



# How to Write More Effective Learning Objectives

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Effective Teacher Series  
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UT Southwestern Medical Center

James Wagner, MD  
Joseph Martinez, MD  
Richard King, PhD

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# Objectives of this workshop

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1. Know learning objectives real good
2. Fully understand how to write them
3. Definitely appreciate how to improve learning objectives
4. Be able to use learning objectives in your own teaching

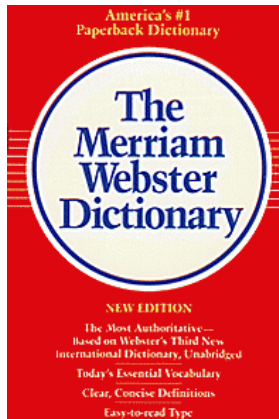


# Objectives of this workshop

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1. State the rationale for learning objectives
2. Describe:
  - the anatomy of a learning objective (three parts)
  - the cognitive levels of performance (two levels)
3. Identify strengths and weaknesses of existing learning objectives
4. Write three-part learning objectives for each level of performance

# What is a learning objective?



Webster's definition of "objective":  
something toward which effort is directed; an aim, goal, or end of action.

An educational definition:  
a statement of what learners are expected to demonstrate to show that they have learned.



# What is a learning objective?

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Example:

Given a history and physical examination of a patient with chest pain in an emergency department, diagnose myocardial infarction within fifteen minutes.



# What is a learning objective?

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Learning objectives should be stated in terms of what the **learner** will do rather than what the teacher will do:

Example of a teacher-centered objective (bad!):

This lecture will explain the cardiovascular system...



# Rationale: why we need objectives

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- Defines expected outcomes of instruction for both teachers and learners
  - Knowledge
  - Skills
  - Attitudes
- Provides guidance for teaching and testing



# Anatomy of an Objective: The 3 Parts

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## *1. Conditions*

- what is “given” to the learner

## *2. Action*

- a verb
- and its object

## *3. Criteria*

- standards of acceptable performance



# Anatomy of an Objective: The 3 Parts

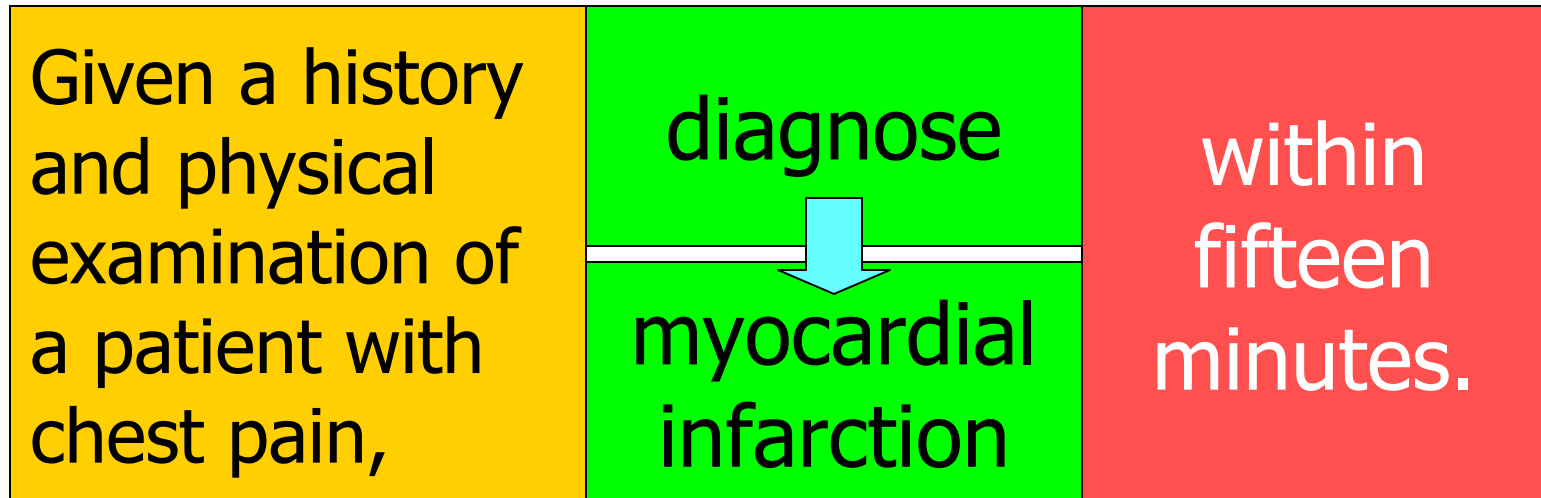
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Condition

Action

Criterion

Verb



Object



# Anatomy of an Objective: The 3 Parts

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Use of the three parts:

- *action* is always used
- *conditions* and *criteria* are used as needed to be clear to learners and teachers



