



Certified Instructor / Coordinator

Course Curriculum

2004

New York State Department of Health
Bureau of Emergency Medical Services
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Troy, New York 12180-2299

Acknowledgements

In 1987, the New York State Department of Health (NYS DOH) EMS Program appointed an ad-hoc committee to study issues related to EMS instructor education and address the lack of Statewide standardization of instruction. From this review, several key points were realized:

- There is a need for consistency in EMS education.
- The lab instructor has more personal impact on students than the lead instructor due to the personal attention spent in small group activity in the lab setting, and students feel more comfortable asking questions in this less formal setting.
- Lab instructors need different skills for teaching than the lead instructor.
- No state was specifically addressing EMS instructor training as it related to certification.

As a result of this committee's investigation, NYS EMS developed two specific EMS Instructor training programs and implemented certification of instructors. It was the original goal of the program to have a minimum of 80% of the lab sessions in an Emergency Medical Technician (EMT) course taught by certified instructors by 1993. Although this goal may be implemented at some future time, current requirements call for a minimum of 50% of the lab sessions to be taught by certified instructors.

This curriculum represents the first major revision of the CLI course since its inception. EMS training and education has continued to change, and has become more challenging as new techniques and practices have come into being. We expect the evolution of EMS to continue, with more challenges yet to face. With the continuation of CLI and CIC courses, the NYS DOH plans on keeping EMS training and education in New York at the pinnacle of EMS programs across the nation.

In recognition of the hard work, and extensive contributions to this curriculum, we would like to formally recognize those individuals who worked on the development of the original program, and those who undertook the review and creation of this revised curriculum.

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**NYS EMS
CERTIFIED INSTRUCTOR/COORDINATOR COURSE
CONTENT ANALYSIS BY LESSON**

Module 1

Lesson 1 - Instructor course overview and certification requirements	30 Min.
Lesson 2 - Educational Theory and Methodology	60 Min.
Lesson 3 - Communication	30 Min.
Lesson 4 - Presentation Techniques	30 Min.
Lesson 5 - Lesson Plans	<u>30 Min.</u>
	3 Hours

Module 2

Lesson 1 - Candidate Presentation Preparation	30 Min.
Lesson 2 - Candidate Presentation #1	90 Min.
Lesson 3 - AV Technology	60 Min.
Lesson 4 - Physical Environment	15 Min
Lesson 5 - Developing Judgement – Review	<u>15 Min.</u>
	3.5 Hours

Module 3

Lesson 1 - Difficult Student	30 Min.
Lesson 2 - Student Evaluation	60 Min.
Lesson 3 - Candidate Presentation #2	<u>120 Min.</u>
	3.5 Hours

Module 4

Lesson 1 - Administration	150 Min.
Lesson 2 - American with Disabilities	<u>30 Min.</u>
	3 Hours

Module 5

Lesson 1 - Candidate Final Presentation	150 Min.
Lesson 2 - End of Course Wrap-up	<u>30 Min.</u>
	3 Hours

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CIC Course Objectives

By the end of this course, the CIC candidate will be:

- A. able to list the difference between training, education, and instruction.
- B. able to identify which of the three learning domains each objective primarily belongs.
- C. able to develop a lesson plan, including identifying the presentation method to be used, identifying the presentation medium, identifying an appropriate room layout, and developing a valid test for the objectives.
- D. able to evaluate a student's performance as related against instructional objectives, and provide appropriate feedback to the student to elicit the behavior change needed for the student to successfully complete the objective.
- E. knowledgeable of NYS DOH BEMS policies and understand the importance of having policies and procedures for the course sponsor, and the student.
- F. able to keep accurate records of student progress, counseling, and remediation plan implementation and outcomes.
- G. able to manage CLIs.

MODULE 1

I. Course Introduction and Overview

OBJECTIVES:

Review the criteria for certification
Describe CIC Course Modules

- A. Welcome candidates and introduce yourself and other faculty.

- B. Cover administrative matters for use of site:
 - 1. Restrooms
 - 2. Phones
 - 3. Smoking policy
 - 4. Emergency exits
 - 5. Turning off pagers/cell phones/etc.
 - 6. Breaks - areas and services (such as vending)
 - 7. Filling out of Instructor Forms (Registration)
 - 8. Other

- C. Review criteria for certification of Certified Instructor Coordinator Candidates:
 - 1. Attend and successfully complete of the CIC course.
 - 2. Successfully complete and instructor internship under the supervision of a CIC in either an EMT or Advanced EMT course. The candidate must:
 - a) Develop and deliver 50 hours of didactic material, from various modules, as part of a NYS EMS certification course.
 - b) Directly coordinate and supervise a minimum of 9 hours or lab sessions in a NYS EMS certification course. The Candidate must plan, coordinate and implement lab sessions, observe CLI performance, and debrief staff with the supervising CIC.
 - 3. Must meet the requirements for CIC Internship as identified in the current DOH Policy Statement.
 - 4. Submit the following items to the NYS EMS Area Office within 18 months of CIC course completion:
 - a) The *CIC Internship Completion Report (DOH-3377)* completed by the supervising CIC.
 - b) A favorable *Didactic Presentation Audit Report (DOH-2424)* conducted by the supervising CIC.
 - c) A favorable *Didactic Presentation Audit Report (DOH-2424)* conducted by a Regional Faculty member or a NYS EMS Area Office Representative.
 - d) A letter of recommendation from the Regional EMS Council Training Committee, if one exists.

- D. Introduce the course by outlining the modules.

- E. Advise candidates that there will be homework assigned, and they will be receiving instructions on their required presentations at later points in the program.
- F. Review the objectives for the course with the candidates.

II. Educational Theory and Methodology

OBJECTIVES:

- Define teaching versus education
- Discuss instructor role and qualities
- Describe the adult learner
- Identify the learning domains
- Review Bloom's Taxonomy
- Discuss learning channels
- Describe the effect of social styles and cultural factors on the student

A. Teaching vs. Education, etc.

1. When was the last time anyone learned you something?
2. Definitions:
 - a) Educate – Formal instruction, especially stresses the development of broad-based mental capacities.
 - b) Teach – To impart knowledge, skills and attitudes.
 - c) Instruct – Methodical teaching.
 - d) Train – To make proficient with specialized instruction and practice. Suggests concentration on particular skills intended to fit a person for a desired role. Also, to coach to a mode of behavior or performance.
 - e) Learning – the acquisition of knowledge or skill not previously known, or the demonstration of an attitude not previously displayed.
3. The goal of an EMS certification course is to have the student :
 - a) acquire the knowledge, skills, and attitude necessary to respond to emergency calls,
 - b) appropriately assess, treat, and transport patients suffering medical or traumatic conditions, all without worsening the patient's condition.
4. As an instructor, you accomplish this goal through a process that may incorporate education, teaching, instructing, and training. Generally, this can be thought of as providing an environment in which the student can learn the knowledge and skill necessary to perform at least at the minimum competency level.

B. The Instructor:

1. Instructor Role:
 - a) To facilitate the Student's acquisition of knowledge, skills, attitude, and the decision making processes inherent in deciding on when and how to apply these.
 - b) THE STUDENTS AREN'T PRESENT FOR THE INSTRUCTOR
 - c) The INSTRUCTOR must be responsive to the needs of the students.
 - d) It shouldn't be "It's my way or the highway!" or "I talk, you listen and learn."

ACTIVITY – Ask the students to try and remember an instructor or teacher they thought was particularly excellent, and to think about the qualities that instructor possessed. Give each student 2 or 3 minutes to write down 4 qualities that they feel are essential to being a good instructor. List the qualities so that all students can view these (flip chart or similar). Review any of the following that students have not identified, and ask the students to discuss the importance of each.

1. Instructor Qualities:
 - a) Knows the subject well
 - b) Has material organized
 - c) Evaluates learning
 - d) Ensures class participation
 - e) Provides positive reinforcement
 - f) Reinforces positive behavior
 - g) Believes in the subject
 - h) Has positive regard for students
 - i) Properly attired
 - j) Appropriate language and voice
 - k) Maintains eye contact
 - l) Avoids sarcasm and arguments
 - m) Is punctual and reliable
 - n) Learns the names of the students
 - o) Avoids killer expressions, fills, & mannerisms
 - p) Is concerned for student safety
 - q) Is patient
 - r) Displays a professional attitude
 - s) Does not read to the class
 - t) Initiates discussion
 - u) Avoids ethical conflicts

2. What instructors expect of their students:
 - a) Attendance
 - b) Preparation
 - c) Attention
 - d) Participation
 - e) Consistency
 - f) Desire to learn
 - g) Enthusiasm
 - h) Honesty
 - i) Respect
 - j) Protection from humiliation (Don't embarrass the instructor)

C. Adult Learners

1. What do we mean “Adult”?
 - a) Voluntary participant in learning.
 - i. Analogy- Adult Ed, expanding your knowledge and interests
 - b) PAC (Parent – Adult – Child) communication model
 - c) “Prisoner” students (those made to come) may not be there as “adult” learners.
 - d) Vacationer – repeater “I’ve done this before”- floats
 - e) Adventurer – “this is new, this is neat”
 - f) Can be any age – not just 18+ years.

2. Common Characteristics of the adult learner
 - a) Emotional – emotions closely tied to learning, every learning aspect elicits an emotion.
 - b) Negative to fear, pain, anxiety, and embarrassment – expect safe, positive emotional learning setting.
 - c) Acutely aware of surroundings – flashbacks and emotional associations are common.
 - i. Example – playing a particular song during a slide show may elicit different reactions from students based on their past emotional state when having heard the song before.
 - ii. Example – one particular student may begin to cry seeing a particular picture during a lecture due to the past emotions associated with this imagery, such as a picture which reminds them of a particularly bad call for them emotionally.
 - d) Need to be able to move, stretch, refresh, and release tension. Allow them to move about class even during lecture.
 - e) Want useful information, skills, and attitude. “What do I need to know?”
 - f) Problem/solution orientated – application based, not theory based.
 - g) Time is seen as a valuable commodity – don’t waste their time.
 - h) Completion or closure is important.
 - i) Need to be able to apply what they learn!

D. Learning Domains

1. The National and State EMS curricula use three learning domains to classify learning objectives: Cognitive, Affective, and Psychomotor.

2. *Cognitive Domain* The cognitive domain encompasses material that could be considered the “book work”. Included are:
 - a) verbal association (new vocabulary),
 - b) discrimination (for example, recognition skills in patient assessment),
 - c) concepts and principles (for example, physiological principles and anatomic concepts),
 - d) problem solving (when the student is given information and asked to develop a plan). Most of the basic introductory information in EMS courses, such as anatomy and physiology, patient assessment, pathophysiology, or basic treatment plans fit into this category.

3. *Affective Domain* The affective domain involves acquisition of values, attitudes and interest. It also includes judgment, which is essential in patient assessment and treatment planning phases. Affective domain also includes ethics, interest in human problems, and attitudes about certain types of patients.
4. *Psychomotor Domain* The psychomotor domain includes performance of specific psychomotor skills. This includes splinting, hands-on patient assessment, CPR etc.

E. Bloom's Taxonomy

1. Knowledge - Recalling common bits of information about a subject.
 - a) Generally these are facts, figures, or other small bits of information
 - b) Examples include such things as CPR rates and ratios, steps in a procedure, and oxygen rates of flow for various devices
 - c) Helpful ways to increase student's ability to recall these include:
 - i. classifying material into sections (CPR rates)
 - ii. using mnemonics (SAMPLE history)
 - iii. using rhymes or songs (I'm clear, you're clear, we're all clear for shocking – to the tune of "I scream, you scream, we all scream for ice-cream")
2. Comprehension - Understanding the facts you've uncovered & showing that you know the meaning of those facts.
 - a) Being able to relate the facts in a way others might be able to understand (for example – the lungs work like a bellows)
 - b) Being able to not only recall a fact, but being able to explain it (for example – being able to explain why 15 chest compressions are used in adult CPR)
3. Application - Ability to use your knowledge to solve problems or make use of information in a new or unusual manner.
 - a) Some EMS personnel refer to this as "having good judgment"
 - b) The more "experience" an individual has using their knowledge in a variety of settings, the more likely they will be able to solve a new problem by applying what they know.
 - c) You must give students a chance at applying what they have been taught (for example – the more scenarios they are exposed to in class, the more likely they will be able to apply classroom learning in the field)
4. Analysis - Select information, examine it, break it apart and try to learn what makes it work, why it is so, why something happens, what makes something so special.
 - a) This is the opposite of Application
 - b) This is being able to look at something, take it apart into parts, see how the parts work, and see how they work together

- c) Example - the ability to look at a patient treatment plan, break it down into the different parts, explain each part, and explain how they all interact to benefit the patient.
- 4. Synthesis - Use the things you already know to think creatively and respond in new ways, or come up with different ideas or methods.
 - a) This is being able to adapt knowledge, techniques, or equipment to meet new challenges
 - b) One example might be using a KED in place of a long-board to immobilize a small child
 - c) Another example is having students extricate rescue manikins from an overturned car.
- 5. Evaluation - Ability to assess the value of your information and make judgments. Be able to make a decision to accept or reject your facts.
 - a) This is the most difficult and probably also the most critical stage
 - b) The ability to look at what is presented, what you are doing, and decide if it is correct for the situation or if you need to modify or change your approach
 - c) Example – when dealing with a trauma patient, continuously reevaluating the ABCs, and modifying your treatment plan based on your assessment

F. Learning Channels (Modalities)

- 1. Which channel/modality is best?

Activity – Have students fill out the Modality Checklist (Appendix C) by quickly checking those statements they strongly agree with. Then have them add the number of check marks on lines 1-5, then 6-10, and then 11-15. The number of check marks in 1-5 equate to Auditory preference, 6-10 to Visual preference, and 11-15 to Kinesthetic. The area in which the individual student has the most check marks suggests that they prefer to learn through that modality. This is not by any stretch scientific proof, but merely a preference suggestion. If you would like, you can ask the students to relocate into like groups in the class to demonstrate the diversity of learning modality preferences.

- 2. Auditory Learners - general characteristics
 - a) Listen to verbal instructions
 - b) Distracted by “visual clutter”
 - c) Unimpressed with visual order
 - d) Remember by forming the sounds of words / repetition
 - e) Read out loud, talk out loud, recite lists, verbal drills, small study groups to talk lesson
 - f) Use rhymes, songs, rap
 - g) Associate with music or other auditory stimulus

3. Considerations for Auditory Learners
 - a) Allow to tape lecturers
 - b) Avoid excessive verbal drills with whole class (confuses visual learners)
 - c) Try to group auditory learners together for projects, group work, practice and reviews
 - d) Segment them away from visual learners when working in small groups to avoid cross-confusion of visual learners
 - e) Mnemonics useful

4. Visual Learners - general characteristics
 - a) Learn by making pictures in their minds while learning.
 - b) Associate graphics/pictures with concepts.
 - c) May appear “daydreaming” when concentrating (trying to see the idea)
 - d) Need space to work (spread out)
 - e) Like outline drawings, empty flow charts, highlighters, color.

