

Module 1 – Learning Outcomes Definition

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What are learning outcomes?

- Formal statements that articulate:
 - **What** learners are able to do after instruction
 - **Why** learners need to do this

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Why assess?

- It builds evidence for accountability, accreditation and improvement.
- Shows evidence of how well our learners learn.
- Uses evidence for continuous improvement.

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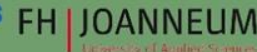


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Simply put

- Know what you are doing
- Know why you are doing it
- Know what learners are learning as a result
- Make changes in the curriculum based on that information

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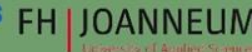


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Shifting focus from

- Teaching to learning
- Teaching effectiveness to learning results
- Private affair to community property

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Some benefits of learning outcomes

- select content
- develop instructional strategy
- develop and select instructional materials
- construct tests and other instruments for assessing and evaluating

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Writing Learning Outcomes

- Learning Outcomes Formula
- Bloom's Taxonomy
- Characteristics of Good Learning Outcomes
- Learning Outcomes Exercise
- Write Your Learning Outcomes

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1. What do you want the learner to be able to do?

This question asks you to develop the outcome.

For Example:

Students will evaluate reference books appropriate to the topic in order to locate the best background information and statistics.

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Learning Outcomes Formula

Verb

or

Action Phrase

“In Order To”

Why?

Great
Learning
Outcomes

What students need
to know?

*“Student evaluates
reference books
appropriate to the topic”*

“In Order To”

Why do they need to
know this?

*“locate background
information and
statistics.”*

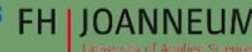
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Importance of Verbs

- Behavioral Outcomes
 - Affective Domain
 - Psychomotor Domain
 - Cognitive Domain

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Cognitive Domain

- Involves knowledge and the development of intellectual skills
- Bloom's Taxonomy
 - Hierarchy of objectives according to cognitive complexity
 - Higher-level objectives include, and are dependant on lower level cognitive skills

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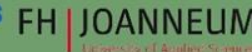


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Bloom's Taxonomy

- Knowledge
- Comprehension
- Application
- Analysis
- Synthesis
- Evaluation

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Bloom's – Lower Levels

- **Knowledge**

- Recalling previously learned information such as facts, terminology, rules, etc.
- Answers may be memorized or closely paraphrased from assigned material.
- Define, list, name, recall

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Bloom's – Lower Levels

- **Comprehension**

- Ability to comprehend the meaning of material.
- Answers must be in the student's own words while still using terminology appropriate to the course material.
- Explain, summarize, distinguish between, restate

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Bloom's – Lower Levels

- Demonstrate rote or surface learning
- Declarative or Procedural Knowledge
- Answers found in the assigned materials
- 80% of HE teachers test at these levels

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Bloom's – Higher Levels

- **Application**

- Requires recognizing, identifying, or applying a concept or principle in a new situation or solving a new problem.
- May require identifying or generating examples not found in assigned materials.
- Demonstrate, arrange, relate, adapt

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Bloom's – Higher Levels

- **Analysis**

- Ability to break material down into its component parts and to understand its underlying structure
- May require students to compare and contrast or explain how an example illustrates a given concept or principle.
- Require students to identify logical errors or to differentiate among facts, opinions, assumptions, hypotheses and conclusions
- Expected to draw relationships between ideas
- Differentiate, estimate, infer, diagram

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Bloom's – Higher Levels

- **Synthesis**

- Opposite of Analysis
- Ability to combine parts to form a new whole; to synthesize a variety of elements into an original and significant whole.
- Produce something unique or original
- Solve some unfamiliar problem in a unique way
- Combine, create, formulate, construct

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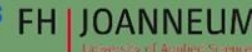
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Bloom's – Higher Levels

- **Evaluation**

- Ability to **evaluate** a total situation, to **judge** the value of material for a certain purpose, combining elements of all the other categories and also value judgments based on defined, fixed criteria.
- The most important part of the answer is the justification and rationale for the conclusion
- Judge, critique, justify, discriminate

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Bloom's – Higher Levels

- Meaningful or deep learning
- Go beyond textual material in that they must be inferred or extrapolated from the material in the assigned material.
- Students' creativity, originality and critical thinking is required at higher levels
- More authentic than lower levels
 - Thinking at this level is more likely to represent types of performances required in the real world

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Characteristics of Good Learning Outcomes

- Measurable/Can be assessed.
- Clear to the learner & trainer.
- Integrated, developmental, transferable.
- Use discipline-specific competencies/standards.
- “In order to” gets to the uniqueness and real world application of the learning.
- Use a variety of Bloom’s Taxonomy levels.

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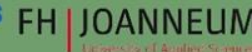


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Example 1

- Bad Outcome
 - Students will name the three types of rock in order to differentiate among the three.

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Example 2

- Good Learning Outcome
 - Learners will compare and contrast the characteristics of the three types of rocks in order to differentiate among the three.

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Example 4

- Bad Outcome
 - Use Iliad and Texshare in order to access materials not available at the University Library.

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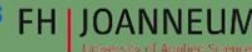
Example 5

- Good Outcome
 - Utilize retrieval services in order to obtain materials not owned by the University Library.

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Example 6

- Bad Outcome
 - Learners will construct bibliographies and in-text references using discipline appropriate styles in order to contribute to academic discourse in their discipline.

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Example 7

- Good Outcome
 - Construct bibliographies and in-text references using discipline appropriate styles in order to correctly attribute others' work and ideas.

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Activity (A)



You will be in a group to practice writing learning outcomes.

You will each choose assigned a level of Bloom's taxonomy.

1. Develop an appropriate learning outcome for each level of learning to teach learners to cite works in a term paper using the appropriate format (APA, etc.).
2. Share with the group.

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Let's Write a Learning Outcome (A)

Choose specific information or a skill that you teach in a training session

- What does the learner need to know?
- Why do they need to know this?
- What is the appropriate learning level?

Write an appropriate learning outcome.

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Learning Outcomes as the Basis for Training (A)

Questions

1. What do you want the learner to be able to do? (*Outcome*)
2. What does the learner need to know in order to do this well? (Curriculum)
3. What activity will facilitate the learning? (Pedagogy)
4. How will the learner demonstrate the learning? (Assessment)
5. How will I know the learner has done this well? (Criteria)

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Defining Your Learning Outcomes (A)

1. Review your current sustainability learning outcomes using the checklist provided.
2. Identify the problem areas.
3. Revise the learning outcomes to reflect what you've learned about writing "good" learning outcomes.

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