

BASUDEV GODABARI DEGREE COLLEGE, KESAIBAHAL



BLENDED LEARNING STUDY MATERIALS

UNIT-II

DEPARTMENT :- EDUCATION

**SUBJECT :- EDUCATIONAL ASSESSMENT AND
EVALUATION**

SEMESTER :- 3rd SEMESTER

CONTENT

1. Taxonomy of instructional learning objectives
2. cognitive domain
3. Criteria of selecting appropriate learning objectives
4. Relationship of evaluation procedure with learning objectives
5. objective based objective type test
6. objective based essay type test
7. YOUTUBE LINK

A systematic approach for developing an assessment plan ensures that the plan is comprehensive. Numerous educational experts (Airasian, 2001; Ebel & Frisbie, 1991; Gronlund, 2004; Huba & Freed, 2000; Mager, 1997; Mehrens & Lehmann, 1991; Nitko, 2004; Trice, 2000; Weimer, 1996) identify objectives as the logical foundation of the teaching-learning-assessment process and agree that the first step of an instructional plan is to identify the course objectives. Objectives set the stage for effective planning, teaching, and assessment by specifying what a student should know and be able to do at the end of an instructional course (Weimer, 1996). Educators frequently concentrate on what material to include in a course before identifying what knowledge and skills they want students to develop. This approach tends to emphasize the recall of factual information instead of focusing the students on developing higher-level learning abilities. Identifying the objectives as the initial step in planning guides the instructional and assessment processes for a course and also provides the framework for developing measurement instruments that provide valid and reliable information about student achievement. Norman Gronlund proposed a plan for preparing clearly defined instructional objectives in 1970. The most recent edition of his book (Gronlund, 2004) continues to refine that plan, but the basic principle remains the same: State the objectives in general terms and identify specific learning outcomes to define the objectives in terms of the behavior that students are expected to demonstrate at the conclusion of the instruction. With this approach the objectives guide the instructional destination of an educational experience for both the teacher and the students, while the outcomes define the objectives by specifying the behaviors that represent the achievement of the objectives.

Establishing objectives and outcomes during the initial phase of course preparation compels you to identify your learning expectations in a language that explicitly communicates your intent to students. Students are much more likely to succeed if they understand what is expected of them from the outset of an educational experience and if they perceive the expectations to be realistic. Effective objectives come from the real world (Mager, 1997). When students recognize that the purpose of the instruction is relevant and useful for their educational goals, they are more likely to assume ownership of their own learning.

Clearly defined instructional objectives steer efficient course planning. In addition, they guide the selection of teaching and learning activities, direct the development of measurement instruments, and empower students to take charge of their own learning to meet your expectations, thereby increasing the validity of your assessment plan.

Role of Objectives

Objectives guide the instructional process by

synchronizing the planning and implementation of teaching, learning, and assessment activities, thereby focusing on the outcomes teachers want students to achieve. Unfortunately, course preparation often involves planning for the content and teaching activities without first establishing a clear definition of what student outcomes are desired. This approach can lead to instructional methods and assessments that focus on knowledge acquisition rather than on higher-level learning outcomes.

If students are expected to achieve the objectives of a course, they must be provided with appropriate opportunities to learn what they need to learn (Huba & Freed, 2000). Instructional objectives require teachers to provide students with the kinds of experiences that facilitate the attainment of the objectives. When objectives are determined at the beginning of a course, they provide direction to the teacher for selecting the instructional activities that promote achievement of the desired behaviors (Gronlund, 2004). For example, a course objective that requires a student to demonstrate critical thinking skills necessitates that the teacher select learning experiences and assessment activities that require the ability to think critically. Refer to Chapter 14, "Laboratory and Clinical Evaluation," for a discussion related to designing clinical and laboratory experiences and assessment tools that address the course objectives.

With today's rapidly advancing computer technology, the need to develop innovative approaches to facilitate learning is paramount. The pervasive nature of the Internet and the rapid progression of distance learning mandate that teachers develop creative teaching modalities and learning opportunities to meet learner preferences. In this atmosphere of self-directed learning, instructional objectives are assuming an ever-increasing role as the basis for meeting the diverse needs of learners. Students who have the opportunity to select from various learning strategies to meet the intended objectives become active participants in the learning process.

When students are aware of what is required of them from the beginning of a course, they are given

responsibility for their own learning and the opportunity to direct their activities toward achieving the required outcomes (Reilly & Oermann, 1990). Self-direction is facilitated when an individual learner has the ability to decide

Focus of Instructional Objectives

What is the most effective way to state an instructional objective? present two different

approaches for defining one objective for a hypothetical course in the foundations of nursing care.

