

*2007 EMS  
Instructor /Coordinator  
Course*



Module #9  
Goals & Objectives

# Goals and Objectives

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- Cognitive Goals

- At the completion of this module, you should be able to:
  - Use your own words to define and describe the terms goal, objective and performance agreement.



# Goals and Objectives

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- Cognitive Goals
  - At the completion of this module, you should be able to:
    - Use your own words to identify and describe the ABCD parts of an objective.



# Goals and Objectives

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- Cognitive Goals
  - At the completion of this module, you should be able to:
    - Use your own words to describe each of the three domains of learning:
      - Cognitive
      - Psychomotor
      - Affective

# Goals and Objectives

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- Cognitive Goals

- At the completion of this module, you should be able to:
  - Use your own words to describe how to evaluate a planned learning activity (lecture, demonstration, etc.) to determine if there is performance agreement between the planned learning event and the course goals and objectives.

# Goals and Objectives

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- Cognitive Goals

- Since Module #8: Domains of Learning hasn't been covered, we'll discuss the level (1-3) from the language of the objective based on ABCD elements next weekend.



# Psychomotor Goals

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- At the completion of this module, you should be able to:
  - take objectives supplied by Jim or me and identify the A, B, C, and D components.

# Psychomotor Goals

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- At the completion of this module, you should be able to:
  - take incomplete objectives (lacking 1 or 2 of the ABCD components) and rewrite the objective to contain all of the necessary elements.

# Psychomotor Goals

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- At the completion of this module, you should be able to:
  - take a goal provided by Jim or me and write at least one ABCD objective for each domain of learning.

# Psychomotor Goals

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- At the completion of this module, you should be able to:
  - compare goals and objectives provided by Jim or me to determine if performance agreement exists.

# Affective Goals

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- At the completion of this module, you should be able to:
  - explain why goals and objectives are important to well designed learning.

# Affective Goals

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- At the completion of this module, you should be able to:
  - explain how the evaluation of goals and objective for performance agreement enhances quality.

# Affective Goals

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- Since we haven't covered Module #8: Domains of Learning, we'll wait to talk about the three levels of each domain and their importance in the planning and executing instruction until next weekend.



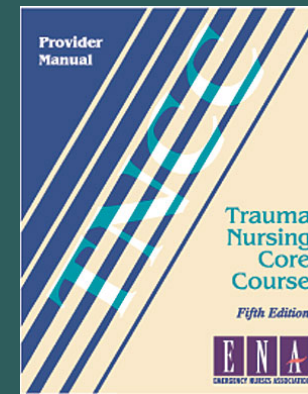
# Goals and Objectives

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- Introduction
  - Importance of Goals and Objectives
    - In order for instructors to have meaning, educational materials should have goals and objectives.

# Goals and Objectives

- Introduction
  - Importance of Goals and Objectives
    - Entry level instructors should be able to utilize educational curricula containing objectives.



Advanced Trauma Life Support® (ATLS®)

# Goals and Objectives

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- Introduction
  - Importance of Goals and Objectives
    - Instructors who write test questions need to know the objectives to assist in the development of the test.

# Goals and Objectives

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- Introduction
  - Importance of Goals and Objectives
    - Objectives help the instructor decide how much information to cover on a given topic.

# Goals and Objectives

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- Introduction
  - Importance of Goals and Objectives
    - To evaluate classroom performance

# Goals and Objectives

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- Terminology

- Goal



# Goals and Objectives

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- Terminology
  - Objective

# Goals and Objectives

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- Terminology
  - Performance agreement

# Goals and Objectives

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- Terminology
  - Performance agreement
    - Each student will be issued a CPR card as a part of the course.
    - Each student will demonstrate competence in AHA BLS skills and be certified prior to completing this education program.

# Goals and Objectives

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- Basic Principles

- Dr. Robert Mager, 1962
  - Ohio University
  - State University of Iowa
- Modern concept of goals & objectives
- "Instruction is effective to the degree that it succeeds in changing students in desired directions and not in undesired directions."

