

**Educational objectives &
Lesson plan: Concept &
Construction**

“If you don't know where you're going, you won't get there;

but if, by chance, you get there you won't know you're there.”

Mager, 1987



GOALS



My Goals

1.

2.

3.



Educational objectives: Principles & Preparation

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Objectives Of This Session

Learned participants will be able to—

- Define educational /learning objective
- Mention its importance
- Identify various educational domains
- Explain the component of instructional objectives
- Write learning objectives for any session

What is Education?

About 12,740,000,000 results (0.32 seconds)

Dictionary

Definitions from [Oxford Languages](#) · [Learn more](#)



education

/ˌɛdʒʊˈkeɪʃn/

noun

1. the process of receiving or giving systematic instruction, especially at a school or university.
"a course of education"

Similar:

teaching

schooling

tuition

tutoring

instruction

pedagogy



2. an enlightening experience.
"Petrus is a good workman—it is an education to watch him"

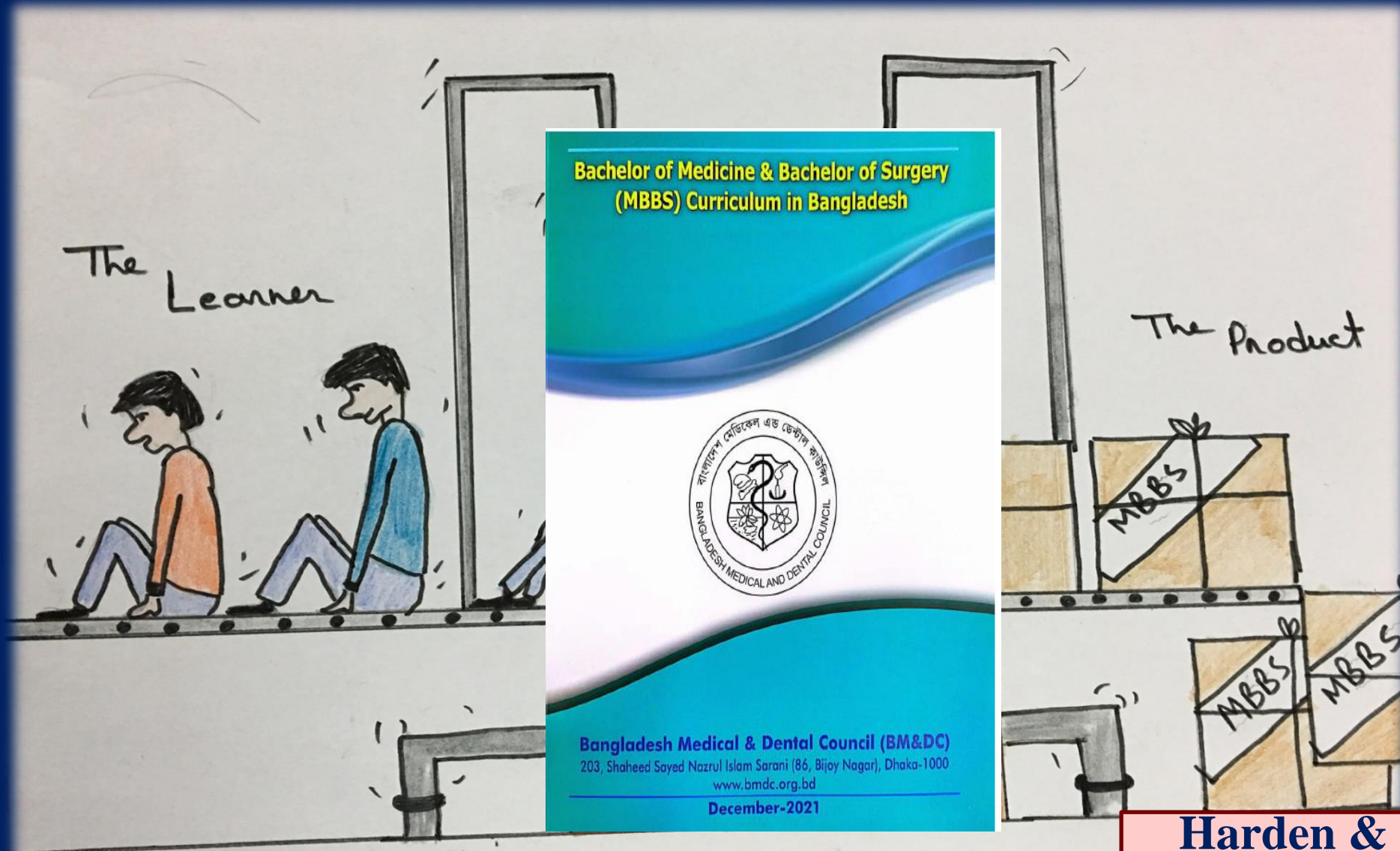
What is Education?

