p> <p>SLIDE: #-#-205</p> <p>When might summative tests be given?</p> <p>SLIDE: #-#-206</p>



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Instructional Development Techniques

PRESENTATION	APPLICATION
<p>2. Oral – verbal answers to spoken questions</p> <p>a) Questions may be either</p> <ol style="list-style-type: none">1) Closed<ul style="list-style-type: none">• Requiring only a single brief answer• Used when the purpose of the test is to determine knowledge2) Open<ul style="list-style-type: none">• Permit longer answers that may lead to further questions• Used when the purpose of the test is to determine how a student responds under pressure <p>b) Advantages</p> <ol style="list-style-type: none">1) Only valid way to measure student's ability to verbally communicate ideas, concepts, or processes2) Allows instructors to observe student's skills in<ul style="list-style-type: none">• Judgment• Thought• Approach to problems• Ability to communicate under pressure <p>c) Disadvantages</p> <ol style="list-style-type: none">1) Scores may be unreliable because of evaluator subjectivity2) Time consuming to administer	<p>What is a closed question?</p> <p>What are some advantages of oral exams?</p> <p>SLIDE: #-#-208</p>



TRAINING INSTRUCTOR 1C

Instructional Development Techniques

PRESENTATION	APPLICATION
<p>3) Difficult to ensure consistency between individual test takers</p> <p>3. Written - evaluates the student's cognitive and affective learning objectives</p> <ul style="list-style-type: none">a) Multiple-choice<ul style="list-style-type: none">1) Single question followed by multiple answersb) True-False<ul style="list-style-type: none">1) Statement that requires student to determine whether it is true or falsec) Matching<ul style="list-style-type: none">1) Series of items needing matching to related information in another columnd) Completion<ul style="list-style-type: none">1) A question or statement missing a worde) Short Answer<ul style="list-style-type: none">1) Question that requires a brief answerf) Essay<ul style="list-style-type: none">1) Question that requires a lengthy answer or response <p>4. Performance</p> <ul style="list-style-type: none">a) Students are required to perform a skill, task, or evolution rather than talk or write about itb) Must be based on standard criteria and performance objectives <p>NOTE: Refer to <u>Fire and Emergency Services Instructor</u>, IFSTA, Seventh Edition, Page 376.</p>	<p>SLIDE: #-#-209</p> <p>What are some common types of written tests?</p> <p>SLIDE: #-#-210</p> <p>What are students required to do during a performance test?</p>



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Instructional Development Techniques

PRESENTATION	APPLICATION
<p>LXXV. TEST PLANNING</p> <p>A. The key to designing effective tests is careful planning</p> <p>B. Four steps</p> <ol style="list-style-type: none">1. Step 1<ol style="list-style-type: none">a) Determine test purpose and type2. Step 2<ol style="list-style-type: none">a) Identify and define learning objectives or learning outcomes3. Step 3<ol style="list-style-type: none">a) Prepare test specifications4. Step 4<ol style="list-style-type: none">a) Construct appropriate test items	<p>SLIDE: #-#-211</p> <p>What are the four steps of test planning?</p>
<p>NOTE: Refer to <u>Fire and Emergency Services Instructor, IFSTA, Seventh Edition, Page 385.</u></p>	<p>SLIDE: #-#-212</p>
<p>LXXVI. TEST USABILITY</p> <p>A. Easy to administer</p> <p>B. Easy to take</p> <p>C. Sufficient time for administration</p> <p>D. Cost effective</p> <p>E. Available comparable forms</p> <p>F. Easy to score</p>	
<p>NOTE: Refer to <u>Fire and Emergency Services Instructor, IFSTA, Seventh Edition, Page 390.</u></p>	
<p>LXXVII. WRITTEN TEST TYPES</p> <p>A. Useful for measuring retention and understanding of technical information</p> <p>B. Used to evaluate cognitive and affective learning</p>	



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Instructional Development Techniques

PRESENTATION	APPLICATION
<p>4) Disadvantages</p> <ul style="list-style-type: none">• Can be difficult to construct tests that include different difficulty-level items• Can be difficult to create enough plausible distracters for each stem• 25% guessing factor <p>b) True-False</p> <ol style="list-style-type: none">1) Statement that requires students to determine whether it is true or false2) Advantages<ul style="list-style-type: none">• Adaptable to a wide range of subject matter• Easy to score• Can promote student interest and motivation and introduce points for discussion3) Disadvantages<ul style="list-style-type: none">• Difficult to create test items that are completely true or completely false• 50% guessing factor• Do not give students the opportunity to demonstrate what they really know <p>c) Matching</p> <ol style="list-style-type: none">1) Series of words, dates, events, or items listed in one column2) Definition or related information in second column3) Students must select choice in column 2 that matches the item in column 1	<p>What are some disadvantages of multiple-choice tests?</p> <p>What are some advantages of true-false tests?</p>



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Instructional Development Techniques

PRESENTATION	APPLICATION
<ul style="list-style-type: none"> • Limited in measuring complex achievement • Difficult to design items so that only one answer is correct <p>e) Essay</p> <ol style="list-style-type: none"> 1) Question that requires a lengthy, sometimes subjective, response 2) Advantages <ul style="list-style-type: none"> • Eliminates guessing • Items are easy to create • Test skills in the higher learning levels 3) Disadvantages <ul style="list-style-type: none"> • Difficult to score because they are very subjective and answers may be difficult to read • Time consuming both to complete and to score • Writing ability and penmanship can be a barrier • Students with writing difficulties may be at a disadvantage 	<p>What are some disadvantages of essay tests?</p> <p>SLIDE: #-#-216</p>
<p>LXXVIII. INTERPRETIVE EXERCISES</p> <ol style="list-style-type: none"> A. Students are provided with information in the form of a paragraph, chart, diagram, etc. B. Items are answered based on interpretation of information 	<p>What is an interpretive exercise?</p>



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Instructional Development Techniques

PRESENTATION	APPLICATION
<p>C. Advantages</p> <ol style="list-style-type: none">1. Material may be tested at great depth2. Complex levels of learning may be tested3. Knowledge is tested in realistic methods4. Testing process is interesting for students <p>D. Disadvantages</p> <ol style="list-style-type: none">1. Complex and difficult to construct2. Require a high level of student reading ability3. Take a long time to administer <p>LXXIX. ORAL TESTS</p> <p>A. Require students to verbally respond to spoken questions</p> <p>B. Usually given one-on-one between instructor and student</p> <p>C. Not commonly used in the fire and emergency services</p> <p>D. Used in the following situations</p> <ol style="list-style-type: none">1. When the student cannot read at the level to which a test is written2. When a student must demonstrate the ability to respond under pressure3. To supplement performance tests to determine if a student knows the reasoning behind the tasks4. At the beginning of the class to<ol style="list-style-type: none">a) Determine if assigned reading has been accomplishedb) Provide a pretest and introduction to the topic	<p>SLIDE: #-#-218</p> <p>In what situations would oral tests be used?</p> <p>SLIDE: #-#-219</p>



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Instructional Development Techniques

PRESENTATION	APPLICATION
<ul style="list-style-type: none"> 5. As a component of a comprehensive exam <ul style="list-style-type: none"> a) Frequently for promotional processes E. When determining student understanding at the end of a lesson 	<p>SLIDE: #-#-220</p>
<p>LXXX. PERFORMANCE TESTS</p> <ul style="list-style-type: none"> A. Students are required to perform a skill, task, or evolution <ul style="list-style-type: none"> 1. Must be used when testing psychomotor learning 2. Must be based on standard criteria and performance objectives B. Discriminating <ul style="list-style-type: none"> 1. Test must separate the good students from the poor students C. Tests will be valid and reliable D. Advantages <ul style="list-style-type: none"> 1. Only way to measure student achievement in manipulative skills 2. Gives students who may struggle with oral or written tests an opportunity to succeed 3. Excellent means of motivating students 4. Provides students with a sense of accomplishment 5. Job-related 	<p>When must performance tests be used?</p> <p>What does it mean to say that a test is discriminating?</p> <p>SLIDE: #-#-221</p> <p>What are some advantages of performance tests?</p>



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Instructional Development Techniques

PRESENTATION	APPLICATION
<p>E. Disadvantages</p> <ol style="list-style-type: none">1. Scores may be unreliable because of evaluator subjectivity2. Tests are both resource and time consuming3. Difficult to score individuals in team evolutions <p>NOTE: Refer to <u>Fire and Emergency Services Instructor</u>, IFSTA, Seventh Edition, Page 410.</p>	<p>SLIDE: #-#-222</p>



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Instructional Development Techniques

Summary:

Evaluating student performance is the important fourth step of the four-step method of instruction. There are a variety of types of test instruments that can be used to achieve this including oral, written, and performance tests. The instructor must make sure that the test is based on the identified learning objectives and that it is valid and reliable.