# Cognitive Levels of Performance

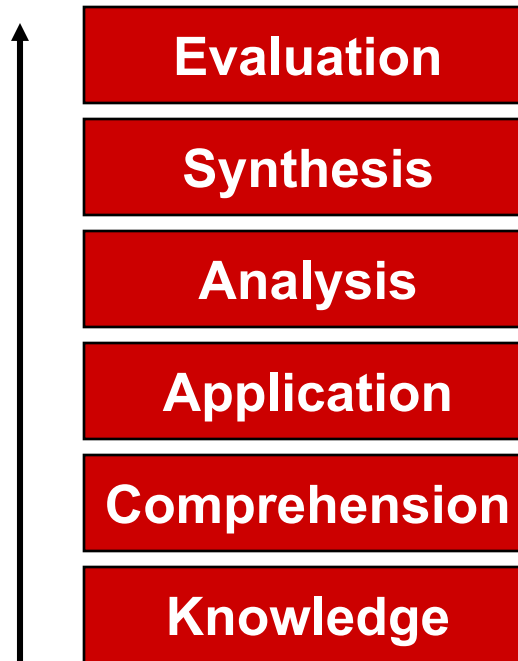
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- Bloom's taxonomy
- Clark's content-performance matrix

# Bloom's Taxonomy: Levels of cognitive objectives

Six cognitive performance levels:

**Increasingly  
complex  
and  
abstract  
thinking**



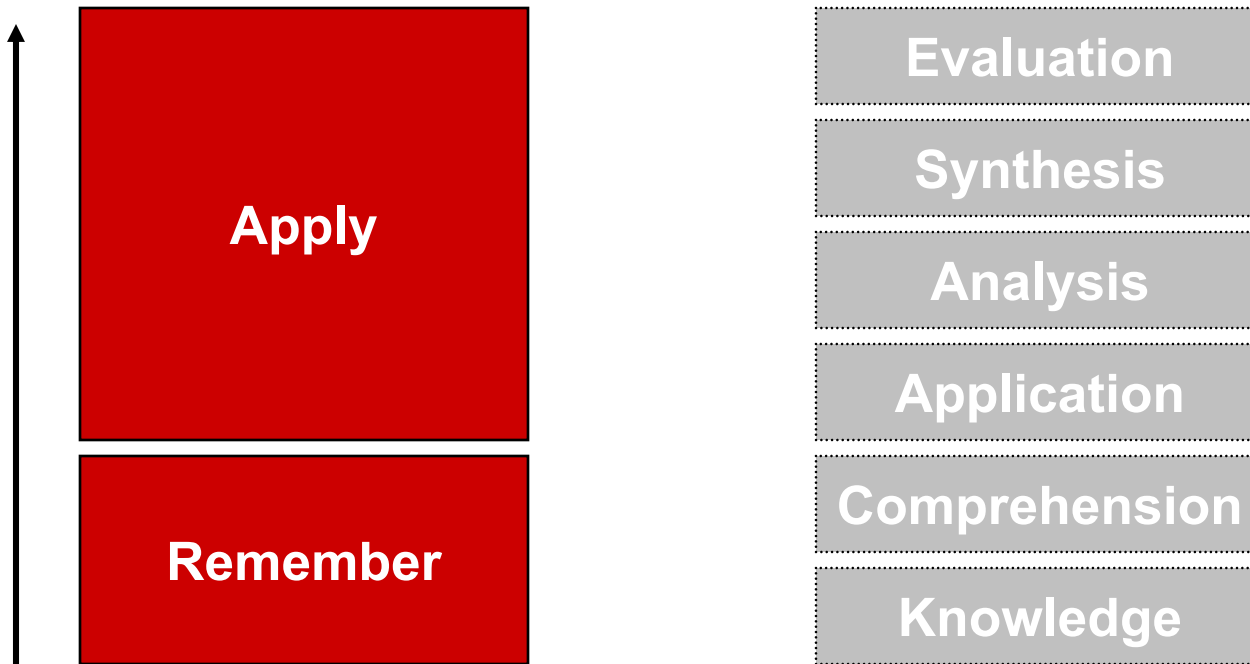
Bloom BS, ed. (1956). Taxonomy of educational objectives. New York: Longmans.



# Clark's Content-Performance Matrix

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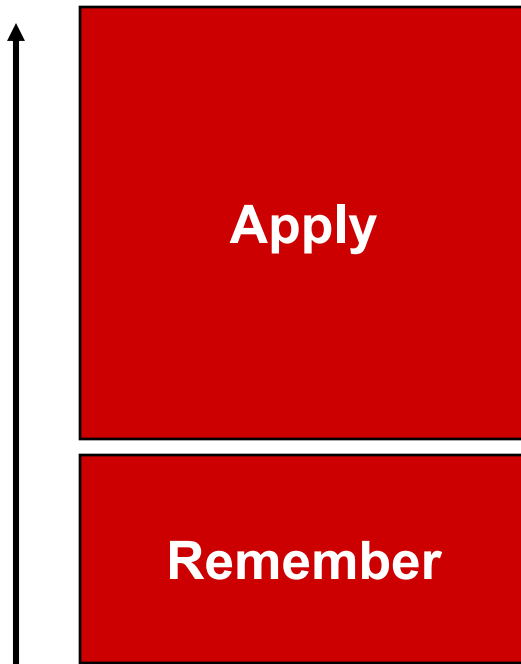
Two performance levels: Remember & Apply





# Clark's Content-Performance Matrix

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Diagnose myocardial infarction.