# Goals and Objectives

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- Basic Principles

- “How to Devise Educational Objectives” the qualities of specific learning objectives are:

- Relevant
- Unequivocal
- Feasible
- Logical
- Observable
- Measurable

# Goals and Objectives

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- Basic Principles

- Goals & objectives need to be solid measurable statements
- A need for instructional designers to clearly communicate to both teachers and students what behavior is expected in order to accomplish a goal.

# Goals and Objectives

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- Basic Principles
  - Each objective should relate to at least one goal and each goal should be represented by at least one objective.

# Goals and Objectives

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- Basic Principles
  - Course instructors use performance agreement principles to determine if they are teaching appropriate levels of contents (depth and breadth) to their students.

# Goals and Objectives

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- Pre-Presentation Evaluation
  - Compare lesson plan to what is written in the course goals and objectives.

# Goals and Objectives

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- Post-Presentation Evaluation
  - Review what was taught to determine if there were omissions.
    - Cover in next class session or provide alternative learning opportunity
  - Revise & enhance the lesson plan for the future.

# Goals and Objectives

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- Evaluate your performance:
  - Self-reflection
  - Observations by other instructors
  - Student feedback

# Goals and Objectives

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- Review student's performance on tests
  - Variables affecting testing performance

# Goals and Objectives

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- Common characteristics of goals
  - Goals again are global statements of intended learning
    - They may be philosophical in nature
    - Does not communicate specific information

# Goals and Objectives

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- May or may not contain all of the ABCD elements commonly seen in an objective

# Goals and Objectives

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- Example of a goal:

“The goal of this program is to provide the tools necessary to become an entry-level EMS instructor.”

# Goals and Objectives

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- *Other Terms:*
  - Primary objectives
  - First level objectives
  - Expected learning outcomes

# Goals and Objectives

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- Common Characteristics of Objectives
  - Articulates the expected behavior that can be observed.
  - Describes how the behavior will be measured.

# Goals and Objectives

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Objectives are unambiguous

- Written in clear terminology
- Identifies behavior expected to successfully complete the objective

# Goals and Objectives

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Objectives are results oriented:

- Describes specific expectations about:
  - Knowledge acquisition
  - Performance
  - Feelings or attitudes

# Goals and Objectives

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- Objectives should have measurable criteria:
  - Quantitative
  - Qualitative

# Goals and Objectives

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- Quantitative (Quantity) Criteria
  - Exhibited under conditions specified
  - Measurement is defined
  - Examples

# Goals and Objectives

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- Quantitative (Quality) Criteria
  - Describes non-numerical observations
  - Examples

# Goals and Objectives

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- Performance Level
  - Pass/Fail
  - Percentage
  - Auto fail criteria

## Goals and Objectives

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- Writing in terms of performance
  - If the item does not describe or define the expected behavior
    - There is nothing to evaluate if learning has taken place

# Goals and Objectives

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- Communicate successful learning
  - Behavioral Terms
    - Define the expected behavior change that you are looking for to determine that learning has taken place

## Goals and Objectives

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- Examples of expected behavior:
  - Select from a assortment of EMS equipment & supplies those items required to perform spinal immobilization.

# Goals and Objectives

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- Examples of expected behavior:
  - Demonstrate how to perform a database search on the Internet with a topic provided by the Instructor.

## Goals and Objectives

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- Examples of expected behavior:
  - State three reasons why I is important to take BSI precautions when providing patient care.

# Goals and Objectives

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- The Domains of Learning
  - We'll cover the domains of learning in depth next weekend.
  - For now we will take a cursory look at the domains and their relevance

# Goals & Objectives

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- Learning takes many forms
  - Categorized or grouped into domains
    - Logical chunks of related information

# Goals & Objectives

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- Examples of types of learning
  1. How we feel emotionally about an issue
  2. Recalling definitions of medical terms
  3. How we relate to each other
  4. Personal values and morals
  5. How we perform skills and procedures