When an objective is teacher focused, the attention is centered on the teaching activity. Teaching is an end in itself; learning is not a criterion. The objective, in effect, is met once the teaching takes place, regardless of whether the teaching is effective. In the traditional lecture format the learning is teacher focused; the teacher has control of the learning. This approach focuses on transmitting information and explains the all-too-common teacher lament, "I don't understand why the students do not know that material. I covered it in class."

A learner-focused objective focuses on the learning that occurs in relation to the teaching that is taking place. Stating instructional objectives in terms of the required student achievement shifts the focus of the educational experience from transmitting volumes of information to providing learning experiences that foster attainment of the objectives. The focus changes to facilitating learner achievement. Teaching is a means to an outcome rather than an end in itself.

Learner-focused objectives require teachers to examine their teaching strategies and to develop creative methods to facilitate student learning. Because students have different learning styles, a variety of approaches must be integrated into a course to provide opportunities for the students to attain the objectives. With this approach, if students do not achieve the desired outcomes, the first question that a teacher must ask is, "Were the instructional experiences appropriate?"

It is important to recognize that teachers who do not consciously identify instructional objectives are most likely operating on teacher-focused goals. When the main objective of classroom instruction is to *cover the material*, without concern for developing strategies to meet student needs, the goals are teacher focused and

the approach usually is a didactic one. Although this instructional method can require students to think logically, it does not encourage critical thinking. Although the lecture approach to teaching is the most direct one for the teacher, it is the least beneficial for addressing individual learning styles to promote student attainment of the course objectives.

Stating Instructional Objectives

Unless students are well informed about assessment criteria, they are placed in a no-win situation. However, by stating the instructional objectives in terms of the behaviors you expect from your students, you give them the direction they need to succeed. A meaningful objective communicates desired outcome behavior of the learner *exactly* as you understand it. In other words, if another teacher uses your objective and their student outcomes are consistent with your expectations, then you have communicated the objective in a meaningful way (Mager, 1997).

Specific Objectives

Methods for writing instructional objectives include general and specific formats. A highly specific format delineates student outcomes in very specific terms. Linn and describe how specific objectives can be further defined by a list of specific tasks. These tasks can then be taught and tested sequentially. Although this process can clearly define student outcomes, it tends to overemphasize low-level skills and factual knowledge and also stresses simple learning outcomes (2000, p. 56).

Narrowly focused specific objectives raise a concern that students will focus on the tasks as an end in themselves rather than as activities that are a part of more complex learning outcomes. McMillan (1997) identifies behavior, learner, criterion, and condition as the components of highly precise objectives. Figure 3.2 is an example of a highly specific objective that identifies these components.

In this example the focus is entirely on the skill. We certainly want a student to accurately obtain a

patient's apical pulse, but obtaining the pulse is not an end in itself. In the real world we want students to go beyond simply obtaining the pulse. The intended objective should be to include the ability to interpret assessment findings in unique clinical situations.

Highly specific objectives clearly indicate the behaviors that a student must demonstrate to achieve the objective. However, the degree of specificity inherent in these "Matching Items" illustrate how selected-response items evolve from the course objectives. While "Constructed-Response Format: Developing Short-Answer and Essay Items," explains how the course objectives guide the development of constructed-response items. The most important role of the instructional objectives is to increase the validity of the results of assessments. When student achievement is measured with instruments that developed from instructional objectives, Focus of Instructional Objectives What is the most effective way to state an instructional objective? Figure 3.1 presents two different approaches for defining one objective for a hypothetical course in the foundations of nursing care.

When an objective is teacher focused, the attention is centered on the teaching activity. Teaching is an end in itself; learning is not a criterion. The objective, in effect, is met once the teaching takes place, regardless of whether the teaching is effective. In the traditional lecture format the learning is teacher focused; the teacher has control of the learning. This approach focuses on transmitting information and explains the all-too-common teacher lament, "I don't understand why the students do not know that material. I covered it in class."

A learner-focused objective focuses on the learning that occurs in relation to the teaching that is taking place. Stating instructional objectives in terms of the required student achievement shifts the focus of the educational experience from transmitting volumes of information to providing learning experiences that foster attainment of the objectives. The focus changes to facilitating learner achievement. Teaching is a means to an outcome rather than an end in itself.

Learner-focused objectives require teachers to examine their teaching strategies and to develop creative methods to facilitate student learning.

objectives makes them unwieldy. In a complex discipline such as nursing, faculty would have to develop extensive lists of specific objectives to address every course outcome. In addition, these objectives are very confining because they severely limit a teacher's ability to modify the instructional approach. McMillan suggests that it is better to focus your objectives on units of instruction rather than on daily lesson plans because "writing objectives that are too specific results in long lists of minutia that are too time consuming to monitor and manage" (1997, p. 26).