5. Considerations for Visual Learners
 - a) Focus the visual clues – avoid distraction from overwhelming visual material
 - b) Encourage Mind-mapping
 - c) Use relevant analogies
 - d) Keep to a proper instructional medium – use color (don’t describe color)
 - e) Use games like Jeopardy with color-coded categories.

6. Touch (tactile) / Movement (kinesthesia) Learners - general characteristics
 - a) The majority of Public Safety students are kinesthetic learners
 - b) Learn best by doing
 - c) Need frequent breaks, hands-on activities
 - d) Enjoy scenarios, action packed stories/examples, field trips, change of locations

7. Considerations for Kinesthetic Learners
 - a) Identify them early to avoid losing their interest
 - b) Allow eager demonstrators to go first, stragglers later (but don’t forget the stragglers)
 - c) Avoid giving most attention to the “shining stars”
 - d) Expect fidgeting during class

G. Social Styles

1. Social style refers to different environmental or inherent characteristics, which affect how students take in information.

2. Large group participators are comfortable speaking out in large groups, and do not get lost in large classroom settings. They will ask questions in large groups freely, and will answer hypothetical questions easily. Interestingly, sometimes these students are uncomfortable in a small setting where they cannot be quite so "anonymous".

3. Small Group students are very comfortable in small discussion or work groups, but frequently hesitate to speak out in the larger classroom. This often means that they don't ask questions when a concept is confusing. For this reason, these students must be watched carefully in a large classroom. They also tend to like studying in groups.
4. Individual "soloists" may be comfortable in a large group setting where they can take in information from the instructor or other students. However, they rarely participate. When they don't understand lecture material, they prefer to go home and work on the problem alone. They enjoy learning on an individual basis and frequently fill out workbooks or single-student projects eagerly. Participation in large and small groups often makes them uncomfortable.
5. "Oral" students learn best when they are eating or drinking. They may be unable to learn if you structure the class to prohibit these activities.
6. "Pacers" are frequently active people who have trouble sitting still. They may also have physical problems, such as low back injuries, which make sitting uncomfortable. They may not be able to concentrate on class if they are made to sit still.

H. Cultural Factors

1. Cultural factors may also influence a student's ability to learn. Different cultures have different standards regarding:
 - a) Eye Contact, which is used by many instructors to read a student's interest and comprehension. In cultures that don't commonly use eye contact, you may need to use another method to assess understanding or interest.
 - b) Touch is an important part of EMS education. Students are expected to perform hands-on surveys in practical skills labs. Cultures that are uncomfortable with this type of touching may have difficulty with this aspect of the course.

I. Conclusions on Adult Learning:

1. Students learn using different learning modalities.
2. The majority of Emergency Service students fall primarily into the Tactile learning channel as the primary inlet. Second is the Visual, and the minority are Auditory. No one is any better than the other, they are just different.
3. One of the instructor's responsibilities is to provide instruction in a manner that will be useful to all the students.
4. Because students learn in a variety of different ways, the instructor must provide instruction in formats that can be assimilated by all students. This means having to present the same material in different formats to cover the different learning styles represented in any classroom or learning setting.
5. Cultural diversity is important for EMS instructors to understand and accept. This is important if the instructor is to avoid cultural based problems in the class.

III. Communications

OBJECTIVES:

- Define communications
- Discuss perceptions
- List types of non-verbal communications
- Discuss verbal communications
- Identify communication failure

A. Introduction to Communications

1. Definition - It's the process of transmitting ones thoughts, wishes or desires to another. Communication is the essence of teaching!
2. It implies the acknowledgement of the receiver. Not all communication is received.
3. Speaking AT someone is not necessarily communicating.
4. Psychologists say that only about 10% of our feelings are conveyed by *words*. About 30% of our feelings are conveyed by our *voice tones and fluctuation*. About 50% of our feelings are conveyed by our *body language*.
5. Teaching requires a maximum of 2-way communication between the instructors and students.
6. Many questions that are frequently asked, are posed to instructors while working in small group settings.
7. The instructor must have effective communications skills.

B. Perceptions

1. Show the video “A Tragedy at Breakfast”
2. Discuss the ways in which perception play into the receiving of the messages in the video.
3. Discuss how preconceptions in EMS classes can lead to errors.
 - a) Preconceptions on the part of the instructor – may lead to not covering necessary material
 - b) Preconceptions on the part of the student – may lead to misunderstanding of material
 - c) Perception of real importance of material by student will directly impact their interest in learning the material

<p>Activity – Allow 2-3 minutes for students to think of an example where their perception has led to a miscommunication. Ask for volunteers to share their examples.</p>
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4. Discuss how preconceptions can be avoided in the classroom.
 - a) Following a lesson plan to make sure all teaching points are covered
 - b) Evaluating learning often
 - c) Outline handouts to highlight the important points

C. Non-Verbal Communication

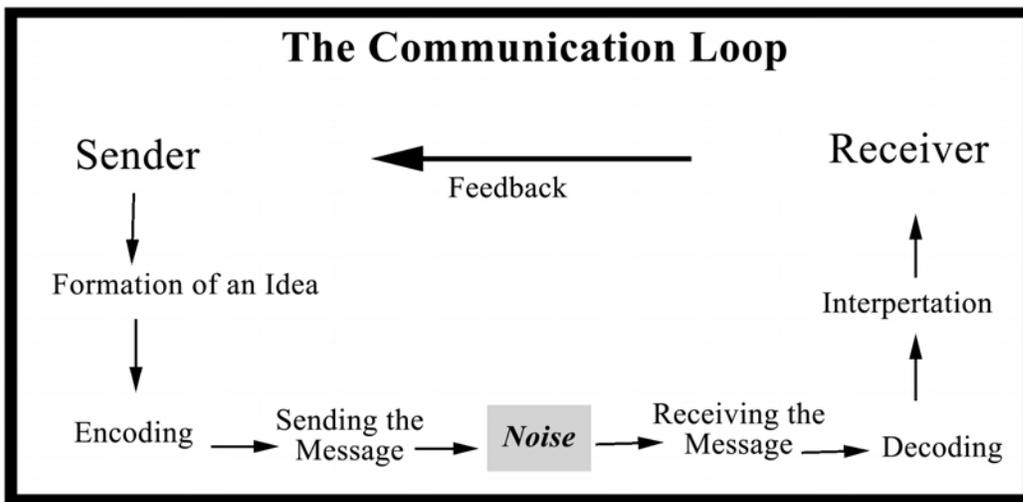
1. The teacher communicates his/her feelings and attitudes even without speaking by:
 - a) Eye contact

- b) Movement
- c) Body Posture
- d) Gestures
- e) Attire

2. Regardless of the words used, the non-verbal clues a person displays, may cause a mixing of the signals. (Effective instructors are good models of the desired behavior).

D. Verbal Communication

1. To achieve mutual understanding, both listening and speaking are required.
2. The model for communication is the feedback loop diagram. It is useful to understand the process.



Taken from "TEACHING EMS: An Educator's Guide to Improved EMS Instruction, by Catherine A. Parvensky

3. Some people have great difficulty with communication because they approach it with a Winners vs. losers. perspective.
4. Listening is a crucial element in the process of communication. *Listen for success!*
 - a) Get in their shoes (empathize). Avoid shutting down or evaluating them during their message.
 - b) Pay 100% attention. Be attentive and patient. Don't interrupt Stop what you are doing.
 - c) Use their name and then restate or paraphrase their message back to them, as you understand it.
5. Avoid making a judgment until you have heard the entire message and you have paraphrased it back to ensure you understand it.
6. Remember:
 - a) *Great minds can hold and understand divergent points of view.*
 - b) *Great minds can disagree with someone without becoming disagreeable.*
7. Be aware of non-verbal communications clues!

E. Why communications fail.

1. One or both people are not listening to the message.
2. Someone has a winner vs. loser approach to communication.
3. One person perceives his/her psychological size or importance to be larger. (Use the Parent – Adult – Child model)



- a) Person “B” perceives self as being smaller or less important than person “A”.
- b) Sometimes “B” is afraid to ask “A” to explain or clarify.
- c) Sometimes “B” is the instructor and “A” has a very large ego and feels that “B’s” message is unimportant.
- d) Sometimes “A’s” are real bullies and throw their weight around.
- e) Beware of this concept of “psychological” size and attempt to reduce it by communicating with students on an equal basis.

ACTIVITY – Give students 2 minutes to list three ways that communication barriers in instruction can be reduced or eliminated. Have each student present their list, and record these (flip chart or similar).

IV. Presentation Techniques

OBJECTIVES:

List qualities of a public speaker

Discuss the use of ice breaking techniques

Discuss the differences between presentation techniques and presentation media

Describe presentation techniques

A. Public Speaking

1. Must be comfortable speaking in front of groups
2. Tone and inflection often send more of a message than the words
3. Enunciation is important
4. Speak loud enough to be heard without shouting
5. Caution on humor – although appropriate humor adds to learning experience, you must know your audience and not offend anyone!
6. The inclusion of some types of music in the background can help auditory learners

B. Ice Breaking

1. Good idea with new class – allows students to meet each other as well as the instructor
2. Some potential ideas
 - a) Tell me about yourself survey (must collect one fact from each other)
 - b) Round Robin – Each person must introduce themselves and give one unusual fact about themselves, or something they have done. (As an alternative, have each person tell one good or bad EMS experience they have had).
 - c) Team building exercise – class is broken into groups, and given an activity that requires them to work together as a team.
3. Refer students to the printout from Weber State University for more ideas. (Appendix D)

C. Presentation techniques vs. Presentation Media

1. Techniques
 - a) Lecture
 - b) Discovery learning
 - c) Drill and practice
 - d) Programmed instruction
 - e) Tutoring
 - f) Modular instruction
 - g) Relevant practice
2. Media
 - a) Book
 - b) Computer - powerpoint
 - c) Slides
 - d) Black/Whiteboard
 - e) Videotape
 - f) Overhead
3. Both
 - a) Satellite conferencing
 - b) Interactive videodisk/CD Rom
 - c) Pencil & paper simulation

D. Specific presentation techniques

1. Lecture
 - a) Traditional
 - b) I say – you listen (Instructor centered)
 - c) Generally only reasonable for cognitive information
 - d) Good for novice trainers, basic information
 - e) Little to no student “buy-in”
 - f) Minimally should include some Audio-Visual material

- g) Best to include appropriate analogies or metaphors (example – the circulatory system being like a series of rubber pipes)
2. Demonstration
- a) Good to introduce application of concepts
 - b) Must be flawless (errors made in demonstration will be repeated by students)
 - c) Good break from lecture
 - d) Tangible, concrete learning
 - e) For practical skills – “Whole-part-whole” technique is best
 - f) Follow quickly with directed practice, so students can further cement learning.
3. Small Group Techniques
- a) Make sure groups are balanced. If group not balanced, may result in either no leadership, or two or more members fighting for lead.
 - b) For most purposes, try to assign auditory learners, visual learners, and kinesthetic learners in different groups, unless you pair them up for specific purpose
 - c) Good for discovery learning (example – have small groups identify and label anatomic parts of an anatomy model)
 - d) Directly involves students
 - e) Must be moderated to assure equal opportunity for participation of all students
 - f) Allows rotation of roles
 - g) Encourages discussion
4. Case Based Instruction
- a) Allows students to apply learning to solve “real life” situation in a safe environment
 - b) Provides a mixture for learning and experience
 - c) Student centered, active student participation
 - d) Allows students to demonstrate abilities
 - e) Provides leadership opportunities, and personal interaction
 - f) Must use caution in critiquing – ego’s / feelings easily damaged
 - g) Can be time consuming, particularly in small groups
 - h) Can turn into a “bull” session if student’s don’t understand the objectives clearly, and see benefit of exercise
5. Contrived Experiences (simulations/role plays)
- a) Allows further application, particularly of psychomotor skills
 - b) Allows students to experiment with material, mix what they already know with new knowledge and skill
 - c) Allows as “real-life” decision making without actual cases
 - d) Must have specific objective(s), and structure
 - e) High anxiety for some students (peer failure fear)

6. Clinical Experience
 - a) Clinical Experiences (hospital/clinics/field/ride along)
 - b) Allows for direct application of class learning in supervised real-world setting
 - c) Must have clear objectives and limits
 - d) Must have learning (Learning journal or log is helpful)

7. Cooperative Learning
 - a) Example – each student is assigned to research one body system, and then share the information with the other students in their group. Can also be used for whole class presentations.
 - b) Allows for direct student involvement
 - c) Must be closely supervised for correct information

8. Questioning
 - a) Rhetorical – no answer expected
 - b) Posed prior to delivery of material helps students to start thinking about application
 - c) May bring forward information already known in student’s mind, and allow for better integration of new information

9. Direct – answer expected
 - a) Helps students review material
 - b) Helps identify points that are most important (Why would the instructor ask about a non-important piece of information?)
 - c) Must use caution not to put any student “on the spot”. General questions are less likely to produce negative emotions from students than specific questions. For example – “What do you think the most important part of oxygen therapy is?” has no wrong answer, where as “What is the most important part of oxygen therapy?” could be seen as threatening.

10. Combinations
 - a) Most presentation combine at least parts of the above
 - b) Example – Rhetoric questions during a lecture

V. Lesson Planning

OBJECTIVES:

- List the parts of a lesson plan
- Identify the curriculum guide
- Review instruction domains
- Discuss the events of instruction
- Describe instructional objectives

A. Parts of a Lesson Plan

1. Terminal instructional and enabling objectives
2. The content of the lesson
3. Description of the testing plan or specific test(s) to be administered at the conclusion
4. The Presentation Techniques to be used, and key learning activities
5. The listing of Presentation Media to be used
6. A materials list for the lesson
7. Approximate timing of lesson
8. The sequence of the material
9. A list of any prerequisites students needed to have before the lesson

B. Curriculum Guide

1. The published State Curriculum is a guide, it does not include lesson plans
2. It can be added to, but not subtracted from

C. Remembering the Instructional Domains

1. Knowledge (Cognitive)
2. Skills (Psychomotor)
3. Attitude (Affective)
4. Presentation technique and media must be matched to objectives.
 - a) Example – To identify types of wounds, you must include either two or three-dimensional models (Photos or moulage) and not just describe them.
 - b) Example – To teach longboard (backboard) techniques, student's must get hands-on practice to make them proficient, and not just see it done.