# Goals & Objectives

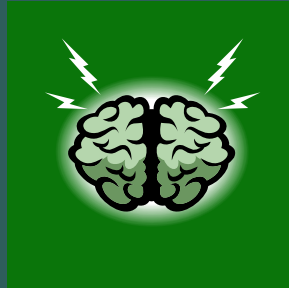
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- The grouping of these learning elements varies with different educational psychology models

# Goals and Objectives

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- Cognitive



Goals

- Psychomotor



Goals

- Affective



Goals

# Goals & Objectives

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- Example of Taxonomy
  - Ontario's Ministry of Education curriculum

# Goals & Objectives

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- Ministry of Education Taxonomic
  - Knowledge and Understanding
  - Thinking
  - Communication
  - Application

# Goals & Objectives

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- Domains are divided into subsections that reflect the need for students to have a deeper level of understanding (and sophistication) as they progress in that domain.

# Goals & Objectives

Level	Cognitive Domain	Psychomotor Domain	Affective Domain
1 Knowledge (low-level)	Knowledge Comprehension	Imitation Manipulation	Receiving Responding
2 Application (mid-level)	Application	Precision	Valuing
3 Problem Solving (high-level)	Analysis Synthesis Evaluation	Articulation Naturalization	Organization Characterization

# Cognitive Domain

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- Emphasizes remembering or reproducing something which has presumably been learned
- Deals with what a learner should know about the subject

# Cognitive Domain

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- Three levels
  - Level 1: Knowledge (recall), Comprehension, and Application
  - Level 2: Analysis
  - Level 3: Synthesis and Evaluation

# Goals & Objectives

Level	Cognitive Domain	Psychomotor Domain	Affective Domain
1 Knowledge (low-level)	Knowledge Comprehension	Imitation Manipulation	Receiving Responding
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# Psychomotor Domain

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- Emphasize muscular motor skill, manipulation of material and objects, or some act that requires neuromuscular condition.
- Concerned with how a learner moves or controls his or her body.

# Psychomotor Domain

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- Lower levels deal with skill performance with assistance or following a demonstration and progresses to “muscle memory,” when the performance of the skill is done almost without conscious thought by the student.

# Psychomotor Domain

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- The three levels within the psychomotor level:
  - Level 1: Imitation and Manipulation
  - Level 2: Precision
  - Level 3: Articulation and Naturalization

# Goals & Objectives

Level	Cognitive Domain	Psychomotor Domain	Affective Domain
1 Knowledge (low-level)	Knowledge Comprehension	Imitation Manipulation	Receiving Responding
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# Affective Domain

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- Composed of two different types of behaviors:
  - Reflexive (Attitudes)
  - Voluntary Reactions and Actions (Values)

# Affective Domain

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- It is often difficult to write objectives for this domain.
- It is also to tough to evaluate if learning has taken place.
  - Measurable change in behavior

# Affective Domain

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- The best education that you can provide to your students in this domain is to model the behaviors that you want them to adopt.

# Affective Domain

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- The three levels within the affective domain
  - Level 1: Receiving and Responding
  - Level 2: Valuing
  - Level 3: Organizing and Characterizing

# Goals & Objectives

Level	Cognitive Domain	Psychomotor Domain	Affective Domain
1 Knowledge (low-level)	Knowledge Comprehension	Imitation Manipulation	Receiving Responding
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# Verbs

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- Verbs to use when writing objectives

# Goals & Objectives

- Verbs to use when writing objectives

Level	Cognitive Domain	Psychomotor Domain	Affective Domain
1 Knowledge (low-level)	Knowledge Comprehension	Imitation Manipulation	Receiving Responding
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# Verbs

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- Cognitive

- Knowledge

- Arrange
    - Define
    - Describe
    - Identify
    - Label
    - List
    - Name

- Match
    - Memorize
    - Order
    - Recognize
    - Recall
    - Recite
    - Repeat

# Verbs

---

- Cognitive

- Comprehension

- Classify
    - Discuss
    - Distinguish
    - Explain
    - Identify
    - Indicate

