Lesson Plan: Learning Outcomes **1.75 hours minimum**

**Lesson Description**



In this lesson participants learn how to develop learning outcomes by applying Bloom’s Taxonomy. They also discuss the connection between outcomes, training activities, and assessment of participant learning.

**Learning Outcomes**



At the end of this session participants will be able to:

1. Apply Bloom’s taxonomy to design learning outcomes
2. Explain the connection between learning outcomes and training activities
3. Explain the connection between learning outcomes and assessment of learning

**Materials**



* Flip chart paper
* Markers
* Tape
* Large Diagram of the ADDIE model – introduced in the lesson on instructional design
* Topics recorded on large pieces of paper – from previous lesson
* CEWT Workbook – 1 per participant
* CEWT Resource Book – 1 per participant
	+ Resources from CEWT Resource Book: R6: Action Words for Learning Outcomes
* Theme music and speakers
* CEWT Hats
* “Levels of Learning” word card packages (See end of lesson plan)
* Blank paper (Minimum 30 sheets)
* Workshop topics (Created in previous lesson plan)
* Optional: Participants’ Nametags created using the template in the workshop introduction

**Preparation**



* Read and prepare lesson plan
* Write the list of activities from the introduction below on the board or flip chart
* Print out and cut four “Levels of Learning” word card packages. Ensure the words are mixed up and not in the correct order
* Write lesson description or learning outcomes on flip chart paper

**Introduction 10 minutes**



* 1. Show participants the following list of activities. The activities should be written on a piece of flip chart paper.
	2. List the parts of a latrine
	3. Evaluate the appropriateness of a pit latrine for a specific context
	4. Create an improved design for a pit latrine
	5. Explain the purpose of each of the parts of a latrine
	6. Build a pit latrine
	7. Identify problems of siting a latrine near a groundwater well
1. Ask participants to work in small groups of 3-4 to order the activities from easiest to most difficult.
2. Divide participants into small groups and allow 3-5 minutes for them to discuss.
3. Ask the participants to share their responses. Note the order that each group recommends by writing down the sequence of the letters for each i.e. A,C,B,D,F,E
4. Explain that later in the lesson they will come back to this list to evaluate whether they ordered the activities correctly or not.

**Trainer Note**: correct order is: A, D, E, F, B, C. Do not reveal the correct order yet.

1. Present the lesson description or learning outcomes.

**Cognitive Hierarchy 35 minutes**



1. Explain that not all the activities we do – or ask our participants to do – are the same level of difficulty.
2. Provide an example: If we want someone to fix a filter they need to know more than just the parts of the filter. They need to know how to find the problem and how to solve it. Knowing the parts of something and knowing how to fix it are two very different levels of complexity.
3. Explain that when creating training, an understanding of these different levels is important.
4. Divide participants into four groups, and give each group one of the bundles of “*Levels of Learning*” cards from the end of this lesson plan.
5. Ask each group to take 3-5 minutes to organize the steps from the simplest to the most complex.
6. When each group has organized their list, come together as a large group.
7. In the large group, have each group present how they organized the words and why.
8. Rotate around the room until each group has presented their list.
9. As a large group, complete the following list. Discuss any inaccuracies or confusion with the large group as you write the list somewhere visible.
10. Write the correct order on the board or flip chart paper:

Create

Evaluate

Analyze

*Increasing complexity*

Apply

Understand

Remember

1. Explain the reasoning behind each level of cognitive (thinking) complexity if participants have questions.

**Trainer Note:**

* Refer to the *Trainer Essential: Bloom’s Taxonomy* for background reading on this ordering.
* Create, evaluate and analyze are sometimes considered as interchangeable in complexity, depending on the task at hand. In the original version of Blooms Taxonomy Evaluate came before Create (Synthesis)
1. Ask participants to think about how they ordered the different latrine activities by complexity during the introduction. Review the different lists with the large group and correctly order the activities as follows (from least complex to most complex):
	* Remember: List the parts of a latrine
	* Understand: Explain the purpose of each of the parts of a latrine
	* Apply: Build a pit latrine
	* Analyze: Identify problems of siting a latrine near a groundwater well
	* Evaluate: Evaluate the appropriateness of a pit latrine for a specific context
	* Create: Create an improved design for a pit latrine
2. In their CEWT Workbooks, in the Design section, under “Learning Outcomes” ask participants to record the learning outcome examples.

**Introducing Learning Outcomes 15 minutes**



1. Tell participants that these levels of learning can help us write specific learning outcomes for our training.
2. Explain that outcomes are statements which represent observable behaviour or actions a trainer can check during a lesson or activity. Learning outcomes help us keep our training focused and measurable.
3. Ask the participants to refer to the “*Action Words for Writing Outcomes*” table in their CEWT Resource Book. Review the handout as a large group.
4. Explain to participants that when we write learning outcomes the action words we choose lead our participants to specific results. Explain that our learning outcomes tell us what we want participants to feel, know, or be able to do at the end of a workshop.