D. Dr. Gagne's Nine Events of Instruction

Dr. Robert Gagne was an experimental psychologist who pioneered instructional design strategies. He was the director of the perceptual and motor skills laboratory of the U.S. Air Force. He wrote "Conditions of Learning" which outlined the relation of learning objectives to appropriate instructional designs. He defined events that are needed for learning to occur

1. Gaining Attention
 - a) Abrupt stimulus change for learner, "wakes" brain up

2. Inform learners of objective
 - a) What is to be learned
 - b) Why it is important, what relevancy does it have to student
3. Stimulate recall of previous learning
 - a) Necessary step to integrate new information with that which has already been learned
 - b) Relate current lesson to any already taught – Example – “If you recall from our discussion last week on wounds, one reason to apply a dressing was to help prevent additional blood loss. We are now going to find out what effect blood loss can have on a patient, furthering your understanding of why we want to prevent it”.
 - c) Can also use analogy here – Example – “Just as a Doctor needs to know how to diagnose different diseases to prescribe the correct medication, a CFR or EMT needs to be able to properly assess a patient in order to initiate appropriate treatments”.
4. Presenting the content
 - a) Giving the “meat” of the presentation
 - b) Using appropriate delivery techniques and media
5. Providing learning guidance
 - a) Using concrete examples to define abstract ideas
 - b) Relating new information to already known information
 - c) Use images, drawings, other visual aids
 - d) Provide auditory sounds if appropriate (Example – tapes of lung sounds)
6. Elicit Performance
 - a) Have the learners practice with the information provided
 - b) Provide clues and cues at first, and gradually remove them
7. Provide Feedback
 - a) Provide corrective guidance during practice
 - b) Assist learner in problem solving their own performance (What might you do different?) and reinforce appropriate change
 - c) Center on performance (measurable objective)
8. Assessing performance
 - a) Testing or assessing that the learner can actually accomplish the objective
 - b) Performed without assistance
 - c) Necessary to “over-learn” in order to really perform without assistance over time
9. Enhance retention and transfer
 - a) Provide new environment for student to “transfer” knowledge. Example – once a student can successfully immobilize a sitting patient, introduce a real car, then maybe an ambulance (with a full wall behind the drivers seat), and discuss how to “transfer” the

immobilization skills they know to these new settings. Discuss how a vehicle on its roof might be different.

- b) Bring in new case studies to discuss how different skills would be applied

E. Instructional Objectives

1. Instructional objectives allow the instructor and student to know what learning needs to take place. They are usually broken into “terminal” and “enabling” objectives.
 - a) Terminal objectives are the “big picture” or final objectives you want the student to be able to accomplish. An example would be – being able to describe a wound and it’s location
 - b) Enabling objectives are all the objectives a student needs to know to reach the terminal objective. In the above example, these would include:
 - i. Knowing anatomical landmarks
 - ii. Being able to identify a wound
 - iii. Being able to classify or name the type of wound
 - iv. Being able to measure the size of the wound

2. An instructional objective identifies the performance expected at the conclusion of the training. It should identify three components:
 - a) The condition(s) under which the performance will take place. Some examples of conditions include:
 - i. What will be provided
 - ii. In what environment
 - iii. Equipment to be used
 - b) The actual performance expected, or what the learner will be able to do. Generally described as actions such as:
 - i. list
 - ii. collect
 - iii. assemble
 - iv. identify
 - c) The criteria to which the performance is measured, or how successful the performance needs to be.
 - i. For example – in the psychomotor objective “Given a disassembled Compact Suction unit, the learner will be able to assemble the unit within one minute without the use of tools, so that the unit works to remove 200 cc of fluid from the airway on an airway management trainer”,
 - (a) the conditions are “the student will have a disassembled suction unit.
 - (b) the performance will be to assemble the unit
 - (c) the criteria is not to use any tools, and end up with a working unit.
 - ii. In a didactic objective – “Using the SAMPLE method, collect a patient history from a simulated patient”
 - (a) the conditions are “given a simulated patient”
 - (b) the performance will be to collect all the parts of a SAMPLE history

- (c) the criteria, although not specifically stated, are to recall SAMPLE from memory, including what each letter stands for, and report the collected history in this format
 - (d) In most cases, the entire objective is not listed out since there is often generally understood conditions or criteria. The instructor needs to understand these, however, to be able to provide the correct learning environment for the learner.
 - (e) Most objectives listed in EMS training are Terminal objectives, with the understanding that the enabling objectives must be covered as well.
 - (f) Usually, there will be many objectives incorporated into a single presentation. For example, the SAMPLE history objective may well be included in a more encompassing presentation on Patient Assessment.
 - (g) When properly identified, the learning objective will indicate to students and instructors alike, what the minimum acceptable performance is at the end of the skill, session, unit or module.
3. Objectives for each module are included in the curriculum and are listed and categorized before the content of each module.

F. Domain Teaching Tips

1. There are a series of articles entitled “Designing Instruction: Practical Strategies” from *Performance & Instruction* (Appendix E). Review these with the students, and discuss how they might be of help when designing a lesson plan.

VI. Module 1 Summary

- A. Review with the candidates the importance of each of the following:
- B. The instructor practicing and maintaining excellent qualities
- 1. Would you prefer to learn from an amateur, expert, or master?
 - a) Amateur – someone who dabbles in the subject
 - b) Expert – someone who can practice a particular craft on their own without mistakes
 - c) Master – someone who can not only practice a craft without mistakes, but can share why and how not to make mistakes as well.
- C. Adult learners
- 1. Their expectations
 - a) must be meaningful and usable
 - b) learn best by being able to apply new information
 - c) have many factors affecting learning
 - i. Auditory, visual, kinesthetic learning modalities
 - ii. Social style

- iii. Cultural factors
[Items 4 & 5 are included in Appendix B, Optional Learning Theory Module]
- iv. Left vs. right brain tendencies
- v. Multiple intelligence
- d) Learning must be identified with learning domain and level of expectation in order to understand what must be taught
 - i. Learning domains – cognitive, psychomotor, affective
 - ii. Level of learning expectation (Bloom’s taxonomy)
 - (a) knowledge
 - (b) comprehension
 - (c) application
 - (d) analysis
 - (e) synthesis
 - (f) evaluation

D. Communications

- 1. The importance of perceptions in EMS classes
 - a) Instructor- may lead to not covering material
 - b) Student- may lead to misunderstanding the material
 - c) Direct impact on interest in learning
- 2. Ways we communicate
 - a) Non – verbal
 - b) Verbal
- 3. Communication failure
 - a) not listening
 - b) winner vs. loser approach
 - c) parent – child model

E. Presentation Techniques

- 1. Public Speaking
 - a) must be comfortable
 - b) tone and inflection can be more important than words
 - c) speak clearly and loud enough to be heard
 - d) be careful with humor
- 2. Ice Breakers
 - a) Good idea for new classes
- 3. Presentation techniques
 - a) Lecture
 - b) Demonstration
 - c) Small groups
 - d) Case studies
 - e) Simulations/role playing
 - f) Cooperative learning
 - g) Questioning

h) Combos

F. Lesson Planning

1. Parts of a lesson plan
2. Curriculum guide
3. Instructional Domains
4. Nine events of instruction
 - a) gaining attention
 - b) objectives
 - c) review previous learning
 - d) present content
 - e) provide learning guidance
 - f) elicit performance
 - g) provide feedback
 - h) assess performance
 - i) enhance retention and transfer
5. Instructional Objectives
 - a) terminal
 - b) enabling
 - c) expected performance

I. Candidate Presentation Preparation

(Review Appendix A for Instructions and topics for Candidate Presentations)

Prior to the course the Candidates were asked to prepare a 3-5 minute presentation on a non-EMS related topic. At this time Candidates should be given 30 minutes to complete their presentation and prepare the written objectives and lesson plan.

II. Candidate Presentation - Non-EMS Topic

(Review Appendix A for Instructions and topics for Candidate Presentations)

Candidates present their 3-5 minute presentation on the Non-EMS related topic. This lesson is scheduled for 90 minutes, depending on the number of Candidates in the class you may need to divide the group in half or less. If practical, this delivery may be video-taped for the Candidate's review. Candidates receive behavioral feedback from faculty and other Candidates, and view their own video.

III. Presentation Technology and Usage

OBJECTIVES:

Discuss advantages/disadvantages of the use of audiovisuals

A. General Concepts of Audio Visual Aids

1. Purpose:

- a) To amplify and clarify what is being presented
- b) To emphasize important points
- c) To stimulate student's senses and enhance learning
- d) To reinforce and summarize key concepts
- e) To bring into the classroom objects or processes that are too big, small, spread out, unavailable, expensive, etc.
- f) Good visual aids can convey an image of competence and professionalism

2. Limitations:

- a) They do not teach independently-"Remember they are aids"
- b) They must be relevant-First ask "What's the point?" – "Why use this?"
- c) Must be well prepared-Only one point to each if possible
- d) Must be well presented
- e) Instructor must be able to "operate" them

3. Advantages:
 - a) Causes more than one sense to be involved in the learning process
 - b) May allow for more rapid presentation of material
 - c) Often result in more rapid initial understanding
 - d) Promotes increased retention
 - e) Facilitates the learning process for a variety of student learning styles simultaneously

4. Selecting which media works best:
 - a) Readable
 - i. Legible and spelled correctly
 - ii. Visible to all in the room
 - iii. Appropriate format for room and audience size
 - b) Relevant
 - i. Pertinent to topic
 - ii. Up-to-date
 - iii. Consistent with local protocol
 - c) Reliable
 - i. Dependable in format and function
 - ii. Should evoke consistent responses
 - d) Reinforce
 - i. Should support presentation, not give it
 - ii. Should stress only the important points
 - iii. Should summarize and reinforce key points
 - e) Tighten up the message
 - i. Present only information you plan to discuss
 - ii. Keep the visuals moving
 - iii. Limit the items to seven
 - iv. Trim and punch up words
 - v. Use bullets, not numbers
 - vi. Clean up data display confusion
 - vii. Present material that will advance your idea not sabotage it

5. **ACTIVITY** – Divide the class into small groups, and assign each group a topic. Have each group develop a written list of instructional devices or presentation formats (not techniques) that can be used to teach their topic. Have each group present their list to the class. Review the importance of providing students with a variety of instructional devices and presentation formats.

Suggested topics:

- Emergency childbirth
- CPR
- Application of a traction splint
- Lung sounds
- Short spine board

B. Advantages, Disadvantages and Use of Specific AV's

C. Chalkboard/Whiteboard

1. Advantages
 - a) Readily available
 - b) Inexpensive
 - c) Easily changed or updated
 - d) Encourages spontaneity
 - e) Dependable
 - f) Room lights left on
2. Disadvantages
 - a) No permanent record
 - b) May place instructor's back to the audience
 - c) Limitations on portability
 - d) Limitations on audience size
3. Proper use
 - a) Prepare large or difficult items beforehand
 - b) Make certain that writing is legible
 - c) Don't talk while facing the board
 - d) Involve your students
4. Construction
 - a) Colored chalk can enhance the appearance
 - b) Using students as recorders can increase involvement and free instructor's hands

D. Flipchart

1. Advantages
 - a) Inexpensive
 - b) Reasonably portable
 - c) Can be saved
 - d) Dependable
 - e) Encourages spontaneity
 - f) Room lights left on
2. Disadvantages
 - a) Limited writing space
 - b) Changes are messy
 - c) May place instructor's back to audience
 - d) Limitations on size of room and audience

3. Proper use
 - a) Complicated or time-consuming illustrations should be prepared ahead of time
 - b) Don't talk with back to audience
 - c) Make certain writing is legible
 - d) Involve students
 - e) Tip: Can be prepared ahead of time

4. Construction
 - a) Commercially available (Plain, Ruled, Grid)
 - b) Require stand
 - c) Easel, Plywood with spring clips
 - d) Some easels prop things up, others hang them.
 - e) Having the wrong kind means trouble.
 - f) Substitutes available such as newsprint roll ends or butcher paper
 - g) "Post-it" type, no stand required

E. Overhead transparencies

1. Advantages
 - a) Attention getting and tend to encourage audience participation
 - b) Relatively inexpensive
 - c) Easy to prepare
 - d) Instructor can face audience while writing
 - e) Can be either permanent or non-permanent
 - f) Reasonably portable
 - g) Room lights left on
 - h) Reliable machinery

2. Disadvantages
 - a) Requires equipment
 - b) Keystone effect
 - c) Room and audience size limitations
 - d) Can be blinding to instructor

3. Proper use
 - a) Prepare complicated transparencies ahead of time
 - b) Arrange in order of anticipated use
 - c) Frames can be used for crib notes and to ease handling
 - d) Cover unwanted portions until ready
 - e) Leave on long enough
 - f) Highlight or point to key concepts
 - g) Involve the student
 - h) Bottom of projected image should be at student's eye level

- i) Tip: place transparencies on floor 6 feet away and read it -if you can not, your audience will not be able to read it either when projected!
 - j) Tip: marking or blocking the spot on the projector where the transparencies should be placed allows exact placement for every transparency.
4. Construction, Written (don't use grease pencils)
- a) Non-permanent pens
 - i. Spontaneous, Smear
 - ii. Highlight permanent overhead projection
 - b) Permanent pens
 - i. Good for pre-planned development
 - ii. Don't allow for mistakes
 - iii. Create a lasting, reusable product
 - c) Stencils or lettering guides
 - i. Make transparencies more legible
 - ii. More professional looking
 - iii. Multiple overlays can be used to build or add color to 1st view
 - iv. Pastel transparency material reduces glare from screen
5. Other sources
- a) Photocopying: Make certain of transparency/ machine compatibility
 - b) Professional results
 - c) Transfer lettering direct to film or to paper and photocopy
 - d) Commercial sources are EMS publishers, schools
 - e) Computer generated i.e.: PowerPoint
 - f) Graphics
 - g) Lettering, direct
 - h) Lettering, photocopy

F. Slides

1. Advantages
- a) Good for large rooms and audiences
 - b) Can be either action oriented or words
 - c) Allows reference back to previous slides
 - d) Relatively portable
 - e) Order easily rearranged
2. Disadvantages
- a) Expensive
 - b) Difficult to produce
 - c) Room must be darkened
 - d) Requires equipment
 - e) Tend to encourage less audience participation

3. Proper use
 - a) Action slides should not be left on too long
 - b) Word slides should be left on longer
 - c) Make certain that they are in focus
 - d) Use to reinforce or highlight only

4. Construction
 - a) Photocopy, then photograph
 - b) Use colored backgrounds
 - c) Color reversal films i.e.: Polar Blue or Kodalith film
 - d) Copy stand use
 - e) Photographing a computer screen
 - f) Get training or assistance (Kodak has numerous publications on this topic)
 - g) Tip: Slide should be readable at arms length to be visible in back of room

<i>Slide Colors</i>	Background	Readability (In declining order)
	Dark (Black)	White, Yellow, Orange, Green, Red, Blue, Violet
	Light (White or Clear)	Black, Red, Orange, Green, Blue, Violet, Yellow

G. Audio Tape Recordings

1. Advantages
 - a) Can provide extra instruction for students at their convenience
 - b) Can provide auditory input for poor readers
 - c) Commercial availability
 - d) Moderate cost

2. Disadvantages
 - a) Re-recording to change
 - b) Low retention rate
 - c) No visual stimulation

3. Proper use
 - a) Preview materials
 - b) Introduce
 - c) Play/replay
 - d) Discuss

4. Construction
 - a) Set up equipment
 - b) Test sound levels
 - c) Record
 - d) Edit and revise

H. Videotapes/Videodiscs/DVD

1. Advantages
 - a) Action oriented
 - b) Excellent for evaluation of simulations
 - c) Easy to produce
 - d) Technology is rapidly improving
 - e) Can be backed up or frozen
 - f) Tapes can be reused
 - g) High student involvement
2. Disadvantages
 - a) Expensive initial investment
 - b) Requires cumbersome equipment
 - c) Limitations on class
 - d) Technical skill required to operate
3. Proper use
 - a) Introduce piece
 - b) Stop to explain or clarify if necessary
 - c) Make certain that everyone can see and hear monitor

Monitor Size	# People
19 inch	5-6
25 inch	12-18
48-72 inch	~50

- d) Summarize and highlight at the end
4. Construction
 - a) Create storyboard
 - b) Procure equipment
 - c) Procure personnel
 - d) Rehearse
 - e) Tape
 - f) Edit tape

I. Computer Projection – (Powerpoint)

1. Advantages
 - a) Easy to update
 - b) Can change “on the fly”
 - c) Attention getting
 - d) Can include Multimedia all in one media

- e) Allows for interactivity
 - f) Connections to the Web
2. Disadvantages
 - a) Requires special equipment/projectors
 - b) Usually needs dim lighting in room
 - c) Potential technical problems
 - d) Requires electricity
 - e) Expensive equipment
 3. Proper use
 - a) Prepare ahead of time
 - b) Have launching icon on “Desktop”
 - c) Control flow of material
 - d) Make sure all students can see
 - e) Don't rely on computer to give lecture – it is only a tool
 4. Construction (See Appendix G for tips on PowerPoint)
 - a) Learn software before making
 - b) Hire a designer
 - c) Buy pre-constructed computer presentations
 - d) Look at the Web for pre-constructed presentations (EMT Sue's, House of DeFrance, NAEMSE, etc.)