- Locate
    - Review
    - Rewrite
    - Summarize
    - Tell
    - Translate

# Verbs

---

- Cognitive

- Application

- Apply
    - Choose
    - Compute
    - Demonstrate

- Operate
    - Practice
    - Prepare
    - Solve

# Verbs

---

- Cognitive

- Analysis

- Differentiate
    - Distinguish
    - Examine
    - Experiment

- Evaluate
    - Relate
    - Separate
    - Select

# Verbs

---

- Cognitive

- Synthesis

- Assemble
    - Compose
    - Construct
    - Create
    - Combine
    - Design

- Formulate
    - Organize
    - Prepare
    - Set up
    - Summarize
    - Tell
    - Write

# Verbs

---

- Cognitive
  - Evaluate
    - Appraise
    - Evaluate
    - Judge
    - Score

# Verbs

---

- Psychomotor
  - Imitation
    - Repeat
    - Mimic
    - Follow

# Verbs

---

- Psychomotor
  - Manipulation
    - Practice with minimal assistance
    - Create
    - Modify

# Verbs

---

- Psychomotor
  - Precision
    - Perform without error
    - Perform without assistance

# Verbs

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- Psychomotor
  - Articulation
    - Demonstrate proficiency
    - Perform with confidence
    - Perform with style or flair

# Verbs

---

- Psychomotor
  - Naturalization
    - Perform automatically

# Verbs

---

- Affective
  - Receiving
    - Accept
    - Attempt
    - Willing

# Verbs

---

- Affective
  - Responding
    - Challenge
    - Select
    - Support
    - Visit

# Verbs

---

- Affective
  - Valuing
    - Defend
    - Display
    - Offer
    - Choose

# Verbs

---

- Affective
  - Organization
    - Judge
    - Volunteer
    - Share
    - Dispute

# Verbs

---

- Affective
  - Characterization
    - Consistency
    - Join
    - Participate

# Verbs

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- Writing Goals

- Know
- Realize
- Enjoy
- Believe
- Understand
- Appreciate
- Write
- Value
- Comprehend
- Aware
- Tolerate
- Be familiar with
- Desire
- Feel

# Goals & Objectives

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- Consider the domains of learning when planning lessons and evaluating instructional techniques

# Goals & Objectives

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- Before you teach:
  - Review the Lesson Plan and Objectives
    - Determine the depth and breath you must cover the material for that session

# Goals & Objectives

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- After you teach:
  - Evaluate if the level taught was adequate for learning to take place
    - Did it target the level specified in the objectives

# Goals & Objectives

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- Example #1:
  - Your objectives state that the student should apply the information presented on therapeutic communications by describing how they would react in a scenario.

# Goals & Objectives

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- Example #1:
  - Class time was used to define terms.
  - What is missing?
- Role Playing Therapeutic Communications

# Goals & Objectives

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- Example #1:
  - The material was not taught to the level that the student will be tested.
  - What's wrong with that?
- Most students will fail the exam.

# Goals & Objectives

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- Example #2:
  - Your objective states that the student should match a set of given directional terms to their correct definitions.

# Goals & Objectives

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- Example #2:
  - The instructor taught all of the medical terms in the textbook by the Latin word root, suffix, and prefix.
  - Students are now asking if they will be tested on all of these terms.

# Goals & Objectives

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- Example #2:
  - Students had an extensive list of medical terminology and the class was several hours behind schedule.
  - So what?

# Goals & Objectives

---

- Example #2:
  - In this example the instructor went way beyond what was required by the objectives and threw off the schedule.
  - So what?
- It will take more time to get class back on track because we'll have to clarify what was expected of the student and what they'll be tested on.

# Goals & Objectives

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- Lesson Plans
  - Goals and objectives are often presented in two distinct levels with objectives being subordinate to goals.

# Goals & Objectives

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- Lesson Plans

- Goal

- The 1<sup>st</sup> level identifies the overall goal of the instruction for the program or instructional event.

