

Writing and Using Learning Outcomes

MJM



Learning outcomes are important for recognition

The principal question asked of the student is
not

“what did you do to obtain your certificate?”

but rather

“what can you do now that you have obtained
your degree?”

The Old Approach

- The traditional way of designing modules and programmes was to **Moving from a teacher-start** from the content of the course
- Teachers decided on the **content centred approach**
- They intended to teach, planned how to teach this content and then assessed the content
- This type of approach focussed on the teacher's input and on assessment in terms of how well the students absorbed the material taught
- Course descriptions referred mainly to the content of the course that would be covered in lessons.

Criticism: it can be difficult to identify precisely what the student has to be able to do in order to pass the module or programme.

The new approach

- From “teacher centred” approach to a “student centred” approach
- This focuses on what the students are expected to be able to do at the end of the lesson or programme
- Is commonly referred to as an outcome-based approach
- Statements called **intended learning outcomes**, commonly shortened to **learning outcomes**, are used to express **what it is expected that students should be able to do at the end of the learning period.**

Defining learning outcomes

1. Learning outcomes are statements of what is expected that the student will be able to do as a result of learning the activity.
2. Learning outcomes are statements that specify what learners will know or be able to do as a result of a learning activity. Outcomes are usually expressed as knowledge, skills or attitudes.
3. Learning outcomes are an explicit description of what a learner should know, understand and be able to do as a result of learning.
4. Learning outcomes are statements of what a learner is expected to know, understand and/or be able to demonstrate after completion of a process of learning.
5. Learning outcomes are explicit statements of what we want our students to know, understand or be able to do as a result of completing our courses.
6. Learning outcome: a statement of what a learner is expected to know, understand and/or be able to demonstrate at the end of a period of learning”.
7. A learning outcome is a statement of what the learner is expected to know, understand and/or be able to do at the end of a period of learning.
8. A learning outcome is a statement of what a learner is expected to know, understand and be able to do at the end of a period of learning and of how that learning is to be demonstrated”.
9. Learning outcomes describe what students are able to demonstrate in terms of knowledge, skills and attitudes upon completion of a programme.
10. A learning outcome is a written statement of what the successful student/learner is expected to be able to do at the end of the module/course unit or qualification.

Remember!

The Objective of Islamic Education is to bring a change in the perspective of the learner, a 'paradigm shift', the provides him and her with the mental courage and physical strength to implement what has been learnt.

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Clearly....

- Learning outcomes focus on what the learner has achieved rather than the intentions of the teacher;
- Learning outcomes focus on what the learner can demonstrate at the end of a learning activity.

A working definition

Learning outcomes are statements of what a learner is expected to know, understand and/or be able to demonstrate after completion of a process of learning.

Difference between Aims, Objectives and Learning outcomes?

Definition of Aims

- The aim of a module or programme is a broad general statement of **Aims** teaching intention, i.e. it indicates what the teacher intends to cover in a block of learning
- Aims are usually written from the teacher's point of view to indicate the general content and direction of the module
- For example, the aim of a lesson could be “to introduce students to the Five Pillars of Islam” or “to teach the main events of Seerah”.

Definition of Objective

- The objective of a lesson is usually a specific statement of teaching intention, i.e. it indicates one of the specific areas that the teacher intends to cover in a block of learning
- For example, one of the objectives of a module could be that “students would know what are the Five Pillars”.

(In some contexts, objectives are also referred to as goals).

So Aims & Objectives are

Thus, the aim of a lesson gives the broad purpose or general teaching intention of the lesson, whilst the objective gives more specific information about what the teaching of the lesson hopes to achieve.

There is a problem here...

- **Lack of clear definition**
- *Basically the term 'objective' tends to complicate the situation, because objectives may be written in terms of teaching intention or expected learning...*
- *This means that some descriptions are of the teaching in the module and some are of the learning...*
- *This general lack of agreement as to the format of objectives is a complication, and justifies the abandonment of the use of the term 'objective' in the description of lessons*

- So there is a confusion they are written in terms of teaching intention and other times they are written in terms of expected learning, i.e. there is confusion in the literature in terms of whether objectives belong to the teacher-centred approach or the outcome-based approach

Advantages of learning outcomes

1. Most teachers who have worked on the development of objectives for lessons have encountered the above problem.
2. One of the great advantages of learning outcomes is that they are clear statements of what the learner is expected to achieve and how he or she is expected to demonstrate that achievement.
3. Thus, learning outcomes are more precise, easier to compose and far clearer than objectives.
4. From one perspective, learning outcomes can be considered as a sort of “common currency” that assists lessons to be more transparent

Bloom's Taxonomy



BT Step 1: Knowledge

- Knowledge may be defined as the ability to recall or remember facts without necessarily understanding them.
- Some of the action verbs used to assess knowledge are as follows:
Arrange, collect, define, describe, duplicate, enumerate, examine, find, identify, label, list, memorise, name, order, outline, present, quote, recall, recognise, recollect, record, recount, relate, repeat, re-produce, show, state, tabulate, tell.
- Some examples of learning outcomes for courses in various disciplines that demonstrate evidence of knowledge include the following:
 1. *Recall* name of Salah
 2. *Identify* who were the companions
 3. *Describe* how and why Saum benefits us.
 4. *List* the name of the Mothers of the Faithful
 5. *Define* what behaviours constitute sins
 6. *Describe* the process of Wudu
- Note that each learning outcome begins with an action verb.