Rather than having an unwieldy list of specific objectives, several general objectives can be developed to encompass the range of content in a course. This allows the teacher to address all the desired student outcomes of a course while keeping the number of course objectives manageable. A reasonable list of general objectives assists the students to demonstrate success by focusing on what is expected of them in a course.

General Objectives

A general format is a more logical approach than the specific format for developing course objectives in a complex area of study, such as nursing. Oermann and Gaberson (2006) describe a format for writing general objectives that is open ended; it identifies the expected learning but does not prescribe particular learning conditions or assessment strategies. The format consists of a learner, a behavior, and the content (p. 10). Figure 3.3 restates the specific objective (referred to in Figure 3.2) as a general objective.

Note that the general objective is content free; the procedures are not identified, so you can develop a set of outcomes that are applicable with various content units in a course. This approach allows the teacher to keep the number of general objectives manageable and avoids unwieldy lists of specific objectives for each unit of study.

To allow for flexibility in instructional strategies, the general objective should not include the teaching procedures for accomplishing the objective. The objective in Figure 3.2 prescribes a narrow skill (obtaining an apical pulse) and restricts both the setting and the teaching method. The objective requires that the learning take place in a laboratory with a volunteer. It precludes assessment in a clinical setting. Imagine how unwieldy the list of objectives would be if they were written in this format for all the procedures in a nursing

foundations course! Figure 3.3, in contrast, presents a general objective that can be applied for assessing a range of procedures without prescribing the setting or the instructional or assessment strategies.

Gronlund (2004) proposes that stating the general learning objective first and then listing a representative sample of learning outcomes stated in performance terms clarifies for the student what is acceptable to the teacher as evidence for attaining the objective. This general objective format accommodates the development of higher-order thinking skills and leaves room for creativity in achieving and assessing the prescribed outcomes.

Learning Outcomes

One way to determine whether a person is knowledgeable of something is to observe the individual's behavior. Learning outcomes indicate the behaviors that an instructor is willing to accept as evidence that the student has achieved the general objective.

Consider the general objective shown in Figure 3.3. The general learning objective requires that a student safely perform basic nursing procedures. However, what does *safely perform basic nursing procedures* actually mean? Although the objective is learner focused, it is very broad and does not clearly specify what behaviors a student must demonstrate to confirm attainment of the objective. To provide a basis for instruction and assessment, the behaviors acceptable as evidence of the attainment of the general objective must be identified.

Figure 3.4 provides an example of the learning outcomes for the student-focused general instructional objective in Figure 3.3. While the general objective is very broad, the learning outcomes are specific behaviors. When considered together, the learning outcomes clarify the general objective by providing an operational definition for what the teacher regards as safe performance of basic nursing procedures.

Note that each learning outcome begins with an action verb—a verb that denotes a behavior that can be measured. Action verbs operationalize the general objective. A student who successfully demonstrates these behaviors—at a performance level predetermined by the teacher—would meet the criteria for safe performance of basic nursing procedures.

As Gronlund (2004) suggests, it is important to keep the objectives and learning outcomes free of specific content so they can be applied across all units of study in a course. Consider the objective in Figure 3.4. It does not specify which procedures the

student must safely perform, and the learning outcomes are applicable to all basic nursing procedures.

When stated without specific content, learning outcomes can be applied for establishing evidence of mastery of the learning tasks required for many procedures. For example, *discusses the rationale for the procedure* applies to all nursing procedures, while *describe the steps of the procedure* requires that a checklist be developed for each procedure. Table 3.1 illustrates how the general objective and learning outcomes apply to a variety of procedures.

This approach provides consistency across content for both student and teacher. It requires that a teacher carefully consider the universal requirements for safety across nursing procedures. In addition, it allows for individualization of the requirements for each procedure. It also reinforces the concepts that principles often apply across procedures, while special consideration must be made for individual situations.

Another benefit of this approach is that the focus is not solely on the skill. From the very beginning of an instructional process students see the skill as a means to an end, as part of the procedure. Teaching, interpreting, reporting, and following up are also important considerations when performing any procedure on a patient. This approach also makes it clear that the objective is to *demonstrate safe performance* and not simply *discussing, completing, or reporting*. The learning outcomes are not ends in themselves; they describe the sample of behavior that the teacher is willing to accept as evidence of *demonstrating safe performance*.

Yet another benefit of developing objectives in this manner is that it focuses the instructional and assessment process on the overall objective rather than on the specific samples of behavior (Gronlund, 2004). For example, when teaching safe performance of a nursing procedure, you might include demonstrating the procedure, having the students read the textbook, view a video, practice the procedure, or engage in role playing.

would be included in the learning activities as part of the procedure, not as isolated activities. Then, when assessing the students you might, for example, present a case study and ask for an interpretation of the patient's response, or have the student perform the procedure on a patient or laboratory volunteer and assess the student's ability with a checklist of all the learning outcomes. By requiring responses that were not directly taught in the classroom, you are assessing the student's ability to apply the knowledge, not to simply recall facts. You are also helping the student to focus on the ultimate goal rather than concentrating on isolated tasks.