Evaluation:

The student will complete the [course final exam summative test](#) at a time determined by the instructor.

Assignment:

Review your notes and read Fire and Emergency Services Instructor, IFSTA, Seventh Edition, Pages 303-318, 375-405, 410 and Training Instructor 1C Student Supplement, SFT, 2010 Edition, Pages 80-82 in order to prepare yourself for the upcoming test. Study for our next session.



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Instructional Development Techniques

Topic: 4-2: Creating Oral, Written, And Performance Tests
Time Frame: 2:00
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 [course-final-examsummative test](#)

Behavior: The student will describe and demonstrate the process of creating oral, written, and performance tests

Standard: With a minimum 80% accuracy on the [course-final-examsummative test](#) according to the information contained in Fire and Emergency Services Instructor, IFSTA, Seventh Edition, Pages 306-307 and 387-405, and successfully completing Group Activity 4-2-1 and Individual Activities 4-2-2 and 4-2-3

- Materials Needed:**
- Writing board/pad with markers/erasers
 - Appropriate audiovisual training aids and devices
 - Group Activity 4-2-1: Creating An Oral Test
 - Individual Activity 4-2-2: Creating A Multiple-choice Written Test
 - Individual Activity 4-2-3: Creating A True-False Written Test

- References:**
- Fire and Emergency Services Instructor, IFSTA, Seventh Edition, Pages 306-307 and 387-405

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.

A ttention (attract)	B egin
C uriosity (arouse)	A ssociation
I nterest (create)	S tudents
D esire (stimulate)	E xperience

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



TRAINING INSTRUCTOR 1C

Instructional Development Techniques

to stimulate student motivation.



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Instructional Development Techniques

PRESENTATION	APPLICATION
<p>LXXXI. TEST TYPES</p> <p>A. Written tests</p> <ol style="list-style-type: none">1. Test cognitive ability2. Useful for measuring retention and comprehension of technical information <p>B. Oral tests</p> <ol style="list-style-type: none">1. Test cognitive and communication abilities2. Not commonly used in the fire and emergency services <p>C. Performance tests</p> <ol style="list-style-type: none">1. Test psychomotor skill ability as it would be performed on the job2. Test on present abilities, not potential	<p>SLIDE: #-#-223</p> <p>SLIDE: #-#-224</p> <p>SLIDE: #-#-225</p> <p>SLIDE: #-#-226</p> <p>When using performance tests, are you testing present or potential abilities of the student?</p> <p>SLIDE: #-#-227</p>
<p>LXXXII. COMMON CONSIDERATIONS FOR ALL TESTS</p> <p>A. General</p> <ol style="list-style-type: none">1. All test items must be referenced to a learning objective2. Learning objectives, in turn, must be based on information from credible sources <p>B. Format</p> <ol style="list-style-type: none">1. Spaces for date and student name on the test sheet<ol style="list-style-type: none">a) Unless separate answer sheets are provided	



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PRESENTATION	APPLICATION
<ul style="list-style-type: none">2. Test title or label3. Numbered tests of different versions<ul style="list-style-type: none">a) Aids in reporting scoresb) Test security4. Clear, easy-to-follow instructions<ul style="list-style-type: none">a) At the beginning of the testb) At the start of each section that has a different format (multiple-choice, matching, true-false, etc.)5. Sample test item and answer demonstrating how the test is to be completed6. Consecutive numbering of test items7. Single spacing within test items8. Double spacing between test items9. Point value of each test item10. Use of commonly understood terms<ul style="list-style-type: none">a) Do not use abbreviations or acronyms unless placed in parentheses following the common termC. Test item arrangement<ul style="list-style-type: none">1. Group items<ul style="list-style-type: none">a) Learning domain outcomeb) Test item type<ul style="list-style-type: none">1) Multiple-choice2) Matching3) Short answer	<p>Where should instructions be included?</p> <p>What are some considerations for arranging test items on the test instrument?</p>



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Instructional Development Techniques

PRESENTATION	APPLICATION
<ul style="list-style-type: none"> 2. Should be placed in sequence of increasing difficulty <ul style="list-style-type: none"> a) Simple to complex b) Allows students to gain confidence at beginning of test 3. Be careful that an item does not reveal the answer to subsequent items D. Test item difficulty <ul style="list-style-type: none"> 1. Based on level of instruction as identified in the lesson plan E. Instructions <ul style="list-style-type: none"> 1. Instruction on how to complete the test should be included 2. Instructions should explain <ul style="list-style-type: none"> a) Purpose of test b) Method and means for recording answers <ul style="list-style-type: none"> 1) On test document or separate answer sheet c) Suggestion on whether to guess when undecided <ul style="list-style-type: none"> 1) Some tests penalize wrong answers more than not answering an item d) Amount of time available to complete the test e) When a test has multiple parts consisting of different types of items, specific instructions at the beginning of each section should be included 	<p>What should the instructions explain?</p>
<p>LXXXIII. WRITTEN TESTS</p> <ul style="list-style-type: none"> A. Multiple-choice tests <ul style="list-style-type: none"> 1. Elements of multiple-choice test item 	<p>What are the elements of multiple-choice test item?</p>



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Instructional Development Techniques

PRESENTATION	APPLICATION
<p>a) Stem</p> <ul style="list-style-type: none">1) Question or incomplete statement <p>b) Choices or alternatives</p> <ul style="list-style-type: none">1) Best answer2) Distracters <p>2. Stem</p> <ul style="list-style-type: none">a) Write the stem in the form of a direct question or incomplete statement that measures only one learning outcomeb) Clear, brief stem that contains most of the wording<ul style="list-style-type: none">1) Do not place repeated words in the choicesc) Write positive statements<ul style="list-style-type: none">1) If negative statements are used, "emphasize" the negative word<ul style="list-style-type: none">• Underline• Bold• Italicized) Avoid grammatical clues to the correct answer <p>3. Choices</p> <ul style="list-style-type: none">a) List four choices<ul style="list-style-type: none">1) Best answer<ul style="list-style-type: none">• One that is clearly the most correct2) Three plausible distracters<ul style="list-style-type: none">• Do not include choices that are obviously wrong or humorous	<p>SLIDE: #-#-228</p> <p>If negative statements are used, what should the author do?</p> <p>How many choices should be included?</p> <p>SLIDE: #-#-229</p>



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PRESENTATION	APPLICATION
<ul style="list-style-type: none">b) Create choices that are grammatically consistent with the stemc) Avoid grammatical clues to the correct answerd) Make all choices close to the same length<ul style="list-style-type: none">1) Correct response should not be longer or shorter than the distracterse) Avoid using the following phrases<ul style="list-style-type: none">1) All of the above2) None of the abovef) Place correct answer in varied positions among the A, B, C, and D choicesg) Place each choice<ul style="list-style-type: none">1) On a separate, indented line2) In a single columnh) Begin responses with upper-case letters when the stem is a complete questioni) Begin the responses with lower-case letters when the stem is an incomplete sentence <p>4. Specific formatting details may be determined by</p> <ul style="list-style-type: none">a) Local policy or preferenceb) Computer-generated test creation software <p>5. Other guidelines for multiple-choice tests</p> <ul style="list-style-type: none">a) Do not test trivial ideas or informationb) Use correct grammar and punctuation	<p>What are some phrases that should be avoided?</p> <p>What factors may influence formatting?</p> <p>SLIDE: #-#-230</p> <p>SLIDE: #-#-231</p>