Education is a process, the chief goal of which is to bring about expected change in human knowledge/skill/ attitude



The result of education is an expected change in the KSA of the student in the course of a given period

A factory approach with a standard product



**Harden & Laidlaw
2012**

What is Educational objectives?

What the students should be able to do at the end of a learning period that they could not do beforehand.



Educational objectives are also called **“Learning objectives”** as opposed to **“Teaching objectives”**.

**Learning objectives describe
what the learner will be
able to do by the end of the
session or training**

True

or

False

**Learning objectives describe
what the learner will be
able to do by the end of the
session or training**



In other words:

**Learning objectives
describe the change of
LEARNER'S behavior,
NOT the
Teacher's behavior.**

I have taught
Snoopy
to whistle



I can't
hear him
whistle



I said that I had
taught him, not
that
he had learned



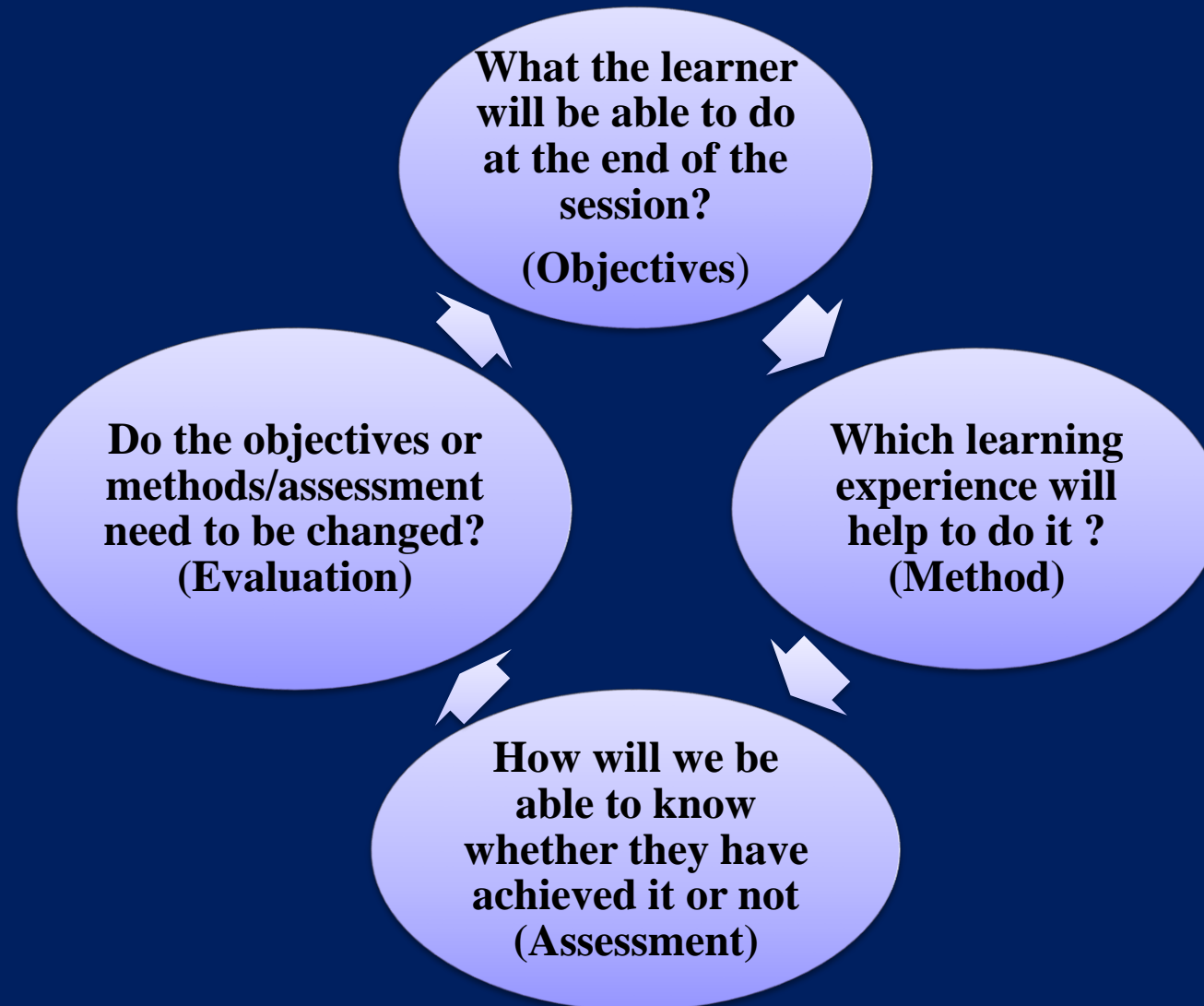
YES

**The learner
will be able to
explain the
four stages
of child
development.**

NO

**The trainer
will present
the four
stages
of child
development.**

Educational Circle / Spiral



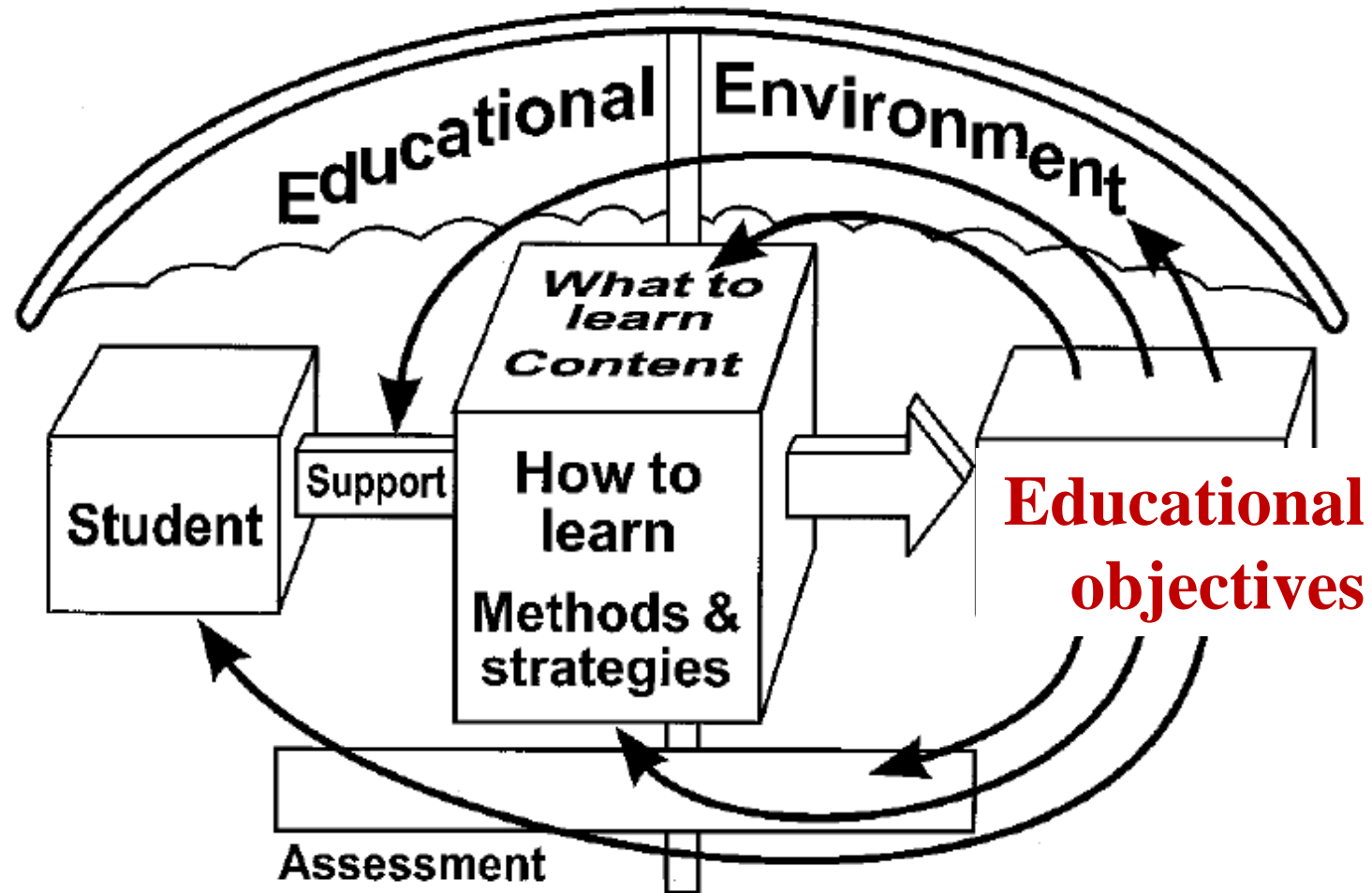
**Why write
learning
objectives?**

Because ...

**... learning objectives serve as
guidelines for content,
instruction, assessment and
evaluation.**

**... should be measurable or at
least observable**

Importance of EO/LO



Importance of Learning objectives

Begin with the end in mind

What do we want
students to learn?



Objectives

How will we know
WHEN they've learned it?