J. Avoiding AV Failure

1. KISS (Keep It Simple, Stupid)
 - a) Outcome is the key, not production
 - b) Select the least elaborate choice which will accomplish the task
 - c) Don't make presentations totally dependent upon AV's
 - d) Plan your presentation and AV's with the audience and facility in mind
2. Electrical Equipment
 - a) Is equipment available? Are you sure?
 - b) Do you know how to operate it?
 - c) Is it compatible?
 - d) Are all of the pieces there?
 - e) Make certain that you have:
 - i. Three-prong adaptors
 - ii. Extension cords
 - iii. Spare bulbs
 - iv. Take-up reels
 - v. Slide trays
 - vi. Screens
 - f) Check it out before you need it, focus, sound levels, etc.

- g) Projection equipment
 - i. screen or surface for projection
 - ii. room lighting
 - iii. room layout/seating
- 3. Always Have a Backup
 - a) Don't make yourself totally dependent on equipment if possible.
 - b) Plan for equipment failure
 - i. Have spare parts
 - ii. Have a spare system
 - iii. Have a training plan "B", practice, demonstration or other which does not require equipment

K. Summary and Questions on AVs

- 1. Class questions or comments on the lesson
- 2. Ask selected students for demonstration of the objectives

IV. Physical Environment

OBJECTIVES: Discuss the physical environment of a classroom

- 1. Environmental Controls
 - a) Lighting
 - i. Is lighting suitable for class activities
 - (1) Bright for skill demonstration
 - (2) Dim for slide, computer projection, etc.
 - (3) Zoned (front row can be turned off, leaving back row on, etc.)
 - b) Heating
 - i. Too hot or too cold reduces learning
 - ii. Appropriate for activities
 - (1) Lecture – most adults prefer between 70 and 74 degrees
 - (2) Lab – a little cooler if physical activity is center of skill
 - c) Sound
 - i. Distractions from pagers and cellular phones
 - ii. Distractions from Heating, Ventilation, and Air-conditioning units
 - iii. Distractions from PA, station alert, and other built-in systems
 - iv. Distractions from competing classes, meetings, etc.
 - v. Distractions from apparatus leaving on calls
 - vi. General acoustics (Echo in all tile rooms)
- 2. Room Arrangements
 - a) Seating
 - i. Comfort

- ii. Arrangement
 - (1) Theater style (chairs only)
 - (2) Classroom style (Traditional)
 - (3) Boardroom style (Conference Table)
 - (4) Horseshoe (U-shaped)
 - (5) Round table (Small Group Pods)
 - b) AV positioning
 - i. Projection screens
 - ii. Black/Whiteboards
 - c) Instructor's space
 - i. Territoriality
 - ii. Breaking the student barrier
 - iii. Sitting vs. standing
 - d) Equipment / Practice Space
3. Breaks
- a) Areas
 - b) Smoking
 - c) Food / Drink in the classroom

V. *Developing Judgment in EMS Students*

- A. "Judgment is the ability to recognize a problem, then intervene at the appropriate time with the appropriate skill to positively affect patient outcome. Judgment is composed of values." It can also be said that Judgment comes as a result of experience, and that poor judgment may be a result of inexperience.
- B. "The Practice Ethic" Most EMS personnel, moments after graduation, breathe a deep sigh of relief and try to forget about study and practice for another three years. It just seems that EMS personnel don't have the same perceptions of proficiency as many other professions.
1. Firefighters drill regularly... Athletes practice fundamentals and scrimmage... Pilots practice "crisis" situations in flight simulators... *It is no less important for EMS Personnel!*
 2. When was the last time you saw a picture of an EMT in action, doing something correctly? (Yes, you too can be on the cover of JEMS!)
 3. Is it because of poor training, or could it be from a combination of factors?
- C. "You play the game the way you practice". We need to prepare EMS personnel to deal with real world situations.
1. In the past, most EMS personnel didn't think that their training was pertinent to the real world and tended to dismiss procedures as superfluous since it didn't provide any connection to real world application.
 2. Training programs should attempt to instill the right values and ethics during the student's formative stages while in training.
 3. Early experiences in the "street" can undo months of training if their peer group doesn't provide the "right" influence.
 4. Poor street performance may be a reflection of not practicing rote skills and patient simulations frequently enough.
 5. Some EMS personnel don't receive enough feedback about their "street" performance to improve.
 6. EMS personnel, particularly refresher students, become easily bored with the classroom "same old stuff" and tune out because they think they know it all already. Make sure refresher training is stimulating and new.
 7. EMS personnel want to grow. If the training is not stimulating or entertaining enough to attract people back, they will look elsewhere, and may not receive the correct answers.
 8. Be wary of "experienced" EMS personnel advising new practitioners to throw away the book and telling them, "hey kid, we don't do it that way here!"
- D. Is training always the excuse for poor performance? From the questions raised it should be obvious this is a complex question with NO easy answer. Often, administrators, physicians and others are quick to point the finger at training for all patient care shortcomings. There are many factors, which influence how an EMT will perform; some of them are changeable by improving training and some are not.

1. Initial Training. Training new EMS personnel may be easier than refresher students since they are more malleable and generally don't have any preconceptions.
 - a) Good habits. The habits that students acquire from over-learning can have long lasting positive effects. Old habits are hard to change. It's important that students don't learn mistakes through poor instruction.
 - b) Thought process. Education is being taught how to think and use the mind for problem solving. In EMS we need to train people to perform specific tasks but we also need to develop their problem solving abilities. After people learn the rote skills involved in patient care, they need to learn how to apply and adapt them to the "real world" circumstances they will face. Students can gain valuable experience in the classroom on patients who are "un-die-in-ly" grateful. These can be many of the significant emotional events, which help shape their attitudes and opinions.
 - c) Positive Attitudes. A CFR or EMT with a negative attitude can have a profoundly negative impact on patient care! People start to develop their attitudes about patient care in their initial course. The values, attitudes and opinions of instructors "rub off" on the students. **It's important that the instructors have positive attitudes themselves and provide a good role model for the students.** "Draftees".
Conscription into EMS training typically results in people who have negative attitudes about patient care in the class. People with poor attitudes on entry to a class are difficult to influence.
 - d) *The EMS instructional staff plays a major role in how well EMS personnel are prepared to function in the field.*

2. Field Experience. The well-known adage of "there's no substitute for experience" has a lot of truth to it, but not all experiences are necessarily positive for improving patient care.
 - a) Need For Acceptance. According to the psychologist Maslow one of the first human needs is to feel accepted. New EMS personnel tend to be insecure and need to be accepted by their peers. If senior EMS personnel have poor habits and attitudes they tend to "rub off" on "the new kid on the block". The new person often goes along just to be accepted. Individuals with strong personalities and who are very secure may not just "go along" with what they think is wrong. These individuals are a rare breed.
 - b) New EMS personnel tend to seek the same level as those around them. The majority of EMS personnel tend to be only as good as those around them. A mediocre EMS worker, working with very good ones, will usually become better. A new graduate who shows some promise, when teamed with a poor performer will usually regress to their level.
 - c) No Field Supervision; Medicine, nursing and other health professions are highly scrutinized and supervised occupations. Their work is constantly under review by others with more education or experience in health care. In EMS actual "on site" supervision during emergencies is virtually nonexistent! It's easy for errors in judgment and technique to go undetected for years.

3. Medical Control and Feedback. The type of medical control and feedback a CFR or EMT receives determines whether or not they will learn from experiences.
 - a) Judgment. People tend to develop good judgment from having had poor judgment; to know it was poor judgment someone must tell you.
 - b) Feedback. In order to learn from experience, a person needs to have periodic feedback to benefit from the experience. Feedback is essential to learn; it's what makes the difference between having 10 years of experience or 1 year of experience 10 times.
 - c) Medical Direction. Not all services have a medical director or a hospital ED staff that takes an active interest in prehospital care and is willing to take the time to provide feedback. Sometimes a physician is interested but may not have a full understanding of the problems that EMS personnel face. This may lead to inappropriate expectations. The lack of medical control feedback and field supervision plays a major role in the pitfalls prehospital care.
 4. Continuing Education/Practice. Constant practice helps keep providers polished and ready for when the little details really matter! Research has shown that even experienced ALS personnel lose their BLS skill proficiency rather quickly. Practice is necessary to maintain BLS skills!
 - a) Repetitive practice of rote skills is not enough and leads to boredom rather quickly.
 - b) Continuing education needs to present new concepts and ideas to expand both CFRs and EMTs, and stimulate growth. It also should focus on recognized pitfalls in prehospital care.
 - c) Simulations are a useful teaching and practice tool because they allow EMS personnel to practice handling situations they may not encounter frequently.
 5. What Does It Take To Have Effective Field EMS Providers?
 - a) *Good Initial Training + Good Field Experience + Medical Control and Feedback + Continuing Education and Practice = An Effective Field Provider!*
 - b) As instructors there are components of this formula that we CAN and should influence.
- E. What Do CFRs and EMTs Really Do, and What Is The Best Way To Prepare Them ?
1. We tend to teach students at a "recall" level with rote skills but we actually expect them to perform at a much higher level in the field.
 2. The educational psychologist Bloom categorized the levels of understanding in his taxonomy. He divided it into the three levels of the Cognitive Domain, Affective Domain, and Psychomotor Domain.
 3. In EMS we have to combine all three domains because when we treat people we must do much more than just psychomotor skills!
 4. We teach at a recall level but we expect students to:
 - a) Assess
 - b) Value
 - c) Set Priorities
 - d) Develop a Treatment Plan

- e) Organize
- f) Lead Others
- 5. Teaching people rote skills *only is* like teaching an athlete *only* how to hit a ball and then expecting him/her to play the game of baseball.
- 6. The athlete needs to learn the *fundamental* skills of the game and then needs to *scrimmage* and learn how to apply those skills under actual conditions, and so does the CFR and EMT by way of simulations and supervised internship.
- 7. *No wonder that CFRs and EMTs don't seem to "play the game right. They learned a few fundamentals but the coach never taught them how to play the game!*
- 8. After the fundamentals are learned, students need to learn how to play the "game". In
- 9. EMS that game is total patient care.
- 10. Since it's difficult to hire sick people for the students to obtain experience on, the only viable alternative is to practice in simulations on programmed patients!
- 11. Very experienced EMS personnel usually become experienced at the expense of some patients! If we as instructors do a better job, perhaps some of our patients will suffer less!

F. What Thought Process Must We Reinforce In EMS Personnel?

- 1. Before practicing situations it is imperative that students have a knowledge and skill base! Otherwise they won't have the "tools to focus on playing the "game". Remember, people need to have fundamentals before they can be expected to play the game and win!
- 2. The thought process. Watching an experienced CFR or EMT in action is like observing a virtuoso performance. Assessment, management and leadership are all carried out with speed and accuracy. But, EMS providers are not born this way. Somewhere along the line they had to develop this ability. Many instructors, when observing students in action, have a difficult time determining where the fumbling student is going wrong.
 - a) There is a definite pattern of processes and mental information transfer that occurs in the mind, every time we treat a patient. The experienced provider may accomplish it in seconds where the inexperienced person may take minutes or not at all.
- 3. How do people assess and manage?
 - a) *Information gathering phase.* This is when the CFR or EMT obtains a history and conducts a physical exam. Some of us always call this phase Patient assessments, but it really isn't. It's an artful process of communication and perception that can greatly alter how we behave toward a patient. If a major piece of information is missing because of sloppy information gathering, then we may arrive at an incorrect conclusion about what is wrong.
 - b) *Compare findings to knowledge base.* Once signs and symptoms are gathered, we then must compare the findings to our knowledge base and understand what they mean. If the information gathering was incomplete or a bit of information was misperceived, we are apt to arrive at an incorrect conclusion about what is wrong.