Because students have different learning styles, a variety of approaches must be integrated into a course to provide

opportunities for the students to attain the objectives. With this approach, if students do not achieve the desired outcomes, the first question that a teacher must ask is, “Were the instructional experiences appropriate?”

It is important to recognize that teachers who do not consciously identify instructional objectives are most likely operating on teacher-focused goals. When the main objective of classroom instruction is to *cover the material*, without concern for developing strategies to meet student needs, the goals are teacher focused and the approach usually is a didactic one. Although this instructional method can require students to think logically, it does not encourage critical thinking. Although the lecture approach to teaching is the most direct one for the teacher, it is the least beneficial for addressing individual learning styles to promote student attainment of the course objectives.

Stating Instructional Objectives

Unless students are well informed about assessment criteria, they are placed in a no-win situation. However, by stating the instructional objectives in terms of the behaviors you expect from your students, you give them the direction they need to succeed. A meaningful objective communicates desired outcome behavior of the learner *exactly* as you understand it. In other words, if another teacher uses your objective and their student outcomes are consistent with your expectations, then you have communicated the objective in a meaningful way (Mager, 1997).

Specific Objectives

Methods for writing instructional objectives include general and specific formats. A highly specific format delineates student outcomes in very specific terms. Linn and Gronlund describe how specific objectives can be further defined by a list of specific tasks. These tasks can then be taught and tested sequentially. Although this process can clearly define student outcomes, it tends to overemphasize low-level skills and factual knowledge and also stresses simple learning outcomes.

Narrowly focused specific objectives raise a concern that students will focus on the tasks as an end in themselves rather than as activities that are a part of more complex learning outcomes. McMillan (1997) identifies behavior, learner, criterion, and condition as the components of highly precise objectives. Figure 3.2 is an example of a highly specific objective that identifies these components.

\In this example the focus is entirely on the skill. We certainly want a student to accurately obtain a patient’s apical pulse, but obtaining

the pulse is not an end in itself. In the real world we want students to go beyond simply obtaining the pulse. The intended objective should be to include the ability to interpret assessment findings in unique clinical situations.

Highly specific objectives clearly indicate the behaviors that a student must demonstrate to achieve the objective. However, the degree of specificity inherent in these

objectives makes them unwieldy. In a complex discipline such as nursing, faculty would have to develop extensive lists of specific objectives to address every course outcome. In addition, these objectives are very confining because they severely limit a teacher's ability to modify the instructional approach. McMillan suggests that it is better to focus your objectives on units of instruction rather than on daily lesson plans because "writing objectives that are too specific results in long lists of minutia that are too time consuming to monitor and manage" (1997, p. 26).

Rather than having an unwieldy list of specific objectives, several general objectives can be developed to encompass the range of content in a course. This allows the teacher to address all the desired student outcomes of a course while keeping the number of course objectives manageable. A reasonable list of general objectives assists the students to demonstrate success by focusing on what is expected of them in a course.

General Objectives

A general format is a more logical approach than the specific format for developing course objectives in a complex area of study, such as nursing. Oermann and Gaberson (2006) describe a format for writing general objectives that is open ended; it identifies the expected

learning but does not prescribe particular learning conditions or assessment strategies. The format consists of a learner, a behavior, and the content (p. 10). Figure 3.3 restates the specific objective (referred to in Figure 3.2) as a general objective.

Note that the general objective is content free; the procedures are not identified, so you can develop a set of outcomes that are applicable with various content units in a

course. This approach allows the teacher to keep the number of

general objectives manageable and avoids unwieldy lists of specific objectives for each unit of study.

To allow for flexibility in instructional strategies, the general objective should not include the teaching procedures for accomplishing the objective. The objective in Figure 3.2 prescribes a narrow skill (obtaining an apical pulse) and restricts both the setting and the teaching method.

The objective requires that the learning take place in a laboratory with a volunteer. It precludes assessment in a clinical setting. Imagine how unwieldy the list of objectives would be if they were written in this format for all the procedures in a nursing foundations course! Figure 3.3, in contrast, presents a general objective that can be applied for assessing a range of procedures without prescribing the setting or the instructional or assessment strategies.

Gronlund (2004) proposes that stating the general learning objective first and then listing a representative sample of learning outcomes stated in performance terms clarifies for the student what is acceptable to the teacher as evidence for attaining the objective. This general objective format accommodates the development of higher-order thinking skills and leaves room for creativity in achieving and assessing the prescribed outcomes.