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Instructional Development Techniques

PRESENTATION	APPLICATION
<p>B. True-False tests</p> <ol style="list-style-type: none">1. Difficulty in constructing is creating a statement that is either<ol style="list-style-type: none">a) Completely trueb) Completely false2. True statements should be based on facts3. False statements should be based on common misconceptions of the facts4. What to include in true-false tests<ol style="list-style-type: none">a) Write words "True" and "False" at the left margin when answers will be marked on the test paperb) Write instructions that direct students to draw a circle around the answer they select<ol style="list-style-type: none">1) Do not have students write<ul style="list-style-type: none">• "T" or "F"• "+" or "-"• "yes" or "no"c) Create a sufficient number of test items to provide reliable results<ol style="list-style-type: none">1) More items are needed than for multiple-choice tests2) Large number of items minimizes the possibility of guessing the correct answerd) Distribute an equal number of true and false test items randomly throughout the test	<p>On what should false statements be based?</p> <p>SLIDE: #-#-232</p> <p>What should be the balance between true test items and false test items?</p>



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Instructional Development Techniques

PRESENTATION	APPLICATION
<p>e) Write items that require a student to think about what they have learned, rather than merely remember it</p> <p>f) Create brief and simply stated items that deal with a single concept</p> <p>5. What to avoid when creating true-false tests</p> <p>a) Specific determiners</p> <p>1) Words that provide a clue to the answer</p> <p>2) Lead to true statements</p> <ul style="list-style-type: none"> • "Sometimes," "generally," "usually," "often" <p>3) Lead to false statements</p> <ul style="list-style-type: none"> • "Always," "never," "all," "none" <p>b) Trick or misleading items</p> <p>c) Double-negative items</p> <p>1) Are very confusing</p> <p>d) Personal pronouns such as "you"</p> <p>e) Command statements</p> <p>f) Items that test trivia or obscure facts</p> <p>g) Unusually long or short items</p> <p>h) Quoting verbatim from the book</p> <p>1) Most common mistake when writing true-false tests</p> <p>C. Matching tests</p> <p>1. Create two parallel columns of words, phrases, images, or a combination of these</p>	<p>SLIDE: #-#-233</p> <p>What are some examples of specific determiners?</p> <p>SLIDE: #-#-234</p> <p>What is the basic format of a matching test?</p>



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Instructional Development Techniques

PRESENTATION	APPLICATION
<ul style="list-style-type: none">a) For every item in the problem column there should be one matching response in the other column2. Instructions should indicate whether a response may be used more than once3. Guidelines for creating matching tests<ul style="list-style-type: none">a) Avoid placing each group of problems and responses on more than one pageb) Prepare at least five but not more than seven problem statements<ul style="list-style-type: none">1) Limiting to five allows use of a mechanically/electronically scored answer sheetc) Prepare more responses than problem statements<ul style="list-style-type: none">1) Reduces selection by eliminationd) Place appropriate titles at the head of each column<ul style="list-style-type: none">1) Number the problem statements2) Place a blank line in front of each problem statement unless a separate answer sheet will be used3) Use letters for each responsee) Arrange problems in systematic manner<ul style="list-style-type: none">1) Alphabetically2) Chronologically3) Numerically	<p>What is an advantage of having only five problem statements?</p> <p>SLIDE: #-#-235</p> <p>What are some options for arranging the problems?</p>



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Instructional Development Techniques

PRESENTATION	APPLICATION
<p>f) Avoid giving clues to answers in either the problem statements or the responses</p> <p>g) Do not include responses that are obviously wrong</p> <p>D. Short-answer/completion tests</p> <p>1. Short-answer test</p> <p>a) Question that requires an answer</p> <p>2. Completion test</p> <p>a) Incomplete statement with key word(s) eliminated</p> <p>b) Missing word represented with a blank line</p> <p>3. Guidelines for creating short-answer/completion tests</p> <p>a) Create short, concise, and direct statements so that only one answer is possible</p> <p>b) Avoid long, involved statements with a string of blanks to fill</p> <p>1) Tend to be confusing</p> <p>c) Start with a direct question and change it to an incomplete statement</p> <p>d) Ensure the answer is a key point in a lesson</p> <p>e) Arrange the statement in order to place the blank at or near the end of the sentence</p> <p>f) If a list of choices is provided, indicate when answers can be used more than once</p> <p>g) Avoid statements that call for answers with more than one word, phrase, or number</p> <p>h) Eliminate clues in the statement</p>	<p>SLIDE: #-#-236</p> <p>What is the format of a test item on a completion test?</p> <p>SLIDE: #-#-237</p> <p>SLIDE: #-#-238</p>



TRAINING INSTRUCTOR 1C

Instructional Development Techniques

PRESENTATION	APPLICATION
<p>1) Variation of length of blank</p> <p>2) Use of words such as "a" or "an" preceding the blank</p> <p>E. Essay tests</p> <p>1. Guidelines for creating essay tests</p> <p>a) Create and follow a plan for selecting test topics</p> <p>b) Write an outline of the acceptable responses</p> <p>1) Use as guide for scoring</p> <p>c) Clearly define the task to be completed when responding to each question</p> <p>d) Give thorough and specific directions that designate the</p> <p>1) Time to spent on each question</p> <p>2) Length of each response</p> <p>e) Provide enough time for students to respond to all questions</p> <p>F. Interpretive exercises</p> <p>1. Effective method for testing outcomes that involve comprehension, application, analysis, synthesis, and evaluation</p> <p>2. Create introductory material</p> <p>a) Paragraph describing a situation or scenario</p>	<p>What may serve as a clue?</p> <p>SLIDE: #-#-239</p> <p>How can an instructor prepare to assist with the grading process for an essay test?</p> <p>SLIDE: #-#-240</p> <p>For what types of situations are interpretive exercises useful?</p>



TRAINING INSTRUCTOR 1C

Instructional Development Techniques

PRESENTATION	APPLICATION
<ul style="list-style-type: none"> b) Numerical data c) Illustration, graph, table, chart, diagram, or map d) Ensure introductory material is <ul style="list-style-type: none"> 1) Relevant to learning objectives being measured 2) Brief and concise as possible 3) Should be unfamiliar to students <ul style="list-style-type: none"> • Requires them to apply learned responses from a similar situation 3. Create test items based on the introductory material <ul style="list-style-type: none"> a) May be any type of written test item type b) Apply rules for effective test item construction for each type of test item c) Answers should not be contained in introductory material d) Cannot be answered without the introductory material e) Sufficient variety and quantity to provide a good sample of student's ability to interpret introductory material 	<p>For an interpretive exercise, in what format should the test items be?</p> <p>SLIDE: #-#-241</p>
<p>LXXXIV. ORAL TESTS</p> <ul style="list-style-type: none"> A. Require students to verbally respond to spoken questions B. Usually given one-on-one between instructor and student C. Often used in conjunction with psychomotor performance tests 	<p>How do students take oral tests?</p>