- c) *Making the assessment.* The comparison of the findings to our knowledge base will allow us to decide what we think is wrong. The quality of the information gathering is usually a reflection of the provider's knowledge base. The more a provider knows about cardiovascular disease, for example, the better his/her questions and observations will be. Making the assessment is the crux of patient care! To treat something one must detect it!
 - d) *The plan.* Once the assessment is made we have to decide what to do. This is where we must set priorities and develop a treatment plan. This is where rationales and judgment play a major role. It is an artful process and one where judgment gained by previous experience can improve the outcomes. Deciding which technique to use, when to use it, and adapting it to the situation is developed best by practicing.
 - e) *Leadership of others.* Once the plan has been decided upon, we need to carry it out. Since actual patient care is complicated and activities need to be coordinated, leadership of other members of the team is necessary. This is essential to carry out the plan quickly. Seldom does the lead provider have the luxury of an entire team of crewmembers, or bystanders who will automatically know how to proceed. Practicing "the game" can develop leadership skills.
4. Instructors need to be cognizant of the thought process to pinpoint where things are going "right" and "wrong". Often a situation, either real or simulated, is disastrous and the instructor is hard pressed to understand why. A careful reflection on this process will usually enable the instructor to provide meaningful feedback.
 5. To prepare providers for the real world we must let them practice "the game" and teach them how to use their minds. With practice, the field provider's assessment and management becomes a "reflex". *Rote knowledge and skill development are only Part of the goal!*
 6. Before attempting simulations the students must:
 - a) Have the knowledge base.
 - b) Have the skill base.
 - c) Understand the treatment approaches and rationales.
 7. *Starting a course off with situations before they have been prepared with the fundamentals is usually disastrous and very negative for the students.*

MODULE 3

I. Handling the difficult student

OBJECTIVES:

Discuss the profiles of problem behavior

A. Profiles of Problem Behavior

1. Sometimes, in spite of excellent instruction, problem behavior manifests itself. Knowing how to cope with it is an important part of being an instructor.
2. For each of the following situations, discuss the potential causes of the behavior, how to immediately handle the situation, and how to handle the situation long term.
 - a) You have a student in the class who is an "Expert" on everything. At least they seem to know enough fancy terms and such to look this way. You have a guest speaker in, and the "Expert" keeps interjecting points they feel are important even though the points are outside the learning objectives of the class. They also keep using body language to demonstrate disagreement with the guest speaker.
 - i. The "Expert" or "Balloon Expert" is a person who exhibits dominant behavior in the classroom, often trying to "show-up" the instructor(s) or other students using either verbal or non-verbal messages.
 - ii. Potential Causes
 - (1) Their ego is so large that it prevents them from just being a student
 - (2) They have poor self-esteem.
 - (3) They need to draw attention to themselves and to establish their authority.
 - (4) Sometimes they may be bored and require stimulation.
 - iii. What can you do immediately?
 - (1) Do not attack or demean the student (even balloon experts).
 - (2) Maintain control by refocusing the class on the objectives.
 - (3) Keep the question and answer format regulated.
 - (4) Perhaps use the real expert to help you answer the tough questions.
 - (5) Often one question asking them to explain what they just stated bursts the balloon.
 - (6) Acknowledge the diversity of correct methods but explain the need for consistency (in skill arguments).
 - (7) Occasionally someone who has true expertise and knowledge on a particular subject is in a course. If they are well-adjusted people they can be true assets to your course. Sometimes their ego prevents them from being humble in the classroom and friction occurs. Provide some gratification and respect for the real expert. Talk to them during a break explaining the need to keep to objectives.
 - iv. In the long term:
 - (1) Counsel the student on how their behavior is effecting class time. Provide clear guidelines as to what behavior is expected.

- (2) Use their talents and desire for respect in a constructive manner by having them assist in tutoring or lab sessions if appropriate.
 - (3) Recognize their accomplishments and provide them with positive reinforcement.
- b) During a break, you overhear a student telling other students that they know a particular Lab Instructor in your course, and that they “aren’t any good in the field, and certainly can’t teach”.
- i. “The Sniper”. This person uses aggressive behavior to take cheap shots and “snipe” at the instructor. Sometimes the sniper is also a bully and attempts to intimidate the faculty. The sniper may also take his/her cheap shots with posturing and other non-verbal behavior.
 - ii. It may be caused by low self esteem and/or the need for group acceptance. Some of their traits are similar to that of the dominant student.
 - iii. What can you do immediately ?
 - (1) Avoid reacting negatively to them and avoid any verbal exchanges or debates.
 - (2) Talk to them during a break about their behavior and how it effects the class.
 - (3) You must not ignore the behavior because it could become contagious and infect others who may follow his/her lead.
 - iv. In the long term:
 - (1) Counsel the student, address the specific behaviors causing difficulty and explain why.
 - (2) Define the consequences if the behavior continues (dismissal, suspension, etc.).
 - (3) Document the meeting and place a record in their student file. Be sure to focus on the behavior! Don't editorialize.
 - (4) Don't allow the behavior to continue to disrupt the class and faculty.
- c) During the third class, you notice a group of three students who have migrated to the back of the class, and are now continuously talking during your presentations that is obviously disruptive to other students in the back of the room.
- i. “Motor Mouth” & “The Back Row Gang”. These people are constantly talking and are disruptive. They make it more difficult for other students to hear and it is a rude gesture to faculty members who are leading the class.
 - ii. There are many causes of this behavior:
 - (1) Immature behavior
 - (2) They think the subject matter is boring or they are mentally lost.
 - (3) They are socially or romantically involved with others in the class.
 - (4) They may also be confirming subject matter with others in the class.
 - iii. What can you do immediately?
 - (1) Walk close to the vicinity of the students.
 - (2) If they don't get the point, ask them a question about material being covered.
 - (3) Generate lively discussion and get them involved.
 - iv. In the long term:
 - (1) Counsel them about their behavior after class.
 - (2) Consider boredom as a problem and reassess your teaching methods.
 - (3) Separate social groups if the problem continues.

- d) Over the course of several classes, you have noticed one student who seems to sit like a bump on a log, never participating in classroom discussion, and never asking any questions.
- i. "The Silent One". This is the shy introverted student who does not become involved in the class. Their lack of involvement could be because of shyness, lack of confidence, boredom or conflict with the instructor.
 - ii. What can be done immediately?
 - (1) Try and involve the student in discussions.
 - (2) Consider varied activities and ask them to help others if they seem bored.
 - iii. In the long term:
 - (1) Try to identify the reason for the silence.
 - (2) Set specific work goals for the student.
 - (3) Change instructor assignments if appropriate.
- e) During the administration of the third division written evaluation exam, you find it necessary to take an emergency phone call in the next room. On returning to the classroom, you see one of the students looking at the answers another student has put on their exam.
- i. "The Cheater". This is the person who cheats on exams.
 - ii. Cheating may occur because of
 - (1) the fear of failure
 - (2) poor personal values
 - (3) laziness
 - (4) poor security measures.
 - iii. Prevention is the best remedy!
 - (1) Structure the environment by not allowing books and reference material in the room.
 - (2) Keep people separated.
 - (3) Have a proctor in the room.
 - (4) Have a firm policy on cheating, be sure students know it and follow it closely.
 - (5) Make announcement about eye contact.
 - iv. If you catch someone cheating:
 - (1) Quietly ask them to leave the room and confiscate the paper.
 - (2) Follow your sponsors procedures for this situation.
 - (3) Carefully document the situation in writing and keep all papers for evidence.
- f) For the eighteenth time in three classes, you have a student who is yet again complaining during a break that the class material is irrelevant, too hard, and just not right.
- i. "The best defense is a good offense." This person complains constantly about the difficulty of the course, the examinations, the instructors, and generally he/she is unhappy with everything.
 - ii. There can be many causes of this behavior:
 - (1) The student is academically "in over their head" and is rationalizing his/her inadequacies.

- (2) Some have a poor attitude about life in general and are not well adjusted.
- (3) Some have low self-esteem.
- (4) Some may have some legitimate complaints about the course.
- iii. In the short term:
 - (1) Acknowledge any genuine problems and work toward resolution.
 - (2) Have the student suggest some potential resolutions.
 - (3) Assess the reasons for the behavior.
- iv. In the long term:
 - (1) Don't allow them to provide criticism without suggesting realistic resolutions to a problem that is real or perceived by them.
 - (2) Provide baseline academic testing to assess entry-level educational skills in reading, writing and math.

- g) You have a student who you feel is really trying their best, but just isn't getting passing grades. It is coming up to the end of the second division and you are afraid that no matter how hard they try, they just aren't going to pass.
 - i. Poor academic performance.
 - ii. Can be caused by:
 - (1) Poor entry-level skills.
 - (2) Disorganized reading and study habits.
 - (3) Difficulty with the vocabulary.
 - (4) Poor attention span.
 - (5) Learning disability.
 - iii. Potential solutions:
 - (1) Give frequent quizzes to rapidly identify students who are in trouble.
 - (2) Provide some training in reading and study habits, or refer them to an appropriate source
 - (3) If your sponsor has accommodations available for special assistance, refer the student to them.
 - (4) Be aware of learning styles, and right and left-brain teaching techniques. Possibly re-present the material in a different learning style.
 - (5) Assess entry-level educational skills.

II. Student Evaluation

OBJECTIVES:

List the reasons for evaluation

List the types of evaluations

Discuss the methods of evaluating cognitive knowledge

Describe evaluating the student in a lab session

Review the feedback loop

A. Evaluation Requirements

1. The requirement set forth in Part 800 of the Public Health Code lists: “Evaluation. Evaluation of students shall be conducted on a recurring basis and with sufficient frequency to provide the student, course medical director and certified instructor coordinator with valid and timely indicators of the student's progress toward and the achievement of the competencies and objectives stated in the curriculum. In order to ensure effectiveness of student evaluation, the test instruments and evaluation methods shall undergo at least annual review. When appropriate, reviews shall result in the update, revision, or formulation of more effective test instruments or evaluation methods. The reviewers shall include at least a certified instructor coordinator.”
2. The traditional thoughts on evaluation surround the written exam. However in EMS courses, knowledge, skill, and attitude all need to be evaluated.
3. Reasons for Evaluation
 - a) Provides both the student and instructor with an indication of the progress.
 - b) Provides student with information on attainment of specific skills and knowledge as well as a comparison with classmates.
 - c) Provides instructor with information on student as well as class progress.
 - d) Provides for both student and instructor satisfaction.
 - e) Provides indication of effectiveness of the learning environment.
 - f) Provides instructor with an indication of teaching effectiveness.

B. Types of Evaluation

1. Tests & Quizzes (Cognitive and Affective)
2. Questioning (All domains)
3. Student Demonstrations (All domains)
4. Active Participation (All domains)

C. Evaluating Cognitive Knowledge

1. Oral vs. Written Tests of Knowledge
 - a) Two types of tests may be used for evaluating achievement of cognitive knowledge:
 - i. Oral tests
 - ii. Written tests
2. Oral testing may not be feasible unless the class size is extremely small (1-5 people).
 - a) Oral tests can be time-consuming.

- b) Oral tests permit in-depth responses.
 - c) Oral testing can be somewhat subjective in that there is a tendency for the instructor to help.
 - d) “Oral boarding”, a system which at the beginning of each class different students are called at random to answer questions on the previous class material, can be used in large classes. The instructor needs to use great care though, since placing people “on stage” particularly in front of their peers can have a disastrous effect on some students.
3. Written tests usually consist of several test items. Test items can be of two basic types:
- a) Recognition type--response is provided and learner must select which is the correct response.
 - b) Supply type--learner must supply the response to a given statement, problem, question.
4. Recognition Type Test Items
- a) The following criteria may be applied in evaluating the structure of questions:
 - i. Item Clarity-- elimination vague and ambiguous terms and other outright errors in the item.
 - ii. Necessary qualifiers--Does the stem or body of the question contain all necessary qualifications that are needed for answer selection?
 - iii. Non-functional words--Have all non-functional words which interfere with comprehension of the question been omitted?
 - iv. Unessential specificity/trivia--Does the question require the student memorizing data or trivia which is really unimportant in achieving the objectives of the course?
 - v. Accuracy of stem--if the stem provides vague information it might confuse or mislead the student.
 - vi. Level of difficulty--is the item adapted to the group and to the purpose for which the item is intended?
 - vii. Omission of clues to the correct response--Does the item contain a clue or cues for not measuring what is intended? For example, if the stem of the question states “The causes of cardiac arrest are”, it is obvious that a multiple correct answer is needed. Or specific clues, such as “all, always, certainly, never” should be avoided since they are clues to incorrect answers.
 - viii. Negative stem--Avoid a negatively stated item since this confuses students and are more like intricate verbal puzzles than they are good questions.
 - ix. Correct answer--is the correct answer one on which competent authorities agree?
 - x. Overlapping answer alternatives--For example, the following question: What percent of cardiac arrest victims experience no painful chest symptoms, etc.?. A. Less than 30 percent. B. Less than 20 percent. C. More than 50 percent. D. More than 95 percent. If one is correct, then two is also correct; if four is correct, then three is correct.
 - b) The three most frequently used recognition type test items are:
 - i. True-false items
 - ii. Multiple-choice items

- iii. Matching items
5. True-false test items
- a) Advantages
 - i. There can be a large number of items.
 - ii. A large content area can be surveyed.
 - iii. Scoring is rapid and easy.
 - iv. Items are well adapted for testing situations where only two logical responses are possible.
 - b) Suggestions for item construction
 - i. Avoid the use of specific determiners. It has been found that on most classroom tests, items which use the words “only”, “all”, “no”, “none”, “always”, “never”, etc., will generally be false. Items with words like “could”, “might”, “can”, “may”, and “generally” will usually be true.
 - ii. Base true-false items upon statements that are absolutely true or false, without qualifications or exceptions.
 - iii. Avoid negatively stated items when possible and all double negatives.
 - iv. Avoid textbook statements.
 - v. Avoid making the true statements consistently longer than the false items, or vice versa.
 - vi. Avoid complex sentence structure with many dependent clauses.
6. Multiple choice test items
- a) Advantages
 - i. They yield more reliable measure.
 - ii. Effect of guessing is reduced.
 - iii. Plausible incorrect alternatives can require fine discrimination.
 - iv. They can provide valuable diagnostic information.
 - v. They are easy to score.
 - vi. They follow a similar pattern to the State Certification exam, and give students practice in differentiating between distracters.
 - b) Disadvantages
 - i. Good items are difficult to construct.
 - ii. Long statements increase reading time—students can answer fewer items in on a test in a set amount of time.
 - iii. It is more difficult to cover large amounts of content.
 - c) Suggestions for item construction
 - i. It is recommended that the item be a direct question.
 - ii. The item should set up a clear, definite, explicit and singular problem.
 - iii. Include in the item any words that might otherwise be repeated in each response.
 - iv. Avoid making the correct response systematically different from other responses.
 - v. If possible, the alternatives should be presented in some logical or systematic order.
 - vi. Make all responses plausible and attractive to the less knowledgeable student, and limit the number to four.

- vii. The response option (none of the above) should be used with caution, if at all.
- viii. Each test item should stand alone. A former response should have no bearing on an item which follows it.
- ix. Randomly arrange the correct choice among the alternatives.

7. Matching test items

- a) Advantages
 - i. Pictorial or symbolic material may be used.
 - ii. Compact and efficient way of making a rapid survey of similar knowledge (symptoms, definitions, terminology).
- b) Disadvantages
 - i. Not well adapted for measurement of higher order abilities.
 - ii. Great care needed in development to avoid awkward arrangement of items.
- c) Suggestions for item construction
 - i. Matching test items should be completed on a single page.
 - ii. Use responses that are related but mutually exclusive.
 - iii. Keep the number of items to be matched relatively small.
 - iv. The number of possible responses should exceed that number of items to be matched by two or three.
 - v. The directions should clearly indicate the basis for matching.
 - vi. Keep the statements in the response column short and present them in some logical order.