Assessment

Importance of LO

No educational objectives



Misdirected and unproductive activities



Lesser chance of success



Unmotivated learners

**Good educational objectives
benefit both teacher & learner**

Purposes of Educational Objectives



Prior idea about what the learners are going to gain from the session



Clarification of items to ourselves as teachers



Choosing appropriate instructional methods to achieve the goal



Serve as the baseline for assessment

Bloom's taxonomy in Educational Domains

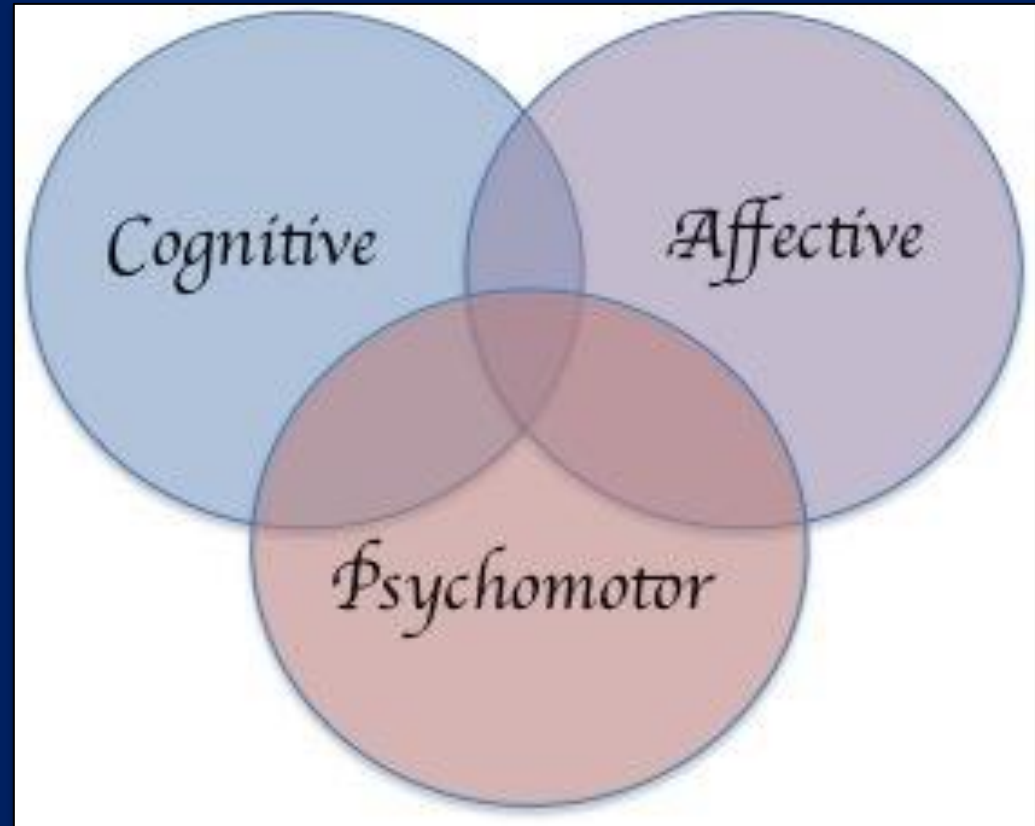
Benjamin Samuel Bloom was an American educational psychologist who made contributions to the classification of educational objectives and to the theory of mastery learning.



(February 21, 1913 –
September 13, 1999)

Domains of Learning

- Benjamin Bloom (1956), classify educational/learning objectives into 3 overlapping broad domains:



Domains of Learning

Bloom's Proposed Terms	What is it?	Examples	Substitution of the Terms
Cognitive Domain	<ul style="list-style-type: none">• Knowledge• Intellect	<ul style="list-style-type: none">• Decision making• Understanding a concept	Knowledge
Psychomotor Domain	<ul style="list-style-type: none">• Manual dexterity• Physical skills	<ul style="list-style-type: none">• Ability to operate equipment• Laceration repair	Skills
Affective Domain	<ul style="list-style-type: none">• Behavior• Attitudes	<ul style="list-style-type: none">• Empathy towards patients• Respect for individual	Attitudes