Learning Outcomes

One way to determine whether a person is knowledgeable of something is to observe the

individual's behavior. Learning outcomes indicate the behaviors that an instructor is willing to accept as evidence that the student has achieved the general objective.

Consider the general objective shown in Figure 3.3. The general learning objective requires that a student safely perform basic nursing procedures. However, what does *safely perform basic nursing procedures* actually mean? Although the objective is learner focused, it is very broad and does not clearly specify what behaviors a student must demonstrate to confirm attainment of the objective. To provide a basis for instruction and assessment, the behaviors acceptable as evidence of the attainment of the general objective must be identified.

Figure 3.4 provides an example of the learning outcomes for the student-focused general instructional objective in Figure 3.3. While the general objective is very broad, the learning o

Learning outcomes are specific behaviors. When considered together, the learning outcomes clarify the general objective by providing an operational definition for what the teacher regards as safe performance of basic nursing procedures.

Note that each learning outcome begins with an action verb—a verb that denotes a behavior that can be measured. Action verbs operationalize the general objective. A student who successfully demonstrates these behaviors—at a performance level predetermined by the teacher—would meet the criteria for safe performance of basic nursing procedures.

As Gronlund (2004) suggests, it is important to keep the objectives and learning outcomes free of specific content so they can be applied across all units of study in a course. Consider the objective in Figure 3.4. It does not specify which procedures the student must safely perform, and the learning outcomes are applicable to all basic nursing procedures.

When stated without specific content, learning outcomes can be applied for establishing evidence of mastery of the learning tasks required for many procedures. For example,

discusses the rationale for the procedure applies to all nursing procedures, while *describe the steps of the procedure* requires that a checklist be developed for each procedure. *illustrates how the general objective and learning outcomes apply to a variety of procedures.*

This approach provides consistency across content for both student and teacher. It requires that a teacher carefully consider the universal requirements for safety across nursing procedures. In addition, it allows for individualization of the requirements for each procedure. It also reinforces the concepts that principles often apply across procedures, while special consideration must be made for individual situations.

Another benefit of this approach is that the focus is not solely on the skill. From the very beginning of an instructional process students see the skill as a means to an end, as part of the procedure. Teaching, interpreting, reporting, and following up are also important considerations when performing any procedure on a patient. This approach also makes it clear that the objective is to *demonstrate safe performance* and not simply *discussing, completing, or reporting*. The learning outcomes are not ends in themselves; they describe the sample of behavior that the teacher is willing to accept as evidence of *demonstrating safe performance*.

Yet another benefit of developing objectives in this manner is that it focuses the instructional and assessment process on the overall objective rather than on the specific samples of behavior (Gronlund, 2004). For example, when teaching safe performance of a nursing procedure, you might include demonstrating the procedure, having the students read the textbook, view a video, practice the procedure, or engage in role playing. All the learning outcomes, such as the rationale, the impact, and aseptic technique, would be included in the learning activities as part of the procedure, not as isolated activities. Then, when assessing the students you might, for example, present a case study and ask for an interpretation of the patient's response, or have the student perform the procedure on a patient or laboratory volunteer and assess the student's ability with a checklist of all the learning outcomes. By requiring responses that were not directly taught in the classroom, you are assessing the student's ability to apply the knowledge, not to simply recall facts. You are also helping the student to focus on the ultimate goal rather than concentrating on isolated tasks. When writing objectives and learning outcomes, the goal is to communicate your objectives so they are not subject to misinterpretation. The challenge is to write your objectives at an

appropriate level of generality—not so narrow that they are impossible to manage and not so general that they provide little guidance for instruction (McMillan, 1997, p. 26) Table 3.2 provides examples of verbs to use for general objectives and verbs to use for learning outcomes to clarify the meaning of an objective. Use this list as a guide. The goal is to write

broad general objectives that focus on complex learning with a list of learning outcomes that sample observable student behaviors you are willing to accept as evidence of attainment of the objective. So, decide what activities define your objective and select verbs for your learning outcomes that operationalize your general objective for the students. A list of instructional objectives for a course usually includes objectives that address the mastery of the minimal essentials as well as objectives that focus on development beyond the minimum level (Gronlund, 2004). Developing objectives and measuring these two different levels require two different sets of criteria. To ensure that the objectives form a valid basis for the assessment plan, you must have a clear understanding of the two levels.

Learning outcomes and assessment criteria

Outcomes-based courses and assessment criteria

The outcomes-based approach to teaching and learning is increasingly being used in higher education as the model for best practice in constructing courses and evaluating students' work. Learn more about this approach with this simple, practical guide to building your own outcomes-based programmes.

Developing outcomes-based learning programmes

The outcomes-based approach to course design is intended to make the expectations of the designer/educator more transparent to both the student and any regulatory or accrediting body. Unlike the traditional model of course design in higher education, where the lecturer would decide what to include on a syllabus, based on his or her own judgement of what was important for students to know; or on personal research or other interests; the outcomes-based approach starts with a specification of what the student will be expected to achieve by the end of the unit.