*If we want participants to be able to tell us something that is very different than if we want them to be able to show us something. Using specific verbs in our learning outcomes helps to ensure our training stays focused and achieves the results we are looking for.*

1. Explain that outcomes alsoallow us to assess if we met our training objectives.

*At the end of a lesson we can ask “Can participants now do these things?” If the answer is yes, our lesson has been successful.*

1. As an example, highlight the learning outcomes from this lesson plan.
2. Ask participants: “What are the action words in each of these outcomes?”
3. As participants volunteer responses, underline the verb/action word in the learning outcome statement i.e. “describe,” “apply,” “explain”.
4. Ask participants to use their “*Action Words for Writing Outcomes*” handout to find where each of these words belongs on the hierarchy.
5. Briefly discuss as a large group. *The outcomes in this lesson fall mostly within the “understand” and “apply” levels because participants learn new information and then practice using it*

**OPTIONAL: key questions 15 minutes**

1. **Only use this step for groups that would struggle to write learning outcomes.**
2. Follow steps 1-2 in “Creating Learning Outcomes” and then do the following steps before continuing:
	1. Ask each group to develop a list of questions that they believe participants should be able to answer about their topic by the end of the workshop.
	2. After 5 minutes ask each group to present their key questions to the full group. Encourage a critical analysis of the questions to ensure they are relevant and appropriate for the scope of the workshop.
	3. Ask participants to return to their original groups, and to develop learning outcomes that respond to the key questions they developed. *Ex: “What are the steps in the multi-barrier approach?” becomes “Identify the steps to the multi-barrier approach.”*

**Creating Learning Outcomes 30 min – 2 hours**



1. Tell participants you are going to divide them into small groups to create learning outcomes for the topics in the workshop their workshop.
2. Divide participants into groups according to the number of topics available.
3. Give each group 4 index cards and a marker to write their learning outcomes.
4. Tell each group to use their *Action Words for Writing Outcomes* handout to help them. Ask each group to create 2-4 learning outcomes for their topic based on what they want participants to know, feel, or be able to do by the end of the lesson. *Emphasize they do not need to create four; the number of outcomes should be determined by the topic and desired results for participants.*
5. Give the groups 10-15 minutes as needed to write learning outcomes based on their topics.
6. After each group has completed their learning outcomes, have them present them to the larger group for review. As each outcome is presented, ask participants to consider the following three questions. You may want to put the post the questions on a flip chart, and check them off as you review the outcomes.
	1. Is it a statement of something observable or demonstrable?
	2. Is the learning outcome appropriate for the target audience?
	3. Is the learning outcome at an appropriate level of Blooms to achieve the desired result?
7. Review and make necessary changes with the large group.
8. Review the completed list of updated outcomes with the large group and make any necessary revisions.

**Learning Domains 10 minutes**

1. Explain that when we are teaching people about WASH we need to help participants achieve a mix of knowledge, skills, and attitudes for them to be motivated to take action and change their behaviour.
2. Post or draw an image of a person on the board or flip chart labelled as follows. **Note:** You can use either the technical words or the simplified language depending on audience level, translation, etc.



Psychomotor (Doing)

Affective (Feeling)

Cognitive (Thinking)

1. Explain that according to these categories, learning can happen in three areas: cognitive (thinking), affective (feeling), and psychomotor (physical actions and skills).
2. Explain to participants that when they design training they should consider the things they want participants to achieve in each of these areas. What do we want them to know (cognitive), feel (affective), and be able to do (psychomotor) at the end of a workshop? Depending on the type of training and the end result they are looking for, they may emphasize different activities.

**Review 5 minutes**



1. Ask participants to form pairs and discuss the following questions:

“How do the verbs we choose for our outcomes influence the types of activities we do in a lesson?”

**Reflections on Lesson**

**Action Words for Learning Outcomes**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Remember** | **Understand** | **Apply** | **Analyze** | **Evaluate** | **Create** |
| DefineIdentifyDescribeLabelListNameMatchRecognizeLocateRecallQuoteTellCopyReadRepeatRecordVisualize | ExplainDescribeInterpretParaphraseSummarizeComparePredictDiscussContrastExpressIdentifyRelateInferSelectOrderReportShowReviewGroupRe-writeIllustrate | SolveApplyIllustrateUseCalculateChangeChooseDiscoverCompletePrepareReportCollectDetermineExamineEstablishExplainOperatePracticeEstablish Demonstrate | AnalyzeCompareContrastClassifyDistinguishSelectCategorizeConnectDifferentiateOrderPrioritizeAppraiseConcludeEstimateExperimentIllustrateOrganizePlanCriticizeShow | EvaluateOrderJudgeSupportDecideCompareAssessChooseConvinceDefendMeasurePredictRankScoreConcludeJustifyPersuadeRate | DesignComposePlanCombineCreateCompileIntegrateProduceAdaptCollaborateModifyArrangeAssembleCollectFacilitateMakeProposeReportSolveSupportTestValidate |

Modified from Center for University Teaching, Learning, and Assessment <http://uwf.edu/cutla/SLO/ActionWords.pdf>

**Levels of Learning**

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