TRAINING INSTRUCTOR 1C

Instructional Development Techniques

PRESENTATION	APPLICATION
<p>D. Questions may be either</p> <ol style="list-style-type: none"> 1. Closed <ol style="list-style-type: none"> a) Requiring only a single brief answer 2. Open <ol style="list-style-type: none"> a) Permitting longer answers that may lead to further questions and/or discussion <p>E. Development</p> <ol style="list-style-type: none"> 1. Base oral questions on standard criteria and performance objectives 2. Ensure that questions clearly state what students are to describe <p>F. Validation</p> <ol style="list-style-type: none"> 1. Ask questions of other faculty, experts, and students before using in actual testing conditions 2. Revise and update as necessary <p>NOTE: Refer students to <u>Group Activity 4-2-1: Creating an Oral Test</u>. Divide the class into small groups.</p>	<p>CLASS ACTIVITY: Complete Group Activity 4-2-1.</p> <p>SLIDE: #-#-242</p>
<p>LXXXV. PERFORMANCE (SKILLS) TESTS</p> <p>A. Must be used when confirming psychomotor skills learning</p> <p>B. Should be administered under controlled conditions</p> <p>C. Specify performance objectives to be measured</p> <ol style="list-style-type: none"> 1. Use student behavioral objectives from psychomotor lesson plan 	<p>When must performance tests be used?</p> <p>Where are the performance objectives to measure identified?</p>



TRAINING INSTRUCTOR 1C

Instructional Development Techniques

Summary:

When was the last time you took a written examination? Did the questions test your knowledge level? Were the questions written in such a way to be easily understood? Were any of them confusing? Ambiguous? Redundant? Were there some questions that were totally written out of context?

If tests and questions are properly planned, prepared, and written, they will accomplish the intent of the test. They will measure what needs to be measured and they will do it accurately.

Tests used in the fire service are either oral, written, or performance tests. In creating these tests there are some general items that need to be considered in order for the tests to be valid and reliable; the most important being that the items must be based on the identified learning objective. For the individual types of tests there are more specific considerations that the instructor must keep in mind in order for the test instrument to achieve the desired goal.

Evaluation:

The student will complete the activities and [course final-exams summative test](#) at a time determined by the instructor.

Assignment:

Review your notes and read Fire and Emergency Services Instructor, IFSTA, Seventh Edition, Pages 306-307 and 387-405 and complete Individual Activities 4-2-2 and 4-2-3 as homework in order to prepare yourself for the upcoming test. Study for our next session.



TRAINING INSTRUCTOR 1C

Instructional Development Techniques

GROUP ACTIVITY 4-2-1: CREATING AN ORAL TEST

Time Frame: 0:30

Materials Needed:

- Fire and Emergency Services Instructor, IFSTA, Seventh Edition, Pages 306-307 and 401-402
- Paper
- Pen or pencil

Introduction: This activity provides the students the opportunity to apply their knowledge of creating and administering oral tests.

Directions:

1. Review class notes from the lecture.
2. Read Fire and Emergency Services Instructor, IFSTA, Seventh Edition, Pages 306-307 and 401-402
3. As a group, select one member's self-prepared cognitive lesson plan.
4. Prepare a 5-item oral test that covers the subject matter from that cognitive lesson plan.
5. Be prepared to discuss your oral test questions in class.



TRAINING INSTRUCTOR 1C

Instructional Development Techniques

INDIVIDUAL ACTIVITY 4-2-2: CREATING A MULTIPLE-CHOICE WRITTEN TEST

Time Frame:

Homework

Materials Needed:

- Fire and Emergency Services Instructor, IFSTA, Seventh Edition, Pages 387-393
- Computer or typewriter
- Printer and/or paper

Introduction:

This activity provides the students the opportunity to apply their knowledge of creating and administering multiple-choice tests.

Directions:

1. Review class notes from the lecture.
2. Read Fire and Emergency Services Instructor, IFSTA, Seventh Edition, Pages 387-393.
3. Prepare a 5-item multiple-choice test that covers the subject matter from your cognitive lesson plan.
Multiple-choice test must be typed or computer generated.
4. Submit one (1) copy to the instructor on _____.
5. Make four (4) copies and be prepared to administer your completed test on _____.



TRAINING INSTRUCTOR 1C

Instructional Development Techniques

INDIVIDUAL ACTIVITY 4-2-3: CREATING A TRUE-FALSE WRITTEN TEST

Time Frame:

Homework

Materials Needed:

- Fire and Emergency Services Instructor, IFSTA, Seventh Edition, Pages 387-396
- Computer or typewriter
- Printer and/or paper

Introduction:

This activity provides the students the opportunity to apply their knowledge of creating and administering true-false written tests.

Directions:

1. Review class notes from the lecture.
2. Read Fire and Emergency Services Instructor, IFSTA, Seventh Edition, Pages 387-396
3. Prepare a 5-item true-false test that covers the subject matter from your cognitive lesson plan.

True-False test must be typed or computer generated.

4. Submit one (1) copy to the instructor on
_____.

5. Make four (4) copies and be prepared to administer your completed test on
_____.



TRAINING INSTRUCTOR 1C

Instructional Development Techniques

Topic: 4-3: Methods Of Administering And Grading Test Instruments

Time Frame: 1:00

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 [course-final-examsummative test](#)

Behavior: The student will describe and demonstrate the methods of administering and grading oral and written test instruments

Standard: With a minimum 80% accuracy on the [course-final-examsummative test](#) according to the information contained in Fire and Emergency Services Instructor, IFSTA, Seventh Edition, Pages 308-315, 402-405, and successfully completing Group Activity 4-3-1

Materials Needed:

- Writing board/pad with markers/erasers
- Appropriate audiovisual training aids and devices
- Group Activity 4-3-1: Test Administration

References:

- Fire and Emergency Services Instructor, IFSTA, Seventh Edition, Pages 308-315 and 402-405
- Overcoming Test Anxiety, Dennis H. Congos, University of Central Florida

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.

A ttention (attract)	B egin
C uriosity (arouse)	A ssociation
I nterest (create)	S tudents
D esire (stimulate)	E xperience

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.



TRAINING INSTRUCTOR 1C

Instructional Development Techniques

PRESENTATION	APPLICATION
<p>LXXXVI. TEST ADMINISTRATION</p> <p>A. Begins before the test is given</p> <p>B. Prior to the test</p> <ol style="list-style-type: none">1. Inform students prior to test date<ol style="list-style-type: none">a) Test typeb) Test contentc) Materials needed2. Dates and times of tests should be included in the course syllabus3. Determine if there are any specific instructions or protocols for administering the test4. Help students overcome test anxiety<ol style="list-style-type: none">a) Based on students' fear of losing controlb) Is reduced with increased preparationc) Provide students with guidelines<ol style="list-style-type: none">1) How to prepare for the test2) Stress management techniques3) Outside resources <p>C. On the day of test</p> <ol style="list-style-type: none">1. Report to assigned location early2. Eliminate adverse conditions<ol style="list-style-type: none">a) Room temperature	<p>SLIDE: #-#-243</p> <p>SLIDE: #-#-244</p> <p>Prior to the test, what should you tell the students?</p> <p>SLIDE: #-#-245</p> <p>What are some adverse testing conditions that you may need to control?</p>



TRAINING INSTRUCTOR 1C

Instructional Development Techniques

PRESENTATION	APPLICATION
<ul style="list-style-type: none">b) Lightingc) Distractionsd) Noise inside or outside room3. Maintain test security<ul style="list-style-type: none">a) Number tests/pages<ul style="list-style-type: none">1) Enables accounting for all materials after the testb) Arrange seating<ul style="list-style-type: none">1) Eliminate the opportunity to cheat4. Ensure that all cellular phones, pagers, personal digital assistants, etc. are turned off and put away<ul style="list-style-type: none">a) Can be a distraction or security concern5. Ensure that no unauthorized notes or materials are available to students6. Read test instructions to students<ul style="list-style-type: none">a) Procedures for marking answersb) Allotted time7. Ask if there are any questionsD. During the test<ul style="list-style-type: none">1. Maintain a quiet and safe environment2. Walk around the room<ul style="list-style-type: none">a) Ensure no cheating is taking place<ul style="list-style-type: none">1) Copying2) Electronic or other information storage	<p>What is the purpose for numbering tests?</p> <p>SLIDE: #-#-246</p> <p>SLIDE: #-#-247</p> <p>Why should the instructor walk around the room?</p>