These learning outcomes may be of knowledge acquisition, mastery of skills, or development of attitude or ability. All the different outcomes expected will be specified in publicly shared statements and these will be linked in a clear way to explicit assessment criteria by which they will be measured. The programme is then written; complete with assessments designed to test the criteria, in such a way as to enable students to work towards achieving the stated outcomes.

The outcomes-based approach has been developed in conjunction with credit-based modular frameworks in which each unit carries a specified number of credits, awarded on its successful completion. In order to achieve

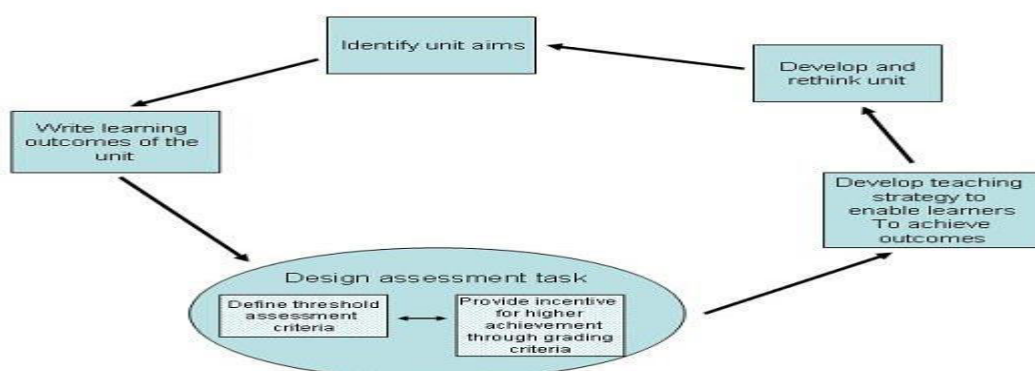
the desired qualification, the student must amass a given number of credits, usually in stated proportions from different levels.

The Principles of Outcomes-based Course Design

1. All learning can be expressed as demonstrable outcomes to be achieved.
2. All units are described in terms of their learning outcomes and assessment criteria.
3. The type and number of learning outcomes and assessment criteria form the basis for assigning a number of credits and a level to a particular unit.
4. For this reason, no unit can be assigned to more than one level.
5. Learning outcomes need to be clear and unambiguous.
6. Learning outcomes set out the necessary learning, which represents the minimum requirement for a pass grade on the unit.
7. Assessment criteria should specify how a satisfactory performance of the learning outcomes will be demonstrated.
8. Assessment criteria should be designed to ensure that learning takes place at a level appropriate to the assigned unit level.
9. Learning outcomes should contribute to the transparency of the overall qualification gained by enabling students, parents, prospective employers and other educational professionals to understand exactly what has been learned in order to achieve a passing grade.
10. This will facilitate student and graduate mobility, internationally, and in a life-long learning context.

Adapted from How to Use Learning Outcomes and Assessment Criteria (David Gosling and Jenny Moon, SEEC, 2002)

A programme can be described by a specification written in terms of programme outcomes similar to the learning outcomes specified for the individual units within it. These larger outcomes are more general and they may not be specifically assessed as part of the course of study but they act as guides in establishing the ethos and direction of the programme. Where the programme aims for validation or accreditation to some larger standard, the programme specification should reflect the requirements of that standard and make reference to available benchmarks.



Writing good learning outcomes

The precision and appropriateness of the learning outcomes are the keys to successful implementation and assessment of outcomes-based programmes of study. Learning outcomes specify what the student is expected to know, understand or be able to accomplish by the end of any given unit of study, therefore they form the basis for all assessment of that learning and for any quality assurance checks, benchmarking or inspection exercise carried out on the unit.

Learning outcomes should not be confused with the aims and objectives of the unit. The two are subtly different. Aims are stated in terms of what is to be taught, and what the intention is behind that teaching; learning outcomes state what the student is expected to learn and have an implication for the standard he or she is expected to attain in order to pass the unit.

For these reasons, it is vitally important to ensure that the learning outcomes set for a unit are as well-constructed and clearly written as possible. When drawing up these expected outcomes, they need to be:

1. Achievable

The outcome must realistically set out what all students are expected to learn over the time period specified. This needs to be appropriate to the existing knowledge and abilities of students who are eligible to take this unit; and to the specified level the unit occupies within the overall programme (first year undergraduate, second year diploma, taught master's, etc.). All learning outcomes should, in principle, be achievable by all students at that level of the programme.

2. Over-arching

Learning outcomes do not specify areas of the curriculum but rather, the areas of general learning expected of the students. The outcomes sought are over-arching and do not match the headings or topics of a syllabus, nor should each curriculum area taught have a matching learning outcome.