# Goals & Objectives

---

- Lesson Plans

- Goal

- In addition to simply being called a goal, it may also be called a “terminal objective” or “primary goal of instruction”

# Goals & Objectives

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- Lesson Plans

- Goal

- Goals don't contain specific information on how learning is to be accomplished or measured.

# Goals & Objectives

---

- Lesson Plans

- Goal

- Goals are philosophical statements of what learning is intended to produce.

# Goals & Objectives

---

- Lesson Plans

- Goal

- The statements found at the beginning of each module in this curricula are goals.

# Goals & Objectives

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- Lesson Plans
  - Objectives
    - The objective is subordinate to the goal  
should relate to the goal

# Goals & Objectives

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- Lesson Plans

- Objectives

- In completing the objective, the student is moving toward meeting the goal.

# Goals & Objectives

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- Lesson Plans
  - Objectives
    - Sometimes these objectives are called “enabling objectives.”

# Goals & Objectives

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- Lesson Plans

- Objectives

- Because these are true objectives, they should follow the ABCD format

# Goals & Objectives

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- Lesson Plans
  - Performance Agreement
    - Performance agreement is a process of critically evaluating the goals, objectives, and course content to force logical relationships to each other

# Goals & Objectives

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- Lesson Plans
  - Performance Agreement
    - Every goal should have at least one objective related to it

# Goals & Objectives

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- Lesson Plans
  - Performance Agreement
    - Every objective should relate to at least one goal

# Goals & Objectives

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- Lesson Plans
  - Performance Agreement
    - The content of the lesson should relate to the goals and objectives

# Goals & Objectives

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- Lesson Plans
  - Performance Agreement
    - There should not be any concern that does not relate to goals and objectives

# Goals & Objectives

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- Lesson Plans
  - Performance Agreement
    - When the goals, objectives, and content all relate to each other there is performance agreement

Tah Dah!

# Goals & Objectives

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- Lesson Plans
- Performance Agreement
  - We'll discuss methods to evaluate performance agreement in a few minutes

# Goals & Objectives

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- Examples of Objectives
  - Given a standard sentence, the English 101 student should be able to identify the noun and verb without error.

# Goals & Objectives

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- Examples of Objectives
  - Given an assortment of EMS equipment, the Paramedic should be able to identify all of the equipment necessary to perform Rapid Sequence Intubation without error.

# Goals & Objectives

---

- Examples of Objectives
  - The EMT-B participant in this pediatric workshop should be able to identify at least four warning signs of possible child abuse from a mock family member's interview that contains eight warning signs.

# Goals & Objectives

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- Examples of Objectives
  - From a listing of roles and responsibilities, the First Responder student should be able to identify all those pertinent to a First Responder level provider with at 70% accuracy.

# Goals & Objectives

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- Parts of an Objective
  - Many methods, models, and templates are available on writing objectives

# Goals & Objectives

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- Parts of an Objective
  - An easy to remember generic model utilizes the letters A-B-C-D to indicate the important information to include in an objective

# Goals & Objectives

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- Parts of an Objective
  - A = Audience

# Goals & Objectives

---

- Parts of an Objective
  - B = Behavior

# Goals & Objectives

---

- Parts of an Objective
  - C = Condition

# Goals & Objectives

---

- Parts of an Objective
  - D = Degree

# Goals & Objectives

---

- Parts of an Objective
  - It is important to note that an objective doesn't have to be written in this order (ABCD) but it should contain all of these elements

# Goals & Objectives

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- (A) Audience
  - Describe the receiver of the instructional activity

# Goals & Objectives

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- (A) Audience
  - Often the audience is identified only in the 1<sup>st</sup> level (which is usually the goal) or the 1<sup>st</sup> objective in the series of objectives for that section.

# Goals & Objectives

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- (A) Audience
  - Examples of audience statements:

# Goals & Objectives

---

- (A) Audience
  - Examples of audience statements:
    - The EMT-B Student
    - The EMT-I refresher course participant
    - The prehospital care provider attending this seminar

# Goals & Objectives

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- (B) Behavior
  - Must be:
    - Observable
    - Measurable

# Goals & Objectives

---

- (B) Behavior
  - If it is a skill, it should be a real world skill
  - It should relate to current clinical practice

# Goals & Objectives

---

- (B) Behavior
  - The “behavior” can include demonstration of knowledge or skills in any of the domains of learning.