TRAINING INSTRUCTOR 1C

Instructional Development Techniques

PRESENTATION	APPLICATION
<ul style="list-style-type: none"> 3) Ensure that students leaving the room do not take testing materials with them 3. Control the conditions for performance tests to ensure they are valid and reliable 4. Provide for safety during all portions of a performance test <p>E. Following the test</p> <ul style="list-style-type: none"> 1. Collect tests, answer sheets, and skill sheets <ul style="list-style-type: none"> a) Ensure that they have been completed correctly b) Maintain security 2. Review the test with students <ul style="list-style-type: none"> a) When appropriate b) To clarify objectives they may not have understood 3. Return test materials to the proper authority 	<p>SLIDE: #-#-248</p> <p>Why would an instructor review tests with students?</p> <p>SLIDE: #-#-249</p>
<p>LXXXVII. TEST SCORING</p> <p>A. Oral tests</p> <ul style="list-style-type: none"> 1. Closed questions <ul style="list-style-type: none"> a) Student's answer must match required answer b) When more than one answer is possible all possible answers must be considered correct and given equal value 2. Open questions <ul style="list-style-type: none"> a) More subjective to score 	<p>Are open questions more subjective or objective to score?</p>



TRAINING INSTRUCTOR 1C

Instructional Development Techniques

PRESENTATION	APPLICATION
<ul style="list-style-type: none"> 4. Ensure accuracy when recording scores B. Add individual scores for student <ul style="list-style-type: none"> 1. To determine final grade 2. To determine whether or not a student achieved the minimum required grade <ul style="list-style-type: none"> a) Do not certify as having completed training any student that does not achieve the minimum required grade C. Due to confidentiality concerns, report only to <ul style="list-style-type: none"> 1. Student 2. Instructor D. Family Education and Privacy Act (1974) <ul style="list-style-type: none"> 1. Legal restrictions apply to the dissemination of a student's grade/score information 2. Training Division/educational establishment <ul style="list-style-type: none"> a) Certification purposes b) Course effectiveness assessment 	<p>Can an instructor post a sheet listing the students' names and grades in public?</p>
<p>LXXXIX. TEST SECURITY</p> <ul style="list-style-type: none"> A. Security of tests is essential to an effective training program <ul style="list-style-type: none"> 1. To prevent cheating B. Test security guidelines <ul style="list-style-type: none"> 1. Regularly revise test questions and answer sheets 2. Destroy old or outdated test materials 3. Use multiple versions of the same test 	<p>What is a major reason for maintaining test security?</p> <p>SLIDE: #-#-251</p>



TRAINING INSTRUCTOR 1C

Instructional Development Techniques

PRESENTATION	APPLICATION
<ul style="list-style-type: none">4. Take care in writing, duplicating, and storing test materials5. Number and inventory test sheets, booklets, and answer sheets6. Use secure data storage for electronic copies of testing instruments7. Control presence of portable electronic devices in classrooms during tests<ul style="list-style-type: none">a) Can be used to<ul style="list-style-type: none">1) Access information about tests2) Record test contents3) Communicate to others outside of the testing room about test contents8. Be aware of suspicious student activities<ul style="list-style-type: none">a) Students looking around the roomb) Answers written on skin, clothing, or papers laying on floorc) Students talking to each otherd) Students leaving the roome) Identical incorrect answers or sequences of answers on multiple choice tests9. Remain in the room during test administration	<p>SLIDE: #-#-252</p> <p>How can portable electronic devices be used to cheat?</p> <p>What are some suspicious student activities that an instructor must watch for?</p>



TRAINING INSTRUCTOR 1C

Instructional Development Techniques

PRESENTATION	APPLICATION
<p>a) Different sequence of answers b) Different sequence of questions c) Different wording of questions</p> <p>10. Use essay, short answer, or completion tests that are more difficult to cheat on</p> <p>11. Use passwords to protect security of on-line testing instruments</p> <p>C. Review organization's code of ethics with students at the beginning of the course clearly stating the</p> <ol style="list-style-type: none">1. Ground rules2. Student's personal responsibility3. Consequences of cheating <p>D. Students are less inclined to cheat if</p> <ol style="list-style-type: none">1. Course material is useful and desirable2. Course work is relevant to students' needs3. Students receive positive feedback and assistance4. Gaining knowledge is more important than getting a good grade <p>NOTE: Refer the students to <u>Group Activity 4-3-1: Test Administration</u> in their student supplements. Divide the class into small groups for this activity.</p>	<p>How can multiple versions of tests be created?</p> <p>SLIDE: #-#-253</p> <p>SLIDE: #-#-254</p> <p>In what situations are students less inclined to cheat?</p> <p>SLIDE: #-#-255</p> <p>CLASS ACTIVITY: Complete Group Activity 4-3-1.</p>



TRAINING INSTRUCTOR 1C

Instructional Development Techniques

Summary:

The administration of testing instruments involves careful planning and preparation by the instructor. Once tests have been administered, they must be scored and the scores must be recorded and reported. Instructors should be careful to follow proper procedures and comply with the law in reporting scores. Opportunities for student cheating can be minimized if an instructor follows proper procedures in maintaining test security.

Evaluation:

The student will complete the activity and ~~course final exam~~[summative test](#) at a time determined by the instructor.

Assignment:

Review your notes and read Fire and Emergency Services Instructor, IFSTA, Seventh Edition, Pages 308-315 and 402-405 in order to prepare yourself for the upcoming test. Study for our next session.



TRAINING INSTRUCTOR 1C

Instructional Development Techniques

GROUP ACTIVITY 4-3-1: TEST ADMINISTRATION

Time Frame: 0:30

Materials Needed:

- Tests prepared in Activities 4-2-2 or 4-2-3
- Appropriate answer sheet for students to take the test
- Answer key(s) and/or other scoring materials for the test
- Pen or pencil

Introduction: This activity provides the students the opportunity to apply their knowledge of the test administration process by administering tests that they have developed.

Directions:

1. Review class notes from the lecture.
2. Read Fire and Emergency Services Instructor, IFSTA, Seventh Edition, Pages 308-315.
3. When directed to do so by the instructor, administer the following test to your group:
 - Multiple-choice test (Individual Activity 4-2-2)
 - or
 - True-false test (Individual Activity 4-2-3)
4. Grade the test using the answer key.
5. Discuss any difficulties or confusion your group may have had with the test.
6. Repeat Steps 3-5 until all group members have administered, graded, and discussed their test.



TRAINING INSTRUCTOR 1C

Instructional Development Techniques

Appendix A: Formative Test #1 Answer Key

INSTRUCTIONS: This is a 25-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. NRA
-
-

1. Which of the following is a benefit of a lesson plan?

- a. Guarantees all students will learn the same materials
- b. Enables a poor instructor to teach the lesson
- ▶ c. Gives a clear path for both instructors and students to follow
- d. Explains how to teach a lesson to the instructor

Answer found in Fire and Emergency Services Instructor, IFSTA, Seventh Edition, Page 322

2. A lesson plan is **best** defined as

- ▶ a. an outline of the information and skills to be taught
- b. a document for the student to identify required learning
- c. a list of jobs to be taught
- d. a document that contains information about a specific activity or project that the student is expected to perform

Answer found in Fire and Emergency Services Instructor, IFSTA, Seventh Edition, Page 321

3. When looking for information sources, "primary literature" is

- a. material that has been translated one time
- b. likely to contain errors of translation
- ▶ c. written or compiled by someone who has direct knowledge of the topic or event
- d. intended to be used only once

Answer found in Fire and Emergency Services Instructor, IFSTA, Seventh Edition, Page 434