8. Supply Type Test Items

- a) Completion items
- b) Essay items

9. Completion test items

- a) Advantages
 - i. Useful for checking on specific facts.
 - ii. Natural. type of item--question-answer situation.
 - iii. Student must summarize in brief statement, easy to construct.
- b) Disadvantages
 - i. Scoring is not completely objective.
 - ii. Frequently items become only a matter of naming or listing.
- c) Suggestions for item construction
 - i. Request short, definite, clear-cut and explicit answers. An indefinite question statement is likely to lead to scoring problems for instructors and response problems for students.
 - ii. If using a fill-in type question, use no more than two blanks in the stem.
 - iii. If several correct answers are possible, equal credit should be given to each one.
 - iv. In testing for comprehension of terms and knowledge of definitions, it is often better to provide the term and require a definition rather than provide a definition and require the term.

- v. For completion items, it is generally recommended that blanks come near the end of the statement.
- vi. Minimize the use of textbook expressions. Causes students to memorize the exact wording of the text.
- vii. In general, direct questions are preferable to incomplete declarative sentences.

10. Essay test items

- a) Advantages
 - i. Easy to prepare and administer
 - ii. Permit in-depth responses
 - iii. Test extrapolation level questions well
- b) Disadvantages
 - i. Limited sampling of content
 - ii. Bluffing is possible
 - iii. Reliability usually quite low
 - iv. Can be very subjective and difficult to score – must be very specific in instructions
 - v. Very time-consuming for student
 - vi. Very time-consuming for scoring
- c) Suggestions for item construction
 - i. Limit the problem which the question poses so that it will have the same meaning to most students.
 - ii. Use words which will convey clear meaning to the student.
 - iii. Prepare enough questions to sample the course content broadly, within a reasonable time limit.
 - iv. Use an essay question for the purposes it best serves, i.e., organization, handling complicated ideas.
 - v. Prepare questions which require considerable thought, but which can be answered in relatively few words.
 - vi. Determine in advance how much weight will be accorded each of the various elements expected in a complete answer.
 - vii. Without knowledge of students' names, score each question for all students.
 - viii. Require all students to answer all questions on the test.
 - ix. Do not construct a test consisting of only one essay question.

11. Reliability

- a) Define: Reliability is the consistency of the measurement device.
 - i. Does it measure a given behavior or body of knowledge consistently on different occasions?
 - ii. Does the environment influence consistency?
 - iii. Do different administrators influence results?
 - iv. Does it discriminate against groups or individuals?

12. Content Validity

- a) Define: Content validity is the ability of an examination process to measure the knowledge and skills it was intended to measure, in accordance with the curriculum objectives.
 - i. Are the subtests weighted and distributed properly?
 - ii. Does it cover a reasonable sample of the knowledge and skill objectives?
 - iii. Is it an accurate predictor of field performance?

13. General Test Construction Guidelines/ Principles

- a) Write your test early
- b) Relate test to objectives
- c) Weigh subtests appropriately
- d) Group like items together
- e) Allow 1 minute per item for student completion
- f) Make certain that answers are positioned randomly
- g) Put the exam away
- h) Reread and evaluate the exam
- i) After the examination check each item for discrimination
- j) Check to see if the upper 1/3 of class consistently missed a specific item. If so:
 - i. Was material taught
 - ii. Is test item keyed correctly
 - iii. Is test item constructed properly
- k) Check to see if the lower 1/3 of class consistently missed a specific item. If so:
 - i. Which distracters were most attractive
 - ii. Improve distracters which were not attractive
 - iii. If not consistently missed by upper group this item is working well

14. Test Blueprint

- a) Developing a test blueprint is essential to provide exam emphasis
- b) See Appendix H

D. Evaluating Student Performance in the Classroom Lab

- 1. Evaluate against the objective(s)
- 2. Try to be objective
 - a) Using a scale such as:
 - i. Not able to perform skill
 - ii. Not able to complete skill
 - iii. Able to complete skill only with direct instruction
 - iv. Able to complete skill only with assistance
 - v. Able to complete skill without assistance, but at a level less than minimum competency (such as too much time, or rough handling, etc.)
 - vi. Able to complete skill without assistance at a minimum competency level
 - vii. Able to complete skill without assistance above minimum competency level

- b) Center on performance

E. Skill Evaluation Feedback Loop

1. Feedback Technique for Skill Session - As used in the feedback given to the candidates during the 5 minute presentation, describe the points of the feedback model:
 - a) Ask the participant how they feel. (This is to allow for a venting of emotions so the participant will be more receptive to positive suggestions)
 - b) Have the participant review the objective(s) of the scenario
 - c) Ask the participant to describe what they did step-by-step in a factual accounting. (This may bring to light that the participant's perception of what they actually did differs from those watching the performance)
 - d) Ask the participant what they learned and what they might do differently next time. (This allows the participant to review the learning that took place and allows them to self-correct any behavior or performance prior to anyone else making any suggestions. This helps the participant to develop both problem-solving skills, and also helps create a positive learning environment).
 - e) If the participant performed something wrong, ask the participant why they performed the way they did, without saying it was wrong.
 - f) Give the participant positive behavioral suggestions for their next performance without passing judgment statements on them. (This can be handled well by phrasing statements as questions. Example – “Would you consider applying a cervical collar before extricating the patient the next time you are faced with a situation similar to this?”).
 - g) Keep feedback limited to the performance of the student as measured against the objective(s), not against any specific technique you may favor.
2. Use a form for tracking progress
3. Corrective feedback is appropriate and necessary for student progression

F. Practical Skill Exam

1. Purpose
 - a) The exam is designed as an assessment tool – not for teaching
 - b) Student is asked to demonstrate tasks or skills
 - c) Evaluator observes performance, and records on instrument provided
 - d) Criteria established by DOH
 - e) Evaluation only of minimum competency (even for refresher candidates)
2. Not included in exam
 - a) Skills not listed in the exam
 - b) Students ability to “think on their feet”, or adapt to different situations
 - c) The suitability of applying any skill in any situation not described in the test
 - d) The use of unfamiliar equipment

- e) Any other “freelanced”, or variation of the exam
3. Administration
 - a) Only for students who have completed ALL parts of the program successfully
 - b) Must be administered PRIOR to NYS Written certification exam
 - c) Must be arranged for by the Course Sponsor
 - d) Course Sponsor appoints a Practical Exam Coordinator, arranges for a suitable location, provides necessary equipment and supplies, and supports other logistics for the exam.
 4. Practical Exam Coordinator
 - a) Responsible for “ensuring the examination is conducted according to NTS standards, and with the Course Sponsor, handle logistical considerations”. At large examinations, the various roles of the Exam Coordinator may be delegated to one or more staff members.
 - b) (review list of responsibilities in the NYS-EMS Basic EMT/CFR Practical Exam Administration Manual).
 5. Practical Exam Evaluators
 - a) Primary observers and recorders of candidates performance
 - b) Evaluate against the prescribed principles as outlined in NYS exam station score sheets
 - c) Need to have knowledge of NYS protocols, instructions, local practice, and exam sheets
 6. Victims & Helpers
 - a) Requires for some scenarios at some stations
 - b) Helpers must be EMTs, victims should be EMTs
 - c) Passive roles, should respond/assist only when requested by candidate
 7. Typical Practical Exam
 - a) (Review the Basic Practical Exam Manual with the candidates)

III. Candidate Presentation #2

(Review Appendix A for Instructions and topics for Candidate Presentations)

Prior to the course the Candidates were given a topic for their 10 and 30 minute presentations. A draft lesson plan will need to be submitted by the candidate for the 10 minute presentation and a completed lesson plan for the 30 minute presentation. At this time the Candidate presentations should take place. If practical, this delivery should be video taped for the Candidate’s review. Candidates receive behavioral feedback – and view their video.

MODULE 4

I. Administration

A. Coordinating EMS Courses

Activity: Divide the group in half and give each a flip chart. Assign one group the “Role of the Course Sponsor” and the other the “Role of the CIC”. Have each group prepare a list of the roles. At the end of this lecture, review the two lists and discuss where and how there may be crossover of roles.

1. Role of the Course Sponsor
 - a) *A course sponsor is to an I/C what a school system is to a teacher*
 - b) Course sponsors have made a formal agreement with NYS-Bureau of EMS.
 - i. EMS courses may only be conducted by a NYS approved course sponsor.
 - ii. The CIC who conducts a course, works for the sponsor and **not** the state. The CIC is NOT a “Free Agent”!
 - iii. The sponsor is the actual training institution, and provides the necessary support functions, develops policies, handles funding and maintains records.

2. Support Functions
 - a) The sponsor coordinates its EMS training with the needs of the region.
 - i. Meets with Regional EMS Council regularly.
 - ii. Determines the dates and locations of courses.
 - iii. Conducts short and long range planning for all training needs.
 - b) The sponsor develops the faculty for the programs being offered.
 - i. Maintains instructor records/data base.
 - ii. Ensures that all instructors are properly trained and notified of all changes.
 - c) Maintains an inventory of equipment and audio-visuals.
 - i. Training equipment is maintained to ensure a 1:6 ratio of instructor to students.
 - ii. Adequate supply of “state of the art” audio-visuals are maintained to support the didactic sessions of the course and provide remediation.
 - d) Sponsor’s Medical Director reviews course content to assure medical accuracy to the current NYS curriculum.
 - e) Assures that affiliation agreements are secured and valid with all clinical and field internship sites.

3. Sponsor administrative procedures and course management
 - a) Develops academic policies and procedures which address:
 - i. Attendance and make-up procedures.
 - ii. Testing requirements and pass/fail criteria for the course NOT State Exams.
 - iii. Personal conduct of students and faculty.
 - iv. Course termination, expulsion and appeal procedures.

- v. Class cancellation
 - vi. Equal opportunity, non-discrimination, sexual harassment, etc...
 - vii. Policies and procedures must be distributed to all faculty and students, **in writing.**
 - b) Develops instructor policies and procedures
 - c) Conducts internal quality control efforts to ensure compliance to curricula, policies and procedures.
 - d) Maintains all course and student records.
 - e) Handles all financial management (Course tuition, instructor payment, purchasing, state funding: if available).
4. Role of the Certified Instructor Coordinator (CIC)
- a) Lead instructor and continuity person.
 - i. EMS courses are seldom taught by one person.
 - ii. CIC acts not only as the lead instructor but also the continuity person to keep the course focused on the objectives and “on track”.
 - iii. Lead instructor does not mean the “only” instructor. The curricula specifies who may teach sessions (ie: MD, specialty lecturer).
 - iv. CIC arranges to have other CICs, CLIs, and prospective certified instructors to lecture and perform lab skill sessions.
 - b) Manager of the learning process.
 - i. Manages the details necessary for “day to day” course operation.
 - ii. Handles administrative aspects (Instructor and equipment scheduling).
 - iii. Handles initial student complaints and provide counseling memos as needed.
 - c) Evaluation and feedback.
 - i. Develops testing instruments to evaluate students and provide feedback to students.
 - ii. Keeps close track of student progress using subjective and objective assessment tools.
5. CIC Pre-Course Activities
- a) Planning and advertising.
 - i. Secure a location and confirm in writing.
 - ii. Discuss course dates with potential faculty.
 - iii. Confirm all lectures and lab instructors.
 - iv. Assist sponsor with advertising and application of students.
 - v. Arrange for hospital observation sites and review clinical guidelines with hospital personnel.
 - vi. Assures that at least 50% of the skill instructors present at any lab session are NYS Certified Instructors.
 - b) Application.
 - i. Develop a detailed course schedule/syllabus with dates, times, topics, lecture faculty and reading assignments.
 - ii. Complete NYS course application, obtain appropriate signatures and send the

- original application to the Bureau of EMS central office, by **certified mail at least 30 days prior to the start of the course**. Also send a copy to Area Office Representative and the Regional EMS Council, with schedule/syllabus.
- c) Instructor preparation.
 - i. Assess latest protocols/procedures and make all instructors aware of changes.
 - ii. Brief all instructors and send copies of session objectives and outlines.
 - iii. Hold staff meeting to assign lab instructors to sessions and review strategies.
 - iv. Preview all A-V's.
 - v. Previews all course lectures and presentations to assure accuracy to the NYS curriculum.
 - d) Registration /admissions.
 - i. Assist sponsor with screening of applicants.
 - ii. Assist sponsor with admission decisions.
 - e) Miscellaneous.
 - i. Assure EMT and CPR textbooks have been ordered.
 - ii. Develop quizzes and modular exams.
 - iii. Schedule all equipment to be used in the course.
 - iv. Develop attendance records and learning contracts for students to sign.
 - v. Notify NYS BEMS of any changes to the course schedule, location, or other aspects of the course.
 - vi. Assures that all students meet the minimum age requirement to enter the course.
 - vii. For advanced original courses, assures that all students have a valid NYS EMT-B card, or higher, that is valid for the duration of the course.
6. The CIC's role During the Course.
- a) General course administration.
 - i. Have students sign the attendance sheet at each class and make announcements.
 - ii. Have students complete the "Application for Emergency Medical Services Certification" (DOH-65),
 - iii. Review student applications for completeness and submit with the Course Memorandum (DOH-263), and submit to NYS-Bureau of EMS no later than the second session. Student Applications must be received by the Bureau, **NO LATER THAN 6 weeks** before the NYS Written Examination.
 - iv. Distribute course policies and procedures to students in writing and explain. Have students read and sign statement that they have received and read the document.
 - v. Attends each class session, presents or listens to lectures, oversees lab sessions and helps the students put the material into perspective.
 - vi. Introduces guest speakers.
 - b) Keeps the class "on track"
 - i. Keeps the class focused on the objectives and debriefs the class after each lesson.
 - ii. Evaluates student progress frequently.

- iii. Provides didactic and skill remediation.
 - iv. Counsels students.
 - c) Prepares evaluation tools.
 - i. Prepares quizzes.
 - ii. Prepares modular and term exams.
 - iii. Assures accuracy to NYS curriculum and NYS protocols
 - d) Miscellaneous.
 - i. Maintains and disinfects equipment used in course.
 - ii. Arranges for course refreshments (appoint a committee of students).
 - iii. Schedule students for hospital observation and checks to see this is a beneficial experience.
 - iv. Assures that all clinical and field internship preceptors are provided with a list of the internship objectives for each rotation.
 - v. Submit instructor time records to sponsor to ensure timely payment.
 - vi. Review NYS-EMS class list. **Be sure all students are accounted for.**
 - vii. Distributes the NYS EMT “Student Reference Guide” to all students.
 - e) Final Exam Preparation.
 - i. Review important material with students.
 - ii. Distribute NYS-EMS skills testing sheets (at least 2 weeks before exam).
 - iii. Reviews course completion criteria to determine Student eligibility for State Certification Examinations
 - iv. Arrange for examiners and exam coordinator.
7. Post Course CIC Role.
- a) Final practical exam
 - i. Given according to NYS Bureau of EMS standards. Follow the NYS Practical Skills Administrative Manual.
 - ii. Students with failures are remediated and retested as per the Administrative Manual.
 - iii. Practical Examination summary sheet prepared.
 - b) Final paperwork
 - i. Provide the State Written Examination Proctor with:
 - “Final Practical Skills Examination Summary Sheet” (DOH-2733)
 - “Students Ineligible to Take the State Certifying Examination” (DOH-79)
 - Completed class list
 - Examination tickets for ineligible or “no-show” students
 - ii. Distribute Examination tickets to students eligible to test.
 - iii. CIC must be present to provide positive identification of candidates to the proctor.
8. Sponsors Medical Director
- a) Must hold a NYS medical license
 - b) Be an active physician with experience and current knowledge of emergency care of acutely ill and traumatized patients.
 - c) Serves as the ultimate medical authority of the course.
 - d) The course may not exceed the scope of practice for the certification level.