Educators called it KSA

Objectives fall into 3 domains

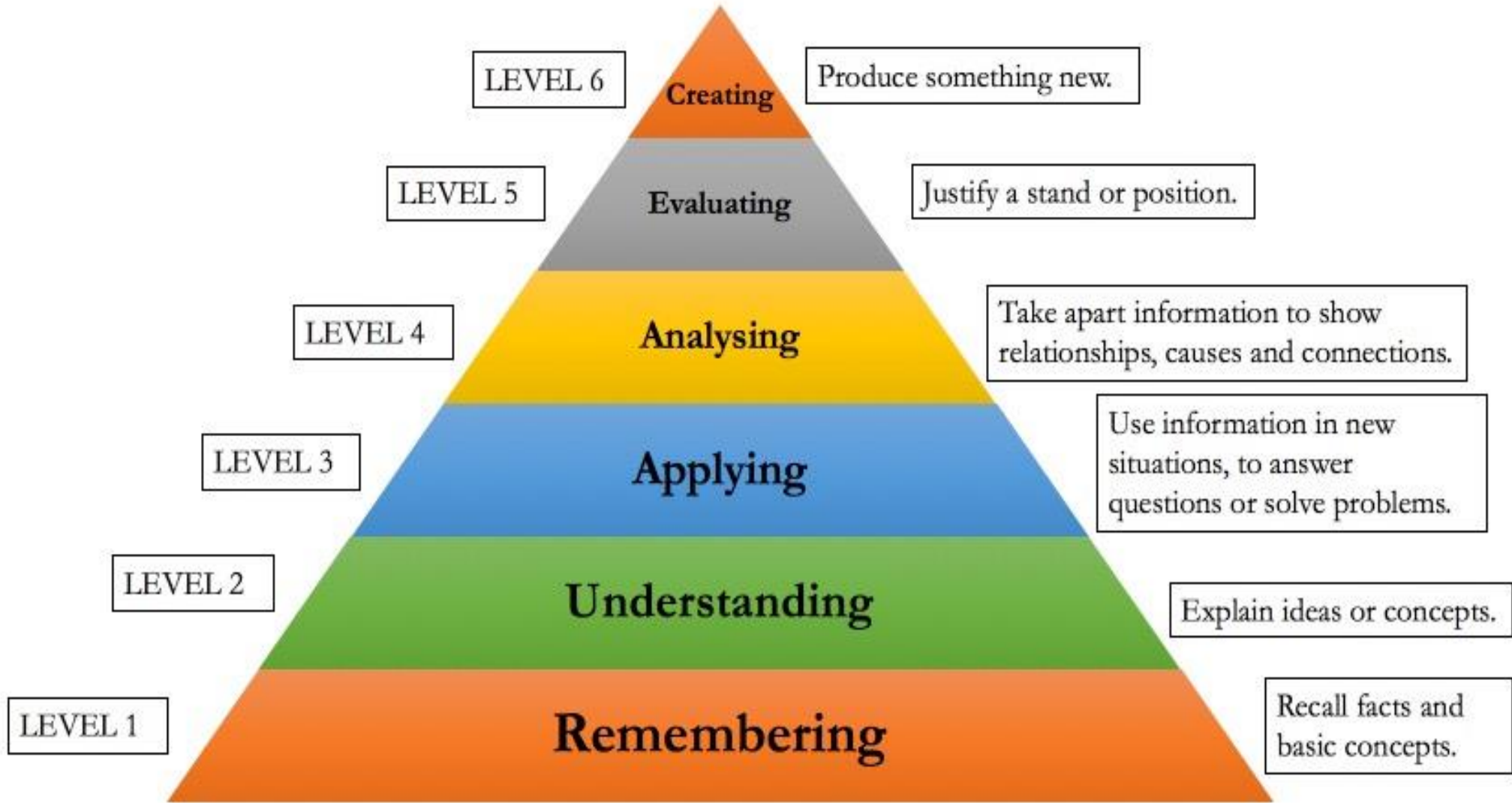
Cognitive – ranges from factual

knowledge to higher levels of function

such as problem Solving and clinical

decision making

Bloom's Taxonomy



Level of cognitive domain

Table 2. Examples of verbs in cognitive domain. Note some of the verbs are used in more than one level (Bloom, 1956).

Knowledge	Comprehension	Application	Analysis	Synthesis	Evaluation
Define	Choose	Apply	Analyze	Assemble	Appraise
Identify	Cite examples of	Demonstrate	Categorize	Compose	Assess
List	Describe	Generalize	Compare	Construct	Choose
Name	Determine	Illustrate	Conclude	Create	Compare
Recall	Discriminate	Interpret	Contrast	Design	Critique
Recognize	Discuss	Operate	Correlate	Develop	Estimate
Record	Explain	Practice	Criticize	Formulate	Evaluate
Repeat	Identify	Relate	Debate	Organize	Judge
Underline	Interpret	Use	Detect	Plan	Measure
	Restate	Utilize	Determine	Prepare	Rate
	Review	Initiate	Develop	Produce	Revise
	Recognize		Differentiate	Propose	Score
	Tell		Examine	Predict	Select
	Simulates		Experiment	Reconstruct	Validate
			Infer	Set-up	Value

Objectives fall into 3 domains

- **Psychomotor – physical skills**
 - **History taking**
 - **Physical examination**
 - **interpersonal communication**
 - **record keeping, procedures etc**

Objectives fall into 3 domains

- **Affective (attitudinal)**
 - **attitudes, values, beliefs, biases, emotions and role expectations**

In stating objectives

- We should avoid words like:
 - To know
 - To understand
 - To discuss
 - To appreciate
 - To believe
 - To have faith in
 - To be familiar with

Types of Educational Objectives

1. General objectives/Goal

- Related to professional function

2. Specific educational objectives or instructional objectives

- Derived from precise professional task

Example of instructional objectives

- Students will be able to collect / draw 5cc of blood sample from the cubital vein of an adult. (Criteria: absence of haematoma, not more than two attempts).
- 'Students will correctly describe the routine childhood immunization schedules in Bangladesh.