TRAINING INSTRUCTOR 1C

Instructional Development Techniques

4. Which of the following is **true** regarding using the internet as a source of information?
- a. The internet has the disadvantage of being unavailable to most people
 - b. Information posted on the internet can be trusted to be the most current information available on a given topic
 - c. Information obtained from the internet is not copyright protected and can be used freely
 - ▶ d. Domains such as *.edu*, *.org*, *.gov*, and *.mil* are generally more reliable than *.com* domains

Answer found in Fire and Emergency Services Instructor, IFSTA, Seventh Edition, Page 435

5. The three levels of learning used in fire service instruction are
- ▶ a. basic knowledge, competent, and highly proficient
 - b. knowledge, application, and synthesis
 - c. perception, manipulation, and performance
 - d. receiving, responding, and organizing

Answer found in Training Instructor 1C Student Supplement, SFT, 2010 Edition, Page 10

6. In the fire service, Level I learning
- a. usually is for psychomotor skills only
 - b. involves students applying what they have learned to new situations
 - ▶ c. is relatively easy to evaluate student progress
 - d. requires students to do complex problem solving

Answer found in Training Instructor 1C Student Supplement, SFT, 2010 Edition, Page 10

7. Terms such as *analyze*, *apply*, *differentiate*, and *relate* are
- a. indicative of Level I student behavior
 - ▶ b. indicative of Level II student behavior
 - c. indicative of Level III student behavior
 - d. not relevant with respect to levels of learning

Answer found in Training Instructor 1C Student Supplement, SFT, 2010 Edition, Pages 12-13

8. Which of the following is Step 1 of the four-step method of instruction?
- a. Explanation
 - ▶ b. Preparation
 - c. Evaluation
 - d. Application



TRAINING INSTRUCTOR 1C

Instructional Development Techniques

Answer found in Fire and Emergency Services Instructor, IFSTA, Seventh Edition, Page 193

9. Which of the following is **not** true about the application step?

- ▶ a. New information is presented
- b. Students apply the presented information.
- c. May be combined with the presentation step.
- d. Students perform the skill under supervision

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

10. Which of the following is something the instructor should do in the evaluation step?

- a. Have students perform the task under supervision
- ▶ b. Have students perform the task unassisted
- c. Demonstrate the task
- d. Describe how a task applies to the job

Answer found in Fire and Emergency Services Instructor, IFSTA, Seventh Edition, Page 194

11. Which of the following is **not** one of the four major components of Specially Designed Academic Instruction in English (SDAIE)?

- ▶ a. Extra reading assignments
- b. Visual clues
- c. Cooperative learning
- d. Lowering student's "affective filter"

Answer found in Training Instructor 1C Student Supplement, SFT, 2010 Edition, Page 19

12. Limited English Proficient (LEP) students

- a. are students with an identified learning disability
- b. are only those in K-12 educational institutions
- ▶ c. may be students whose native language is not English
- d. are protected by the Americans with Disabilities Act

Answer found in Training Instructor 1C Student Supplement, SFT, 2010 Edition, Page 18

13. Which of the following is a definition of a course outline?

- a. A list of the operations and key points required to complete a task
- b. A document that contains information about a specific activity or project that the student is expected to perform
- c. A fact sheet that provides additional background information
- ▶ d. A list of cognitive and psychomotor lessons to meet predetermined teaching objectives



TRAINING INSTRUCTOR 1C

Instructional Development Techniques

Answer found in Training Instructor 1C Student Supplement, SFT, 2010 Edition, Page 30

14. In a course outline, course content must be listed
- ▶ a. so that the most basic knowledge is taught first
 - b. from complex to simple
 - c. based on teaching priority sequence
 - d. according to student-determined order

Answer found in Training Instructor 1C Student Supplement, SFT, 2010 Edition, Page 30 and Fire and Emergency Services Instructor, IFSTA, Seventh Edition, Page 534

15. Which of the following components of a lesson plan is a restatement of the key points of the lesson?
- a. References
 - b. Assignments
 - ▶ c. Lesson summary
 - d. Lesson outline

Answer found in Fire and Emergency Services Instructor, IFSTA, Seventh Edition, Page 328

16. Which component of the lesson plan relates to Step 2 of the four-step method?
- a. References
 - b. Assignments
 - c. Lesson summary
 - ▶ d. Lesson outline

Answer found in Fire and Emergency Services Instructor, IFSTA, Seventh Edition, Page 328

17. Which of the following is a list of information, skills, or previous requirements that students must have completed or mastered before entering a course or starting a lesson?
- a. Assignments
 - b. References
 - ▶ c. Prerequisites
 - d. Level of instruction

Answer found in Fire and Emergency Services Instructor, IFSTA, Seventh Edition, Page 328



TRAINING INSTRUCTOR 1C

Instructional Development Techniques

18. Which component of a learning objective explains the situation, tools, or materials required for a student to perform a single specific action or behavior?
- a. Standards criteria
 - ▶ b. Conditions description
 - c. Performance statement
 - d. Resources statement

Answer found in Fire and Emergency Services Instructor, IFSTA, Seventh Edition, Page 330

19. Which of the following terms is a description of the minimum acceptable behavior that a student must display by the end of an instructional period?
- a. Prerequisites
 - b. Learning goal
 - ▶ c. Learning objective
 - d. Level of instruction

Answer found in Fire and Emergency Services Instructor, IFSTA, Seventh Edition, Page 323

20. Where does the instructor find the "statement of minimum acceptable student performance for an instructional period?"
- a. Learning desires
 - ▶ b. Behavioral objectives
 - c. Preparation statement
 - d. Course outline

Answer found in Fire and Emergency Services Instructor, IFSTA, Seventh Edition, Page 329

21. Fire and Emergency Services Instructor identifies 13 steps to develop a lesson plan. Which statement **best** describes the lesson plan development process?
- a. The 13 steps performed in order will ensure a complete lesson plan
 - ▶ b. The learning objectives will develop into the lesson plan
 - c. The instructor should determine the evaluation method prior to writing a lesson plan



TRAINING INSTRUCTOR 1C

Instructional Development Techniques

- d. Lesson plans developed using the 13 steps are comprehensive

Answer found in Fire and Emergency Services Instructor, IFSTA, Seventh Edition, Page 338

22. The Materials Needed section of the lesson plan identifies

- ▶ a. the items the instructor needs to teach the lesson
- b. the items the student will use during the lesson
- c. the same items as listed in the condition of the behavioral objectives
- d. additional items the instructor will need for the evaluation

Answer found in Fire and Emergency Services Instructor, IFSTA, Seventh Edition, Page 323

23. Which of the following is a characteristic of course objectives?

- a. Narrow and measurable
- b. Focused on individual learning styles
- ▶ c. Knowledge and skills expected at the end of the course
- d. Support behavioral objectives

Answer found in Fire and Emergency Services Instructor, IFSTA, Seventh Edition, Page 528

24. "Provides uniformity, gives a clear path, ensures continuity, provides documentation" best describes

- a. a course outline
- ▶ b. a lesson plan
- c. levels of instruction
- d. the four-step method of instruction

Answer found in Fire and Emergency Services Instructor, IFSTA, Seventh Edition, Page 322

25. Most learning takes place in the _____ step, making it critically important.

- a. preparation
- b. presentation
- ▶ c. application
- d. evaluation

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



TRAINING INSTRUCTOR 1C

Instructional Development Techniques

Appendix A: Formative Test #2 Answer Key

INSTRUCTIONS: This is a 26-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. NRA
-
-

1. During which instructional step are skills sheets used by the instructor?

- a. Preparation
- ▶ b. Presentation
- c. Application
- d. Evaluation

Answer found in Fire and Emergency Services Instructor, IFSTA, Seventh Edition, Page 220

2. What part of the psychomotor lesson plan is the foundation for the evaluation criteria?

- a. Presentation
- b. Application
- ▶ c. Skills sheet
- d. Materials needed

Answer found in Fire and Emergency Services Instructor, IFSTA, Seventh Edition, Page 127