# Goals & Objectives

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- (B) Behavior
  - Examples of behavior statements:
    - should be able to write a report
    - Should assemble the equipment necessary to perform needle thoracotomy
    - Defend the need to use reasonable force for self-protection

# Goals & Objectives

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- (B) Behavior
  - Terminology may be important here:
    - “should be able to”
    - “will be able to”

# Goals & Objectives

---

- (B) Behavior

- This may only be an issue for someone who is writing objectives
  - If you have a concern:
    - Consult your supervisor or a senior instructor

# Goals & Objectives

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- Parts of an Objective
  - Two simple models to follow in writing an objective:

# Goals & Objectives

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- Parts of an Objective
  - The Audience will Behavior in Condition circumstance to Degree level.

# Goals & Objectives

---

- Parts of an Objective
  - Given Condition the Audience will Behavior to Degree.

# Goals & Objectives

---

- Audience
  - Describe the receiver

# Goals & Objectives

---

- Audience
  - The audience is identified only in the 1<sup>st</sup> level of objective

# Goals & Objectives

---

- Audience
  - Examples of audience statements:

# Goals & Objectives

---

- Audience

The EMT-B student

# Goals & Objectives

---

- Audience

The EMT-I refresher course  
participant

# Goals & Objectives

---

- Audience

The prehospital care provider attending this seminar

# Goals & Objectives

---

- Behavior
  - Describes learner capability

# Goals & Objectives

---

- Behavior
  - Must be observable & measurable

# Goals & Objectives

---

- Behavior
  - If it is a skill, it should be a real world skill

# Goals & Objectives

---

- Behavior
  - The “Behavior” can include demonstration of knowledge or skills in any of the domains

# Goals & Objectives

---

- Behavior
  - Examples of behavior statements:

# Goals & Objectives

---

- Behavior
  - Should be able to write

# Goals & Objectives

---

- Behavior
  - Should be able to assemble the equipment necessary to perform needle thoracotomy

# Goals & Objectives

---

- Behavior
  - Defend the need to use reasonable force for self-protection

# Goals & Objectives

---

- Behavior
  - Terminology

# Goals & Objectives

---

- Behavior
  - Terminology

# Goals & Objectives

---

- Condition
  - The condition describes any circumstances that will impact upon the behavior the student will exhibit

# Goals & Objectives

---

- Condition
  - Equipment or tools that may (or may not) be utilized in completion of the behavior

# Goals & Objectives

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- Condition
  - Environmental conditions or situations

# Goals & Objectives

---

- Condition
  - Time limits imposed as a condition for performance

# Goals & Objectives

---

- Condition
  - Examples of condition statements:

# Goals & Objectives

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- Condition
  - Given an oxygen wrench, regulator, and D tank with oxygen in it

# Goals & Objectives

---

- Condition
  - Given the complete works of Wm Shakespeare

# Goals & Objectives

---

- Condition
  - Following the last ventilation given by BVM and within 30 seconds

# Goals & Objectives

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- Degree
  - States the standard for acceptable performance

# Goals & Objectives

---

- Degree

100%

# Goals & Objectives

---

- Degree
  - Examples of degree statements:

# Goals & Objectives

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- Degree
  - Without error

# Goals & Objectives

---

- Degree
  - 9 out of 10 times

# Goals & Objectives

---

- Degree
  - Without committing any critical errors

# Goals & Objectives

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- Review

- Who (A)
- What (B)
- What (C)
- What (D)

# Goals & Objectives

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- Review
  - Evaluating goals, objectives and content for performance agreement

# Goals & Objectives

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- Review
  - Failure
  - Modify
  - Reevaluate

# Goals & Objectives

---

- Review
  - Too much
  - Too little

# Goals & Objectives

---

- Review
  - Prior to
  - After

Goals & Objectives

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Questions?