List 5 symptoms suggestive of a myocardial infarction.



# Verb examples

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- Remember-level

- Define
- Identify
- List
- Name or label
- Recite
- Select or choose

- Apply-level

- Arrange or sort
- Assemble
- Classify
- Compute
- Diagnose
- Diagram
- Treat



# Avoid vague verbs!

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## Vague/Unobservable

- *Know*
- *Understand*
- *Be able*

## Precise/Observable

- *Name*
- *Classify*
- *Perform*



# Exercise 1

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Classify objectives by level:

- Remember (press 1)
- Apply (press 2)



# Remember (1) or Apply (2)?

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- R** ■ Name the side effects of the 3 most common antibiotics.
- A** ■ Using a chart, calculate appropriate dosage for 45-pound child.
- R** ■ List five causes of joint pain.
- A** ■ Classify findings as significant or not significant to the presenting problem.
- R** ■ State the patient's HPI in your own words.
- A** ■ Rank order your differential diagnoses concerning the cause of the patient's symptoms.



## Exercise 2

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For each of the following learning objectives, identify its strengths and weaknesses.



# Reviewing objectives

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1. *Strong*
- 2.
- 3.
- 4.
5. *Weak*

Example:

Be able to identify a myocardial infarction.

Commentary:

- Eliminate "be able to" (action)
- Do we mean "identify" or "diagnose"? (action)
- Given what? (conditions)
- Remember or apply?



# Reviewing objectives

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1. *Strong*
- 2.
- 3.
- 4.
5. *Weak*

## Example:

Given a history and physical examination of a patient with chest pain in the emergency department, diagnose myocardial infarction within fifteen minutes.

## Commentary:

- All three parts are present



# Reviewing objectives

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1. *Strong*
- 2.
- 3.
- 4.
5. *Weak*

Example:

Be able to appreciate the anatomy of the skin.

Commentary:



# Reviewing objectives

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1. *Strong*
- 2.
- 3.
- 4.
5. *Weak*

## Example:

Given a photomicrograph of normal skin, identify the five layers of the epidermis, the epidermal-dermal junction, and the dermis.

## Commentary:



# Reviewing objectives

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1. *Strong*
- 2.
- 3.
- 4.
5. *Weak*

Example:

Learn to recognize normal and abnormal growth and development in adolescent patients.

Commentary:



# Reviewing objectives

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1. *Strong*
- 2.
- 3.
- 4.
5. *Weak*

Example:

Distinguish seriously-ill patients from patients with minor illness or injury.

Commentary:



# Exercise 3

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- On a blank sheet of paper, write two 3-part objectives related to your own teaching:
  - one remember-level
  - one apply-level
- Be prepared to share your objectives with the group for discussion
  - Turn in your objectives when done



# Summary

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- Objectives describe observable actions that we're willing to accept as an indication of learning.
- With clear objectives, students and teachers will know more precisely what they are expected to accomplish and whether they have achieved it.



# Summary

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- Objectives should have three components
  - Conditions (explicit or implied)
  - Action
  - Criteria (explicit or implied)
- An action verb is precise and observable
- The action should involve an appropriate level of performance
  - Remember
  - Apply



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Questions???

Please complete an evaluation form!



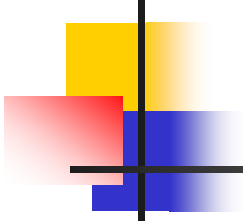
# SMART checklist

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Are your objectives

- ❑ Specific?
- ❑ Measurable?
- ❑ Achievable?
- ❑ Realistic and relevant?
- ❑ Time-bound?

Doran, GT (November 1981). There's a S.M.A.R.T. Way to Write Management Goals and Objectives. *Management Review*.



1. *Strong*
- 2.
- 3.
- 4.
5. *Weak*



# Exercise 3

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- On a blank sheet of paper, write two 3-part objectives related to your own teaching:
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## Examples of Verbs for Formulating Learning Objectives

### “Remember” Verbs

Identify  
Indicate  
Define

List  
Select  
Name

Recite  
Write  
Sort

### “Apply” Verbs

Compute  
Classify  
Apply  
Calculate  
Choose  
Diagram

Differentiate  
Separate  
Measure  
Arrange  
Organize  
Assemble

Document  
Rank  
Rate  
Recommend  
Test  
Estimate

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