3. Information sheets, skills sheets, activity sheets, and study sheets are examples of

- ▶ a. ancillary components
- b. lesson plan appendices
- c. components of psychomotor lesson plans
- d. instructional aids

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



TRAINING INSTRUCTOR 1C

Instructional Development Techniques

4. Which ancillary component divides a task into parts by listing the operational steps and their key points or steps for completing each operation?
- a. Study sheet
 - ▶ b. Skills sheet
 - c. Activity sheet
 - d. Assignment sheet

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

5. Which ancillary component contains information about a specific activity or project that the student is expected to perform without supervision?
- a. Study sheet
 - b. Skills sheet
 - c. Information sheet
 - ▶ d. Assignment sheet

Answer found in Fire and Emergency Services Instructor, IFSTA, Seventh Edition, Page 346

6. Which of the following is **not** true about information sheets?
- a. Provides additional information on a topic
 - b. Designed to encourage a student to learn
 - c. Includes information that may not be readily available
 - ▶ d. Requires the student to do homework

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

7. Which is an example of a nonprojected training aid?
- a. Video
 - ▶ b. Marker board
 - c. Overhead transparency
 - d. Electronic presentation software (e.g., PowerPoint®)

Answer found in Fire and Emergency Services Instructor, IFSTA, Seventh Edition, Page 258

8. Which 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



TRAINING INSTRUCTOR 1C

Instructional Development Techniques

9. Which piece of nonprojection-type audiovisual equipment is the easiest, most versatile, and most frequently used?
- a. Models
 - b. Audiotapes
 - ▶ c. Marker board illustrations
 - d. Casualty simulation training aids

Answer found in Fire and Emergency Services Instructor, IFSTA, Seventh Edition, Page 258

10. Which is an appropriate guideline for using audiovisual training aids?
- a. Use as many training aids as possible
 - b. Use visual aids that are complex and present multiple ideas
 - ▶ c. Rehearse with the training aids before giving a lecture
 - d. Do not spend a lot of preparation time on visual aids

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

11. Which strategy can be used to avoid 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 eyelevel of seated students

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

12. Summary slides, preview slides, and slides that provide for continuity within a presentation are examples of
- a. overheads
 - b. interactives
 - c. relationships
 - ▶ d. transitions

Answer found in Fire and Emergency Services Instructor, IFSTA, Seventh Edition, Page 255

13. Which of the following statements is **most** correct regarding media transitions?
- a. Sounds should be incorporated with major text
 - b. Major headings should be grouped with graphics
 - ▶ c. Animations should be used sparingly
 - d. Fancy and involved motion will help maintain interest

Answer found in Fire and Emergency Services Instructor, IFSTA, Seventh Edition, Page 258



TRAINING INSTRUCTOR 1C

Instructional Development Techniques

14. All instructors are responsible for the condition of training aids. Which statement **best** describes how an instructor should maintain training aids?
- a. Clean, care for, and maintain your training aids
 - ▶ b. Follow the manufacturer's recommendations
 - c. Only designated personnel should be responsible
 - d. Gloves should be worn during maintenance

Answer found in Fire and Emergency Services Instructor, IFSTA, Seventh Edition, Page 273

15. Educational theories of learning and remembering indicate that students
- ▶ a. remember best when multiple senses are stimulated
 - b. learn best when they read information
 - c. are more apt to remember what they hear
 - d. learn best with stimulation singularly focused

Answer found in Fire and Emergency Services Instructor, IFSTA, Seventh Edition, Page 151

16. Presenting someone else's work as your own **best** describes
- a. Fair use
 - b. Copyright
 - ▶ c. Plagiarism
 - d. Originality

Answer found in Fire and Emergency Services Instructor, IFSTA, Seventh Edition, Page 315

17. Which statement **best** describes the fair use doctrine of the copyright law as related to audiovisual media development?
- a. It protects an individual's rights to original creation put into tangible form
 - b. It protects ideas which have been expressed
 - ▶ c. It allows limited use of protected works
 - d. It supersedes plagiarism rules for educational purposes

Answer found in Fire and Emergency Services Instructor, IFSTA, Seventh Edition, Page 273

18. "Versatile for indoor and outdoor, provides a permanent record, can be prepared before class" **best** describes
- a. overheads
 - b. visual presenters
 - c. computer projectors
 - ▶ d. easel charts

Answer found in Fire and Emergency Services Instructor, IFSTA, Seventh Edition, Page 260



TRAINING INSTRUCTOR 1C

Instructional Development Techniques

19. Why are sans-serif fonts preferred for ancillary materials?

- ▶ a. Sans-serif fonts do not have tails, which make them easier to read
- b. Serif fonts are more difficult to read from the back of the classroom
- c. Serif fonts have curly ends
- d. Serif is less important than type size

Answer found in Fire and Emergency Services Instructor, IFSTA, Seventh Edition, Page 349

20. The terms "6 x 6 rule," "phrases," and "simple backgrounds" apply to

- a. information sheets
- b. handouts
- c. easels
- ▶ d. projected aids

Answer found in Fire and Emergency Services Instructor, IFSTA, Seventh Edition, Page 349

21. Which term means that a test measures what it is designed to measure?

- ▶ a. Validity
- b. Reliability
- c. Discrimination
- d. Comprehensiveness

Answer found in Fire and Emergency Services Instructor, IFSTA, Seventh Edition, Page 386

22. Which term means that a test performs consistently?

- a. Validity
- ▶ b. Reliability
- c. Discrimination
- d. Comprehensiveness

Answer found in Fire and Emergency Services Instructor, IFSTA, Seventh Edition, Page 386

23. Which term means that a test separates good students from poor students?

- a. Validity
- b. Reliability
- ▶ c. Discrimination
- d. Comprehensiveness

Answer found in Fire and Emergency Services Instructor, IFSTA, Seventh Edition, Page 410



TRAINING INSTRUCTOR 1C

Instructional Development Techniques

24. What is the key to ensuring a test is valid and comprehensive?
- a. Item analysis
 - ▶ b. Test planning
 - c. Easy to give and easy to take
 - d. Including different types of items

Answer found in Fire and Emergency Services Instructor, IFSTA, Seventh Edition, Page 376

25. Which test rates student performance compared to other students based on a broad sampling?
- a. All test types
 - b. Formative tests
 - ▶ c. Norm-referenced tests
 - d. Criterion-referenced tests

Answer found in Fire and Emergency Services Instructor, IFSTA, Seventh Edition, Page 377

26. Which of the following is an end-of-the-course appraisal that commonly measures learning by some form of objective or subjective evaluation instrument?
- a. Formative evaluation
 - ▶ b. Summative evaluation
 - c. Process evaluation
 - d. Product evaluation

Answer found in Fire and Emergency Services Instructor, IFSTA, Seventh Edition, Page 364



TRAINING INSTRUCTOR 1C

Instructional Development Techniques

Appendix B: Formative Test #1

Name: _____ Date: _____

INSTRUCTIONS: This is a 25-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. NRA

1. Which of the following is a benefit of a lesson plan?
 - a. Guarantees all students will learn the same materials
 - b. Enables a poor instructor to teach the lesson
 - c. Gives a clear path for both instructors and students to follow
 - d. Explains how to teach a lesson to the instructor

2. A lesson plan is **best** defined as
 - a. an outline of the information and skills to be taught
 - b. a document for the student to identify required learning
 - c. a list of jobs to be taught
 - d. a document that contains information about a specific activity or project that the student is expected to perform

3. When looking for information sources, "primary literature" is
 - a. material that has been translated one time
 - b. likely to contain errors of translation
 - c. written or compiled by someone who has direct knowledge of the topic or event
 - d. intended to be used only once