- e) Is an employee of the sponsor
- f) Responsibilities
 - i. Resolve questions and issues regarding medical content
 - ii. Resolve questions and issues regarding medical procedures and protocols
 - iii. Assist with lecturing and/or recruiting other physicians to lecture
 - iv. Serve as a liaison between the course and the medical community
 - v. Certify that students complete all appropriate didactic, skills, clinical and internship experience objectives
 - vi. Adhere to NYS and Sponsor policies
 - vii. Annually assist with reviewing and updating test instruments and evaluation methods.

B. Student Policies (Developed by the Course Sponsor)

1. Policies protect the student, instructor and Course Sponsor.
 - a) State Emergency Medical Services Code Part 800.20 (c)(8)
2. Minimum policies you must have:
 - a) entrance requirements (minimum set by DOH)
 - b) Age eligibility requirements (CFR-16; EMT-18 see Part 800.6)
 - c) course goals and objectives
 - d) testing requirements and pass/fail criteria
 - e) exam re-testing and make-up
 - f) attendance requirements and make-up procedure
 - g) requirements regarding personal conduct and ethics
 - h) emergency class cancellation procedure
 - i) course termination/expulsion and appeal procedure
 - j) textbooks required
 - k) tuition refund schedule
 - l) a student-course sponsor learning contract for all refresher courses
 - m) BLS and ALS clinical internship requirements
 - n) ALS field internship requirements
 - o) Americans with Disabilities Act (ADA) procedures advisory
 - p) sexual harassment policy
 - q) accommodation request for ADA
 - r) Criminal conviction policy statement
 - s) Personnel policies for instructors and faculty
3. Additional policies for ALS Course Sponsors
 - a) The Policies and Procedures must contain the required statement regarding students having current certification as an EMT, valid through the end of the course (Part 800.11) Students who do not meet this requirement are not permitted to enroll in the course.
 - b) A description of the planned student clinical experience
 - c) A description of the planned student ALS field internship experience

4. Policies and practices must be:
 - a) non-discriminatory with respect to race, color, creed, sex, age, national origin, and disability
 - b) in writing
 - c) equitable in their treatment of students
 - d) in compliance with the requirements set forth in Part 800 of the Public Health Code
 - e) issued to all students by the end of the first class

C. Review of Administrative Paperwork

1. Course Applications
2. Course Schedules
3. Student Applications
 - a) Filing with Course Memorandum
 - b) Students unable to sign (Review policy on students with criminal convictions)
4. End of course paperwork
 - a) Class list printout
 - b) Ineligible to take exam form
 - c) Student exam tickets
 - d) Practical exam summary
5. Vouchers
 - a) Practical exam voucher
 - i. Submit copy of the Practical Examination Summary Sheet
 - b) Training vouchers
 - i. Submit copy of the Professional Examination Services (PES) test results
 - ii. Provide list of students eligible for reimbursement

D. Record Keeping

1. Student Records
 - a) DOH requires the course sponsor to maintain for a period of at least five years, files which contain the following documentation on individual students:
 - i) individual attendance record
 - (a) record of make-up session
 - ii) individual grade record
 - iii) signed student-course sponsor learning contract if applicable
 - iv) modular and final examination results
 - v) practical skills examination sheets
 - vi) clinical experience documentation and field internship experience documentation which show the student achieved the objectives of the clinical and field internship experiences and who evaluated the student's performance
 - vii) counseling notes
 - viii) any student correspondence
 - ix) records of Remediation and
 - (a) remediation plan
 - (b) written record

- j). Student files must be kept confidential
 - i. Restricted access to appropriate individuals
 - ii. Can not release without student's written permission
 - iii. Good idea to have written release on student contract for release to DOH and sponsoring agency
 - iv. Should develop standard release form
- 2. Course Files
 - a) DOH requires the course sponsor to maintain Course files for a period of at least five years. [800.20(c)(9)]
 - i. Financial records showing all sources of funding and expenditures for each course
 - ii. Faculty attendance list for each course
 - iii. Copy of course certification examination grades
 - iv. Copy of modular and final examinations administered
 - v. Copy of course application, schedule and DOH course approval
 - vi. Copy of Student Ineligible to test list
 - vii. Copy of Practical Examination Summary sheet
- 3. Sponsor Files
 - a) Faculty lists – including name, address, telephone and qualifications for the duration of employment plus five years.
 - b) Medical Director's resume
 - c) Equipment inventory
 - d) ALS Sponsors
 - i. Paramedic Program Director's resume
 - ii. Paramedic Program Director's job description
- 4. All other course records must be kept for a minimum of 6 years. Depending on the type of sponsor you work for, additional record keeping requirements may come into effect (i.e. College – Federal and State Education record requirements).

E. NYS Policies

- 1. Review the current issue of the following NYSEMS Policies:
 - a) Advanced standing in AEMT certification courses
 - b) Course reimbursements
 - c) Instructor Qualifications and Certification Requirements
 - d) Required CPR Testing
 - e) AED Policy
 - f) ADA Policy
 - g) Criminal Convictions
 - h) Clinical

II. *Americans with Disabilities Act (ADA)*

Objectives:

Describe the Americans with Disabilities Act (ADA)

Describe who the ADA affects

Discuss what is a qualified individual with a disability

Describe the differences between aid and an accommodation

Discuss how a request for an accommodation is made

Discuss the differing policies between educational institutions and certification agencies

PRESENTATION

1. Americans with Disabilities Act (ADA)
 - a) ADA prohibits discrimination in all employment practices, including job application procedures, hiring, firing advancement, compensation, training, and other terms, conditions, and privileges of employment.
 - b) Signed into law July 1990
 - c) Estimated that 1 in 6 Americans have some type of disability
 - d) A “qualified individual with a disability cannot be denied an employment or education opportunity.
 - e) Although the act seems to focus on providing fair employment opportunities and practices for persons with disabilities, as Instructors and Course Sponsors, provisions of the act affect how you provide education and training opportunities.
2. Who is considered disabled?
 - a) Individuals who have a physical or mental impairment that substantially limits them in one
 - b) or more of the major life activities
 - i. Seeing, hearing, speaking, walking, self-care, learning and working
 - c) Persons who are unable to or finds it difficult to perform certain functions, or uses assistive devices or who need assistance from another person to perform basic activities
 - d) Person is not considered disabled if their condition is controlled by medication (US Supreme Court)
 - e) Person is not considered disabled under this act if their condition is temporary or acute (e.g., broken leg, muscle pull, pregnant)
 - f) Disabilities are generally considered permanent
 - g) Examples of disabilities
 - i. Physical – Medical disorders, disfigurement, severe damage or loss of a body part
 - ii. Mental – Mental illness, mental retardation, learning disabilities, psychological disorders
3. Who is a “qualified individual with a disability”?
 - a) A person who meets legitimate skill, experience, education, or other requirements of an employment position that he or she holds or seeks, and who can perform the “essential functions” of the position with or without reasonable accommodation.

- b) Requiring the ability to perform “essential functions” assures the individual will not be considered unqualified simply because of inability to perform marginal or incidental job functions.
4. Who does ADA affect?
- a) “Covered Entities”
 - i. For-profit agencies
 - ii. Not-for-profit agencies
 - iii. All EMS agencies
 - iv. Labor unions
 - v. Contracted agencies (i.e. Course sponsors)
 - vi. Government
5. Course Sponsor Responsibilities
- a) Course entry requirements must relate to the profession
 - i. Should use the EMS Functional Job Descriptions as guides
 - b) Everyone is eligible for education as long as they meet the entry requirements (i.e. minimum age, pay tuition, meet pre-requisites, etc)
 - c) Any testing or screening that is done must be done of ALL students equally
 - i. Testing or screening cannot be used as a method of eliminating disabled students
 - ii. All testing must relate to what the intended job will be
 - d) Remediation must be available to ALL
 - e) Any accommodations provided in the classroom setting need to be documented
 - i. Accommodations that will enable a student to achieve learning may be requested by the qualified individual with a disability
 - ii. The type of accommodations could be from a sign language interpreter to a reader or note taker.
 - (c) Again the decision to provide these accommodations need to be documented
 - (d) Since some accommodations are for assisting learning, they may not be appropriate or available for licensing or certification examinations.
 - f) Must maintain confidentiality
6. CIC Responsibilities
- a) Advise all students about ability and procedures to seek an accommodation under ADA
 - b) Advise students seeking accommodations of State Certification Examination to contact BEMS central office no later than 6 weeks prior to examination
 - c) File all student applications according to policy (minimum of 6 weeks)
 - i. There can be no difference in the required time frames for receiving applications between a person who is requesting an accommodation and those students who are not.
 - ii. Obviously, applications can be sent early and requests for accommodations can be made earlier.
 - d) Evaluation and remediation opportunities must be available to ALL students
 - e) Must have sensitivity to issues of disabilities
 - i. Some disabilities or visible or obvious
 - ii. Some may not be visible or obvious

- iii. If you notice a disability is or may be impacting the essential functions, you may confidentially provide counseling and remediation opportunities
- f) Confidentiality
- 7. Course Sponsor and CIC
 - a) In the educational setting of the course, many different types of accommodations may be made available to assist a qualified individual with a disability.
 - i. Reader for textbook or classroom testing
 - ii. Signer
 - iii. Extended time
 - iv. Distraction free location
 - b) Accommodations must not result in undue hardship or significant difficulty or expense to the organization
 - c) Documented accommodations granted by the course sponsor might not be available or honored for the state certification process.
- 8. Aids for disabilities within the function of EMS
 - a) An aid is a piece of equipment that is readily available and can reasonably be brought to the side of the patient that doesn't alter the "essential functions".
 - i. Eyeglasses
 - ii. Amplified stethoscope
 - iii. Large dial B/P gauge
- 9. Accommodations for disabilities within the function of EMS
 - a) A reasonable accommodation is any modification or adjustment that will enable a qualified person with a disability to perform essential job functions.
 - b) The ADA does not require the providing of a second person to assist the disabled person to be able to perform the essential job functions
 - c) Accommodations must be made in relation to maintaining the "essential functions". Sight is an "essential function" – Use of a Braille B/P cuff would not be an acceptable accommodation because it changes the "essential function".
- 10. Accommodations for State EMS Certification Examinations
 - a) The Bureau of EMS considers the ability of an Certified EMS provider to function and act independently as an essential functions of providing prehospital care.
 - i. Use the functional Job Descriptions
 - b) The Bureau of EMS does not provide accommodations for the State Practical Skills Examination.
 - i. All candidates for certification must have the skills test provided in the same way following the Practical Skills Administrative manual.
 - (c) E.g. changing the location of the manikin for someone who can not bend would not be acceptable
 - c) The Bureau of EMS will consider all requests for accommodation of the State Written Certification Examination from qualified individuals with disabilities.
- 11. Course Sponsor and CIC Considerations
 - a) Take a common sense approach
 - b) Be sensitive
 - c) You are there to educate and provide opportunity for all

- d) Document any accommodations provided and why
- e) No undue financial or administrative burden
- f) Many accommodations can be done with little cost
- g) Fines and court costs can be substantial for refusal to provide assistance or doing so in bad faith.

MODULE 5

I. Candidate Presentation #3 (Final)

(Review Appendix A for Instructions and topics for Candidate Presentations)

Candidates present their 15 minute presentation to the remainder of the group. If practical, it is recommended that this delivery is video taped for the Candidate’s review. Candidates receive behavioral feedback – and view their video. [Note to Regional Faculty – due to time constraints, the group should be divided into smaller groups to allow time for the presentations and feedback]

II. End of course wrap-up

1. Review Certified Instructor Coordinator certification requirements:
 - a) Candidate must directly develop and deliver a minimum of 50 hours of didactic material in a classroom in a NYS EMS Certification Course (under the supervision of the lead CIC for the course). The candidate must receive 1 presentation audit during this time, which must be performed by the supervising CIC
 - b) Candidate must directly coordinate and supervise a minimum of 9 hours of lab in a NYS Certification Course (under the supervision of the lead CIC for the course).
 - c) Supervising CIC must “sign off” that the Candidate has accomplished the learning objectives listed in the CIC course.
 - d) Candidate must receive a positive audit by a CIC Regional Faculty member or a NYS EMS Area Office Representative, verifying the ability to deliver classroom didactic material in accordance with the objectives listed in the CIC course.
 - e) Submission of all audits and internship completion to the DOH Area Office serving your geographic region within 18 months of the completion of the CIC course
2. Congratulate students on completing the course.
3. Have students fill out end of course evaluations

Appendix A – Presentation Topics for CIC Candidates

- I. Introduction
 - A. Goals of the Candidate presentations
 - 1. To provide an opportunity for Candidates to plan, prepare, present and receive corrective feedback.
 - 2. To allow the Candidate's first presentation to be a topic with which they are familiar and comfortable.
 - 3. To provide an opportunity for the faculty and peers to review the method and manner of the Candidate presentation.
 - 4. To provide the opportunity for Candidates to review other Candidate's presentations
 - 5. To provide an opportunity to practice principles of positive corrective feedback
 - 6. To provide an opportunity for the candidate to improve their presentation techniques
 - 7. To provide an opportunity for the Candidate to review their video taped presentation
 - 9. To provide and opportunity for the Regional faculty to evaluate the Candidates overall performance

- II. Candidate instructions
 - A. Prior to the course Candidates are given assignments and are asked to prepare three presentations.
 - 1. Presentation #1
 - a) 3-5 minute presentation
 - b) non-EMS related topic – Candidate's choice
 - c) time included in Module 2, Lesson 1 for final preparations
 - i. prepare objectives
 - ii. prepare lesson plan
 - d) Presented in Module 2, Lesson 2
 - e) evaluation and feedback by Regional Faculty and other candidates
 - 3. Presentation #2
 - a) 10 minute presentation
 - b) EMS topic assigned by Regional Faculty prior to the CIC Course
 - c) presentation should be an overview of the topic
 - d) prepare presentation prior to the course or before Module 3
 - e) Presented in Module 3, lesson 3
 - f) Candidate provides a copy of the objectives and draft lesson plan
 - g) evaluation and feedback by Regional Faculty and other candidates
 - 4. Presentation # 3
 - h) Final presentation
 - i) 15 minute presentation on same assigned EMS topic
 - j) Prepare a complete presentation with appropriate media
 - k) Prepare presentation prior to the course or before Module 5
 - l) Presented in Module 5
 - m) Candidate to provide 2 copies of objectives and final lesson plan to Regional Faculty at the start of the presentation.
 - n) evaluation and feedback by Regional Faculty and other candidates

Appendix A – Presentation Topics for CIC Candidates

III. Instructions to Faculty

- a) Assign Candidates specific sections (objectives) of the EMT-B curriculum for presentations #2 and #3. The section (objectives) chosen should be sufficient to allow the Candidate to prepare a complete topic.
- b) Some examples are listed below:
 - Module 4-4 Altered Mental Status
 - Module 4-4 Diabetes Emergencies
 - Module 4-5 Allergies
 - Module 4-3 Cardiac Emergencies
 - Module 6-1 The approach to Pediatric Patients
 - Module 3-8 Documentation
 - Module 4-2 Respiratory Distress
- b) The final presentation is to be video taped for the Candidate's. Candidates should provide a black VHS tape (or other). Candidates will receive from faculty and other candidates, and will be able to review their presentation.
- c) Candidates may wish to share their lesson plans with the other candidates as a way to begin their lesson plan book for the EMT – B curriculum.