How should we write learning objectives?

**The SMART Way
to Write
Learning Objectives**

S



M



A



R



T



Components of Educational Objectives

- **Target Audience**: Who are the learners?
- **Observable/measurable Behavior**: What do we expect the learners to achieve?
- **Condition**: What are the conditions? What are the prerequisites? How do the learners achieve their targets?

Components of Educational Objectives

- Degree: How much should they learn? Is there a specific criterion that we want our learners to meet? What is the extent of achievement?
(Acceptable limit)

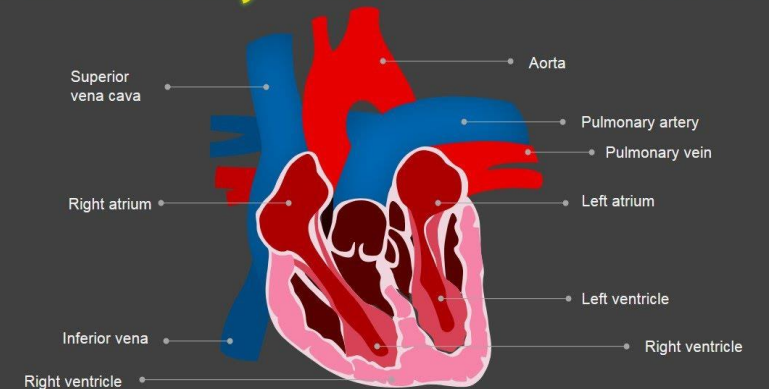
ABCDs of writing LO

- **Audience**: Who are the learners?
- **Behavior**: What do we expect the learners to achieve?
- **Condition**: How do the learners achieve their targets?
- **Degree**: What is the extent of achievement?

Examples

- At the end of 2 hours tutorial class and using the illustration, 1st year medical students will correctly identify eight out of ten anatomical structures of the heart

Anatomy of Human Heart



Examples

'**first year medical students**' is the audience,
'**identify**' is the measurable behavior, **using the**
illustration' is the condition, and '**eight out of ten**'
anatomical structures of the heart is the degree.

Examples

- **At the end of 1:20 hours workshop session, with guidance of facilitator (using the presentation), all participants will be able to write their learning objective correctly within two attempts.**

Examples

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Template for Lesson plan

- **Topic:** **Date:** **Place:** **Duration:**

Objectives	Purpose	Pre-requisite Knowledge	Content	Method	Teaching materials	Assessment

Summary

- **Educational objectives are learner centered, short and precise descriptions of what learners are expected to achieve at the end of the session.**

Summary

- **Good learning objectives include:**
 - **(a) target/audience (b) observable/ measurable behavior (c) condition and (d) degree of acceptance.**
- **It is directly linked to instructional methods and assessment.**

Summary

- **Definition of educational /learning objective**
- **Importance of learning objectives**
- **Name of various educational domains**
- **Elements of specific educational objectives**

References

- **Harden, R. M., & Laidlaw, 2020. Essential skills for a medical teacher: an introduction to teaching and learning in medicine.**
- **Guilbert JJ, 1987. Educational Handbook for health personnel. Revised edition, WHO Geneva.**
- **Amin & Hoon, 2007. Basics in Medical Education.**
- **Online resources.**



**It goes without saying that no man can
teach successfully who is not the same
time a student.**



Sir William Osler

Group work

- Learners will be able to-
 - Write learning objectives of their teaching/learning session according to educational domain following SMART way & ABCD component.