TRAINING INSTRUCTOR 1C

Instructional Development Techniques

4. Which of the following is **true** regarding using the internet as a source of information?
- The internet has the disadvantage of being unavailable to most people
 - Information posted on the internet can be trusted to be the most current information available on a given topic
 - Information obtained from the internet is not copyright protected and can be used freely
 - Domains such as *.edu*, *.org*, *.gov*, and *.mil* are generally more reliable than *.com* domains
5. The three levels of learning used in fire service instruction are
- basic knowledge, competent, and highly proficient
 - knowledge, application, and synthesis
 - perception, manipulation, and performance
 - receiving, responding, and organizing
6. In the fire service, Level I learning
- usually is for psychomotor skills only
 - involves students applying what they have learned to new situations
 - is relatively easy to evaluate student progress
 - requires students to do complex problem solving
7. Terms such as *analyze*, *apply*, *differentiate*, and *relate* are
- indicative of Level I student behavior
 - indicative of Level II student behavior
 - indicative of Level III student behavior
 - not relevant with respect to levels of learning
8. Which of the following is Step 1 of the four-step method of instruction?
- Explanation
 - Preparation
 - Evaluation
 - Application



TRAINING INSTRUCTOR 1C

Instructional Development Techniques

9. Which of the following is **not** true about the application step?

- a. New information is presented
- b. Students apply the presented information.
- c. May be combined with the presentation step.
- d. Students perform the skill under supervision

10. Which of the following is something the instructor should do in the evaluation step?

- a. Have students perform the task under supervision
- b. Have students perform the task unassisted
- c. Demonstrate the task
- d. Describe how a task applies to the job

11. Which of the following is **not** one of the four major components of Specially Designed Academic Instruction in English (SDAIE)?

- a. Extra reading assignments
- b. Visual clues
- c. Cooperative learning
- d. Lowering student's "affective filter"

12. Limited English Proficient (LEP) students

- a. are students with an identified learning disability
- b. are only those in K-12 educational institutions
- c. may be students whose native language is not English
- d. are protected by the Americans with Disabilities Act

13. Which of the following is a definition of a course outline?

- a. A list of the operations and key points required to complete a task
- b. A document that contains information about a specific activity or project that the student is expected to perform
- c. A fact sheet that provides additional background information
- d. A list of cognitive and psychomotor lessons to meet predetermined teaching objectives



TRAINING INSTRUCTOR 1C

Instructional Development Techniques

14. In a course outline, course content must be listed
- so that the most basic knowledge is taught first
 - from complex to simple
 - based on teaching priority sequence
 - according to student-determined order
15. Which of the following components of a lesson plan is a restatement of the key points of the lesson?
- References
 - Assignments
 - Lesson summary
 - Lesson outline
16. Which component of the lesson plan relates to Step 2 of the four-step method?
- References
 - Assignments
 - Lesson summary
 - Lesson outline
17. Which of the following is a list of information, skills, or previous requirements that students must have completed or mastered before entering a course or starting a lesson?
- Assignments
 - References
 - Prerequisites
 - Level of instruction

Answer found in Fire and Emergency Services Instructor, IFSTA, Seventh Edition, Page 328



TRAINING INSTRUCTOR 1C

Instructional Development Techniques

18. Which component of a learning objective explains the situation, tools, or materials required for a student to perform a single specific action or behavior?
- Standards criteria
 - Conditions description
 - Performance statement
 - Resources statement
19. Which of the following terms is a description of the minimum acceptable behavior that a student must display by the end of an instructional period?
- Prerequisites
 - Learning goal
 - Learning objective
 - Level of instruction
20. Where does the instructor find the "statement of minimum acceptable student performance for an instructional period?"
- Learning desires
 - Behavioral objectives
 - Preparation statement
 - Course outline
21. Fire and Emergency Services Instructor identifies 13 steps to develop a lesson plan. Which statement **best** describes the lesson plan development process?
- The 13 steps performed in order will ensure a complete lesson plan
 - The learning objectives will develop into the lesson plan
 - The instructor should determine the evaluation method prior to writing a lesson plan
 - Lesson plans developed using the 13 steps are comprehensive



TRAINING INSTRUCTOR 1C

Instructional Development Techniques

22. The Materials Needed section of the lesson plan identifies
- the items the instructor needs to teach the lesson
 - the items the student will use during the lesson
 - the same items as listed in the condition of the behavioral objectives
 - additional items the instructor will need for the evaluation
23. Which of the following is a characteristic of course objectives?
- Narrow and measurable
 - Focused on individual learning styles
 - Knowledge and skills expected at the end of the course
 - Support behavioral objectives
24. "Provides uniformity, gives a clear path, ensures continuity, provides documentation" best describes
- a course outline
 - a lesson plan
 - levels of instruction
 - the four-step method of instruction
25. Most learning takes place in the _____ step, making it critically important.
- preparation
 - presentation
 - application
 - evaluation



TRAINING INSTRUCTOR 1C

Instructional Development Techniques

Appendix B: Formative Test #2

Name: _____

Date: _____

INSTRUCTIONS: This is a 26-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. NRA
-
-

1. During which instructional step are skills sheets used by the instructor?

- a. Preparation
- b. Presentation
- c. Application
- d. Evaluation

2. What part of the psychomotor lesson plan is the foundation for the evaluation criteria?

- a. Presentation
- b. Application
- c. Skills sheet
- d. Materials needed

3. Information sheets, skills sheets, activity sheets, and study sheets are examples of

- a. ancillary components
- b. lesson plan appendices
- c. components of psychomotor lesson plans
- d. instructional aids



TRAINING INSTRUCTOR 1C

Instructional Development Techniques

4. Which ancillary component divides a task into parts by listing the operational steps and their key points or steps for completing each operation?
 - a. Study sheet
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5. Which ancillary component contains information about a specific activity or project that the student is expected to perform without supervision?
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 - a. Provides additional information on a topic
 - b. Designed to encourage a student to learn
 - c. Includes information that may not be readily available
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7. Which is an example of a nonprojected training aid?
 - a. Video
 - b. Marker board
 - c. Overhead transparency
 - d. Electronic presentation software (e.g., PowerPoint®)

8. Which 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



TRAINING INSTRUCTOR 1C

Instructional Development Techniques

9. Which piece of nonprojection-type audiovisual equipment is the easiest, most versatile, and most frequently used?
- Models
 - Audiotapes
 - Marker board illustrations
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10. Which is an appropriate guideline for using audiovisual training aids?
- Use as many training aids as possible
 - Use visual aids that are complex and present multiple ideas
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- Avoid eye contact with students when using a visual aid
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 - relationships
 - transitions
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TRAINING INSTRUCTOR 1C

Instructional Development Techniques

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 - Follow the manufacturer's recommendations
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 - Gloves should be worn during maintenance
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- remember best when multiple senses are stimulated
 - learn best when they read information
 - are more apt to remember what they hear
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16. Presenting someone else's work as your own **best** describes
- Fair use
 - Copyright
 - Plagiarism
 - Originality
17. Which statement **best** describes the fair use doctrine of the copyright law as related to audiovisual media development?
- It protects an individual's rights to original creation put into tangible form
 - It protects ideas which have been expressed
 - It allows limited use of protected works
 - It supersedes plagiarism rules for educational purposes
18. "Versatile for indoor and outdoor, provides a permanent record, can be prepared before class" **best** describes
- overheads
 - visual presenters
 - computer projectors
 - easel charts



TRAINING INSTRUCTOR 1C

Instructional Development Techniques

19. Why are sans-serif fonts preferred for ancillary materials?
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 - Serif fonts have curly ends
 - Serif is less important than type size
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- information sheets
 - handouts
 - easels
 - projected aids
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- Validity
 - Reliability
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 - Comprehensiveness
22. Which term means that a test performs consistently?
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23. Which term means that a test separates good students from poor students?
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TRAINING INSTRUCTOR 1C

Instructional Development Techniques

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25. Which test rates student performance compared to other students based on a broad sampling?
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 - Summative evaluation
 - Process evaluation
 - Product evaluation