Upon successful completion of the CIC course as determined by the instructional faculty, the candidate will then work with a course sponsor to complete the remaining CIC certification requirements, and continuing improvement on lesson planning.

NOTE: Regional Faculty and candidates observing the presentation should complete a "Candidate Presentation Evaluation Form."

Appendix A –Topics for Presentation by CIC Students

CIC Candidate Presentation Evaluation Form

CIC Candidate: _____

Subject: _____

Strongly Agree	Agree	Disagree	Strongly Disagree	
				1. Lesson objectives were made clear to students
				2. Lesson introduction created interest and established the need to know
				3. All needed supplementary teaching / learning items were ready and organized
				4. Instructor maintained proper position for all students to see presentation
				5. Aids were well-planned, well-developed, and used appropriately
				6. Vocabulary was at an appropriate level
				7. The instructor regularly checked with students to see if they were on target
				8. Information was presented in an organized format
				9. Skill demonstration was presented in an organized format
				10. Appropriate teaching methods were selected
				11. The instructor's delivery was poised, effective, and geared to the topic
				12. The instructor stayed on the subject
				13. Summation and closure were effective

Overall, the lesson was: ____ too long ____ just right ____ too short for the content

What were the instructor's strengths?

Where might this instructor improve?

Hemisphericity (or Left Brain - Right Brain)

Activity - Have students fill out the Hemisphericity Self-Assessment Exercise. After filling out, have students add the value assigned in 1, 5, 6, 7, 9, 12, 15, 16, 17, and 18 into the left open column. Add the value from 2, 3, 4, 8, 10, 11, 13, 14, 19, and 20 into the right column. Have them place the higher number in the top box at the bottom, and the lower number in the middle box at the bottom. Subtract the lower from the higher. Re-arrange the seating as follows: those with a higher Right number move to the right side of the room, if the difference between numbers is less than 7, have them move to the back, and if it is more than 7, have them move to the front. If their higher number is Left, have them follow the same pattern of movement on the left side of the room. If both numbers are equal, have them sit near the middle (either side of the room). Explain that different activities and processes seem to be located or centered in the left or right hemisphere of the brain. Their final seating pattern reflects their individual tendency.

1. Left Brain preference tendencies:
 - a) Analytical
 - b) Sequential
 - c) Linear
 - d) Structured
 - e) Goal-orientated
 - f) “Love those algorithms
 - g) “Left brainers” tend to be very analytical in their approaches, need to have all the pieces, have difficulty with “big picture” presentations, and are very organized in their approaches.

2. Right Brain preference tendencies:
 - a) Global
 - b) Non-verbal
 - c) Visual
 - d) Playful
 - e) Spatial
 - f) Intuitive
 - g) “Define the end product and let me work”
 - h) “Right brainers” tend to be more artistic, and structured, may not look as organized (messy desk syndrome) but seem to know where everything is, and generally look more at the global perspective.

Multiple Intelligencesⁱ

1. There is another approach that may also be of value for instructor's to understand which is termed Multiple Intelligences. This concept recognizes that people differ even more in their ability to learn, and categorizes learning patterns even in more defined areas.

2. Spatial Intelligence
 - a) is the capacity to perceive the visual-spatial world accurately (e.g., guide, hunter, scout) and to perform transformations upon those perceptions.
 - b) Students with spatial intelligence also have the ability to:
 - i. visualize
 - ii. graphically represent visual or spatial ideas
 - iii. understand one's position in a spatial matrix.

3. Linguistic Intelligence
 - a) Linguistic Intelligence is the capacity to effectively employ words, either orally (e.g., politician, public speaker, storyteller, talk show host) or in writing (e.g., journalist, playwright, poet, editor).
 - b) Students with linguistic intelligence have the ability to manipulate:
 - i. the structure or rules of language (e.g., punctuation for dramatic effect);
 - ii. the sounds of language (e.g., alliteration);
 - iii. the meanings of language (e.g., double entendre);
 - iv. using language to convince (rhetoric- using language to remember information)
 - v. using language to explain (expatiation) - using language to talk about itself (metalanguage).

4. Logical-Mathematical Intelligence
 - a) Logical-Mathematical Intelligence is the capacity to effectively employ numbers (e.g., mathematician, statistician, accountant) and to reason soundly (e.g. computer programmer, logician, scientist).
 - b) Students with logical-mathematical intelligence have the ability to perceive:
 - i. logical patterns and relationships;
 - ii. statements and propositions (if-then, cause-effect);
 - iii. functions and complex processes; and related abstractions.

5. Bodily-Kinesthetic Intelligence
 - a) Bodily-Kinesthetic Intelligence is the capacity to use your complete body in expressing ideas and feelings (e.g., actor, athlete, dancer, mime), including the facility to use your hand's to create or transform things (e.g., artistic painter, mechanic, sculptor, surgeon).

ⁱ Taken from www.aenc.org/SiteOverview-Multi-Int-FS.html

Appendix B – Optional Learning Theory Module

- b) Students with bodily-kinesthetic intelligence have these physical-based skills:
 - i. coordination - harmonious functioning of muscles;
 - ii. balance;
 - iii. dexterity - grace in physical movement;
 - iv. muscle strength;
 - v. flexibility;
 - vi. speed;
 - vii. sensitive touching.

- 6. Musical Intelligence
 - a) Musical Intelligence is the capacity with musical forms to perceive (e.g., music lover), discriminate and judge (e.g., music critic), transform (e.g., composer), and express (instrument player/performer).
 - b) Students with musical intelligence have sensitivity to:
 - i. rhythm,
 - ii. pitch,
 - iii. melody;
 - iv. the timbre or distinctive tone of a musical piece.

- 7. Interpersonal Intelligence
 - a) Interpersonal Intelligence is the capacity to quickly grasp and evaluate the moods, intentions, motivations, and feelings of other people.
 - b) Students with interpersonal intelligence have:
 - i. sensitivity to facial expressions, gestures, and voice qualities;
 - ii. ability to discriminate among many personal cues and prioritize the degree of intensity of feelings behind these cues;
 - iii. expertise in responding effectively to these cues so as to assuage negative emotions or to inspire people to positive actions.

- 8. Intrapersonal Intelligence
 - i. Intrapersonal Intelligence is the capacity to understand yourself and to subsequently act adaptively. Students with interpersonal intelligence have:
 - ii. an honest, accurate, and comprehensive picture of themselves (e.g., their strengths & weaknesses);
 - iii. an awareness of their inner moods, motivations, and desires;
 - iv. self-discipline tendencies; and healthy self-esteem.

Appendix C – Modality Checklist

Place a check mark in front of each statement you strongly agree with.

	1. I need to hear myself say it in order to remember it.
	2. I often need to talk through a problem aloud in order to solve it.
	3. I memorize best by repeating information aloud to myself over and over.
	4. I remember best when the information fits into a rhythmic or musical pattern.
	5. I would rather listen to a recording of a book than to sit and read it.
	6. I prefer to see an illustration of what I'm being taught before I really understand it.
	7. I am drawn to flashy, colorful, or visually stimulating objects.
	8. For technical or detailed subjects, I almost always prefer books that include pictures or illustrations with the text.
	9. I can look like I'm daydreaming when I'm trying to get a mental picture of what's being said.
	10. I usually remember better when I can actually see the person who is talking.
	11. I have difficulty sitting still for extended periods.
	12. I usually learn best by physically participating in a task.
	13. I almost always have some part of my body in motion.
	14. I prefer to read books or hear stories that are full of action.
	15. I remember best when I highlight in the textbook or take notes during lectures.

of items from _____ : _____.

of items from _____ : _____.

of items from _____ : _____.

(Based on research by Walter Barbe & Raymond Swassing)

[Taken from <http://weber.edu/studentactivities/old/htmls/ice.htm>, May 2001]

Ice Breakers

It's human nature to want to be liked. It's also human nature to build walls and "false fronts" around us so that we are protected...and so we show the people around us only what we want to show them.

Ice breakers are an attempt to get past those walls...to get people, especially members of an organization, to break through the boundaries that we all build...to let others see us for what we really are...not just what we want to be.

Ice breakers also allow us to just plain relax and loosen up. In order to function effectively in a group, it is important to know the individual members: who they are, where they come from, and what their interests include.

NAME GAMES AND ICE BREAKERS

As your group gets together, name retention is very important. To get everyone's names down quickly, and to allow everyone to feel more comfortable, try one of the activities listed below. Ice breakers are not limited to the ones listed here. Create your own variations or try something like a scavenger hunt or, design a group project. Whatever you do, have fun.

1. **SEARS CATALOG:** Each person in the group chooses an item that might be found in a department store catalog. The item must start with the same first letter as their first name and should be something that describes something about the person...job, hobbies, major, etc. The second person repeats what the first one said then gives their own name and object. The third person repeats the first two, then his or her name and object ...and so on around the group. This will help memorize names plus give a bit of information about each person. If you want to, switch seats and try it again.

2. **DEMOGRAPHICS:** The group decides among themselves what information they would like to find out about the members of the group (major, classes, hobbies, etc.) and then each member of the group introduces themselves according to the demographics chosen by the group.

3. **DYADS:** When you have a stretch of time, divide the group into groups of two, preferably with the person they know least about. Send each dyad off by themselves where they won't be bothered by other dyads. Take up to ten minutes to get acquainted. Have them share personal and important things with each other so that they will get to know each other better. Take turns "interviewing" each other to gain some knowledge and understanding of the partner. When ten minutes are up, come back to the group and have each partner introduce the other and tell a little about him or her. For a guide you may want to prepare a list of basic questions the group can use as a starting point.

Appendix D – Weber State University “Ice Breakers”

4. **THE TOILET PAPER GAME:** Get one roll of toilet paper. Without giving any other instructions, pass around the roll and tell each person in the group to take as much toilet paper as they need. Then, one at a time, group members tell one thing about themselves for each piece of toilet paper they took.
5. **COMPUTERS:** Subgroups of three or four group members are designated to be "computers." They stand in semicircles, facing the group leaders, who will start a sentence like "life..." or "anger..." The "components" of the computer respond by creating the rest of the sentence, one word per group member. The sentence is completed by one "component" saying period, question mark, or exclamation mark. You can wrap up the experience by having the different computers linked together to form a sentence describing the activity or the group to that point--again, with each "component" contributing a word.
6. **M&M's:** Similar to the Toilet Paper Game. Pass around a bag of M&M's and tell each person to take as many pieces of candy as they want. Then, one at a time, group members will tell one thing about themselves for each piece of candy they have taken.
7. **HOW'S YOURS?:** One member of the group is sent the room. The rest of the group decides on one part of the body. The person is called back into the room and tries to identify the body part chosen by asking individual group members "How's yours?" The group member chosen has to respond in a descriptive word or short phrase that describes the part chosen. If a group member's description allows the person to guess the body part, that group member becomes "it."
8. **GROUP RECALL:** Participants are asked to consider they would choose to be if they had to be another person who has lived or is living (a real person). After they have chosen someone, the participants are next asked to reflect upon why they selected this person. When all are ready to share, the facilitator explains the process: A volunteer goes first, sharing the person she would like to be and why and her name; the next person sitting to the left goes by first recalling what the volunteer shared and then shares her selection, etc., going around the circle.
9. **FAVORITE CARDS:** Divide an index card into four sections. In one section draw a picture of your favorite TV show; in another section your favorite state; favorite book or magazine; favorite food. Then tape your card on and walk around the room trying to guess what other people drew on their card, let others guess at yours, but do not tell them if their guesses are right or wrong; just listen. After everyone has walked around the room looking at each others' card, go around the circle and tell what your favorites are.
10. **ELECTRIC FENCE:** Set up an obstacle to represent a fence using rope or twine. Instruct the group that they have just escaped from prison and must get over the "electric fence" without getting shocked. It is the responsibility of the group to get all members of their group over the obstacle. They may not go under. This exercise builds trust among the group members. An excellent example of "need and trust" that all people require to exist as a group.

Appendix D – Weber State University “Ice Breakers”

11. **ROLES GIVE AWAY:** On four separate sheets of paper have each person write down four roles that he plays (e.g. student, sister, son, teacher, group leader etc.). After they have done this, have them arrange the sheets in order of least important to most important. The leader should then go first and describe why he or she can give away one of his or her roles. Continue around the circle until all have given away their roles.

(ADAPTED FROM THE UNIVERSITY OF NEBRASKA "SOURCE" SERIES.)

Appendix E – “Designing Instruction: Practical Strategies”

For further information, read the articles in the series “Designing Instruction: Practical Strategies” that ran in *Performance & Instruction* between August 1989 and March 1990.

Appendix F – How to Write Assessment Based Questions

The writing of assessment based test questions is different than that of previous “diagnosed” based curriculum formats. It is likely that you have seen questions in the past that were diagnosed based. Unfortunately, these types of questions do not measure the correct information in the new assessment based curriculum. The Bureau of EMS has had to rebuild the test bank of questions for the State Written Certification exams based on the new assessment format. Many of the old “commercial” test banks are no longer usable due to the changes in approach to assessment. Questions need to be based on, and referenced to the curriculum objectives.

What is meant by this?

The question below is typical of a diagnosed based question:

Which of the following signs or symptoms is typical of a myocardial infarction?

- A. *head ache*
- B. *abdominal pain*
- C. *neck pain*
- D. *chest pain*

The question is designed to measure the EMTs ability to associate various signs and symptoms with a diagnosis – in this case a myocardial infarction. The curriculum does not teach the EMT to diagnose an MI, but to identify chest pain as a medical problem and the appropriate treatment for chest pain.

A more appropriate test question within this domain might be:

Which of the following chief complaints is an indication for oxygen administration?

- A. *minor laceration*
- B. *isolated leg pain*
- C. *chest pain*
- D. *blurred vision*

Should you decide to use one of the new test banks available from a publisher, you will probably need to edit some questions and may want to add some of your own revised questions.

Appendix H – Test Blueprint for EMTB

[Insert Test Blueprint here]