BT Level 2: Comprehension

- Comprehension may be defined as the ability to understand and inter-pret learned information.
- Some of the action verbs used to assess comprehension are as follows:
- *Associate, change, clarify, classify, construct, contrast, convert, de-code, defend, describe, differentiate, discriminate, discuss, distinguish, estimate, explain, express, extend, generalise, identify, illustrate, indi-cate, infer, interpret, locate, paraphrase, predict, recognise, report, restate, rewrite, review, select, solve, translate.*

BT Level 3: Application

- Application may be defined as the ability to use learned material in new situations, e.g. put ideas and concepts to work in solving problems. Some of the action verbs used to assess application are shown as follows:
- *Apply, assess, calculate, change, choose, complete, compute, construct, demonstrate, develop, discover, dramatise, employ, examine, experiment, find, illustrate, interpret, manipulate, modify, operate, organise, practice, predict, prepare, produce, relate, schedule, select, show, sketch, solve, transfer, use.*
- Some examples of learning outcomes that demonstrate evidence of application are:
 - *Construct* a timeline of significant events in the Seerah
 - *Apply* knowledge of the Prophet's manners in playtime.
 - *Relate* Prophet's attitude towards the Jew with their behaviour.
 - *Apply*

BT Level 4: Analysis

Analysis may be defined as the ability to break down information into its components, e.g. look for inter-relationships and ideas (understanding of organisational structure). Some of the action verbs used to assess analysis are as follows:

Analyse, appraise, arrange, break down, calculate, categorise, classify, compare, connect, contrast, criticise, debate, deduce, determine, differentiate, discriminate, distinguish, divide, examine, experiment, identify, illustrate, infer, inspect, investigate, order, outline, point out, question, relate, separate, sub-divide, test.

Some examples of learning outcomes that demonstrate evidence of analysis are:

- *Analyse why society criminalises certain behaviours.*
- *Compare and contrast the different electronic business models.*
- *Debate the economic and environmental effects of energy conversion processes.*
- *Compare the classroom practice of a newly qualified teacher with that of a teacher of 20 years teaching experience.*
- *Calculate gradient from maps in m, km, % and ratio.*

BT Level 5: Synthesis

Synthesis may be defined as the ability to put parts together. Some of the action verbs used to assess synthesis are the following:

Argue, arrange, assemble, categorise, collect, combine, compile, compose, construct, create, design, develop, devise, establish, explain, formulate, generalise, generate, integrate, invent, make, manage, modify, organise, originate, plan, prepare, propose, rearrange, reconstruct, relate, reorganise, revise, rewrite, set up, summarise.

Some examples of learning outcomes that demonstrate evidence of synthesis are:

- *Recognise and formulate problems that are amenable to energy management solutions.*
- *Propose solutions to complex energy management problems both verbally and in writing.*
- *Summarise the causes and effects of the 1917 Russian revolutions.*
- *Relate the sign of enthalpy changes to exothermic and endothermic reactions.*
- *Organise a patient education programme.*

BT Level 6: Evaluation

Evaluation may be defined as the ability to judge the value of material for a given purpose. Some of the action verbs used to assess evaluation are:

Appraise, ascertain, argue, assess, attach, choose, compare, conclude, contrast, convince, criticise, decide, defend, discriminate, explain, evaluate, grade, interpret, judge, justify, measure, predict, rate, recommend, relate, resolve,

The following are some examples of learning outcomes that demonstrate evidence of evaluation are:

- Assess the importance of key participants in bringing about change in Irish history Evaluate marketing strategies for different electronic business models.
- Summarise the main contributions of Michael Faraday to the field of electromagnetic induction.
- Predict the effect of change of temperature on the position of equilibrium.
- Evaluate the key areas contributing to the craft knowledge of experienced teachers.

Practical advice for writing learning outcomes 1/3

Aims	Outcomes
Know	Distinguish between
Understand	Choose
Determine	Assemble
Appreciate	Adjust
Grasp	Identify
Become familiar	Solve, apply, list

Practical advice for writing learning outcomes 2/3

- Begin each learning outcome with an action verb, followed by the object of the verb followed by a phrase that gives the context.
- Use only one verb per learning outcome.
- Avoid vague terms like know, understand, learn, be familiar with, be exposed to, be acquainted with, and be aware of. These terms are associated with teaching objectives rather than learning outcomes.
- Avoid complicated sentences. If necessary use more one than one sentence to ensure clarity.
- Ensure that the learning outcomes of the module relate to the overall outcomes of the programme.
- The learning outcomes must be observable and measurable.
- Ensure that the learning outcomes are capable of being assessed.

Practical advice for writing learning outcomes 3/3

- When writing learning outcomes, bear in mind the timescale within which the outcomes are to be achieved. There is always the danger that one can be over-ambitious when writing learning outcomes. Ask yourself if it is realistic to achieve the learning outcomes within the time and resources available.
- As you work on writing the learning outcomes, bear the mind how these outcomes will be assessed, i.e. how will you know if the student has achieved these learning outcomes? If the learning outcomes are very broad, they may be difficult to assess effectively. If the learning outcomes are very narrow, the list of learning outcomes may be too long and detailed.
- Before finalising the learning outcomes, ask your colleagues and possibly former students if the learning outcomes make sense to them.
- When writing learning outcomes, for students at levels beyond first year, try to avoid overloading the list with learning outcomes which are drawn from the bottom of Bloom's taxonomy (e.g. *Knowledge* and *Comprehension* in the cognitive domain). Try to challenge the students to use what they have learned by including some learning outcomes drawn from the higher categories