3. Unambiguous

As far as possible, learning outcomes need to be clear, sharp and unambiguous. Each outcome specified should be capable of only one single interpretation.

4. Understandable

Linked to unambiguity is the requirement that learning outcomes be easily understood by all those who will be expected to use them. This group includes students, teaching and inspection staff, potential and current employers, etc. so use of technical or jargon-heavy language should be avoided and the outcomes expressed in the simplest manner possible.

5. Important

Every learning outcome specified should refer to a significant achievement expected of the student on completion of the unit. This may not represent an exhaustive totality of what the student has actually learned but should include all those features of importance.

6. Assessable

In order to determine whether learning outcomes have been achieved, they need to be capable of being assessed by a suitably qualified person, by some reasonable and manageable means, within the time-frame allowed by the programme or institution's regulations. Assessments should be designed so that all the learning outcomes are tested for all students. This often means setting more than one piece of assessed work per unit, and may require the development of different forms of assessment in order to cover all the different types of learning outcome specified.

7. Essential

All the learning outcomes for a unit must be achieved in order for the student to successfully complete that unit. The learning outcomes set out the minimum requirements for passing the unit. Additional 'desirable' outcomes can be specified as part of a grading scheme, allowing students to gain higher marks but these are not the learning outcomes for the unit. It is important to recognize that this approach to developing programmes separates grading of students' work from assessment of whether they have passed or failed to achieve. Learning outcomes are the baseline criteria for passing the unit.

In practical terms, a well written learning outcome will follow the following guidelines:

- It will be expressed in a single, simple sentence
- It will contain a verb that what the student is expected to be able to do at the end of the unit
- It will indicate on what or with what the student will be acting; or, in the case of a skill-based outcome, the way in which that skill is to be performed
- It will indicate what sort of performance is required of the student as evidence that the learning has been achieved
- It will use vocabulary and concepts appropriate to the broader requirements of the programme level at which the unit is pitched.

Thus:

"By the end of this unit, the student is expected to be able to demonstrate a clear understanding of the different psychological approaches to the study of the individual within the context of management history."

This is a single, straight-forward sentence, using vocabulary appropriate to a second year undergraduate level unit, and including the following:

- "to be able to demonstrate" = verb
- "the different psychological approaches to the study of the individual" = what the student is acting upon
- "a clear understanding" and "within the context of management history" = nature of the required performance

Feedback within an outcomes-based framework

Although informal, verbal feedback is an on-going part of any teaching and learning situation, most educators become aware of feedback when they are assessing students' work. Assessment feedback is usually written, rather than verbal and is therefore accessible to a wider audience (including colleagues and inspectors/evaluators). In addition, many institutions have formal mechanisms for monitoring feedback. Knowing that the words you write about a student's work may themselves be assessed by someone else can be quite daunting but it does serve to focus the mind very clearly when composing assessment feedback.

There are two main purposes of assessment:

1. evaluation of student learning against some pre-set, possibly external standard often at or near the end of a course of study (summative assessment)
2. discovery of student strengths and weaknesses during the course of study, with a view to guiding and enhancing learning (formative assessment).

Assessment can only serve the latter function if feedback is provided as well as (or instead of) a grade or mark. Most higher education courses contain both elements and single assessment exercises may fulfill both functions.

Formalized systems and approaches may come into effect and there may be a requirement to give written feedback in a particular form or based on pre-determined criteria. The wording and structure of the assessment brief should specify if this is the case and ideally, a stated proportion of the marks awarded will be allocated for following this format.

Accentuate the positive

In order to act as a positive motivator for change, feedback needs to be constructive, comprehensible, honest and useable. Language used in feedback needs to focus on the desired and specified outcomes of the work, and not on the personality or attributes of the recipient.

Useable, constructive feedback should always suggest areas and means for improvement, rather than leave the student with nowhere to go. This applies to those at the top of the achievement spectrum as much as to those at the bottom. It is important to realize that simple exclamations such as: "Excellent! Outstanding!" are as unhelpful to self-development and improvement as: "Irrelevant! Nonsense!". Students at the top of the ability scale can often feel short-changed by cursory feedback that fails to offer them any sort of progression route.

Conversely, those at the bottom end of the scale can easily become disheartened and demotivated if they receive a relentless litany of negative comment and criticism for their work. It is generally recommended that even critical feedback is prefaced by a positive remark and criticism should be phrased in a neutral, unthreatening and depersonalized way. It should

explain clearly what was expected of this answer and how the piece of work being assessed could be improved better to meet those expectations.

The "feedback sandwich"

One simple technique for writing feedback is to wrap negative comments up in a "feedback sandwich" with positive, encouraging remarks before and after them. Without deceiving students into believing that their work was better than it actually was, this technique ensures that the assessment is delivered sensitively and with due respect for the effort that has gone into it.

Where formative assessment in the form of detailed written feedback is accompanied (is it generally is) by a grade or mark awarded, it is vital that the feedback remarks match the grade.

As well as relating explicitly to the learning and assessment criteria for the piece of work in question, feedback will often have other specific functions with particular students, at different times in their studies. Sometimes the role of feedback may be more supportive; offering encouragement and spurring the student to greater efforts or increased self-belief and confidence. At other times it may be aimed at refining the student's critical abilities or offering detailed correction of an argument or data.

A final word of caution on the subject of feedback in assessment: it can be never-ending! Limit remarks to the key points of relevance, where the student can gain most benefit and learning. Develop means of streamlining the feedback process to make it a more efficient use of your time as well as a more effective learning tool for your students.

Assessment criteria

Assessment criteria are statements specifying the standards that must be met and the evidence that will be gathered to demonstrate the achievement of learning outcomes.

The purpose of assessment criteria is to establish clear and unambiguous standards of achievement for each learning outcome. They should describe what the learner is expected to do to show that the learning outcome has been achieved. They should not, however, be confused with the actual assessment tasks. Rather, the assessment criteria specify how the task will be evaluated.

There are three broad types of assessment criteria:

1. Threshold standards tell the learner what must be done in order to demonstrate achievement of the learning outcomes of the unit i.e. what is the minimum requirement for passing this unit.
2. Grading criteria provide a general description of the standard required for achievement of each pre-established grade, marking band or degree classification i.e. a first class honours award requires 70 per cent or more, an upper second requires 60-69 per cent, etc.

3. General criteria provide general outcome descriptors that can be achieved more or less well. Students' work will be judged to fall at a point within a performance range and marks are allocated accordingly. Typically, criteria of this sort are used to evaluate such things as use of referencing, accuracy of language, use of supporting evidence in drawing conclusions, quality of critical thinking, etc.

Writing assessment criteria

Many of the points to note when writing assessment criteria are the same as those for writing learning outcomes: clarity, unambiguity and brevity are all important and the language should be understandable by both teaching staff and students. The criteria must be measurable in a valid and reliable way and should concern themselves solely with those aspects of performance that are essential for achieving a pass or the specified grade.

The assessment criteria creation process:

1. Writing assessment criteria starts with a consideration of the learning outcome being tested.
2. Then this needs to be set along side the assessment task.
3. Requirements for, or attributes of, successful performance of the task should be listed.
4. If necessary, these requirements can be placed into context of expectations at this level of learning.
5. The final criteria must focus on what is deemed essential amongst the requirements and these should be formed into clearly worded criteria.
6. These criteria need to be checked to ensure that they are reliably measurable and clear in their intention.
7. This process can be refined until a satisfactory set of assessment criteria has been created.

Assessment criteria should reflect the overall, published, aims of the programme. If, for example, the course claims to prepare students for entry into a particular profession, then the achievement of the entry requirements for that profession should be specified in the assessment criteria.

The criteria must be informed by the published learning outcomes of the module. They should not, however, merely repeat what has been stated as learning outcomes but must expand on these to make clear how and to what extent the student is expected to use particular skills or knowledge in order to meet these outcomes.

Assessment criteria should reflect the level of the module. Higher level modules will generally require more complex analytical skills and greater depth of knowledge than lower level ones. This must be reflected in the language used to write the criteria, with more descriptive verbs such as

‘define’ or ‘describe’, giving way to increasingly sophisticated analytical and critical ones such as ‘compare’, ‘evaluate’ and ‘critique’.

The criteria must reflect the distinctive epistemological characteristics of the particular subject or discipline being assessed.

Assessment criteria must be comparable to standards set in other institutions offering the same award. Whilst each course will have, and should retain, its distinctive individual features, the meaningfulness of any qualification depends on it representing the same value wherever it has been obtained.

Assessment criteria need to relate to the specific requirements of the assessment task i.e. they should describe the performance required for the task set. Oral presentation criteria will be quite distinct from the criteria set for an essay or portfolio.

Using assessment criteria

Assessment criteria are chiefly of value in so far as they enable students to focus their learning more effectively and make the assessment process more transparent and fair. For this reason, if no other, the expected outcomes and assessment criteria for any module should be discussed with students before they are expected to undertake any assessed work. Such discussions can be facilitated using the following structure:

- decide on the essential criteria
- make the criteria or checklist simple to use
- allow for brief global impressions
- give the criteria to the students before they do the assignment
- if possible, involve them in the design of the criteria and checklist
- encourage students to use the criteria.

The essentials of good criteria are that they:

- match the assessment task and learning outcome
- enable consistency of marking
- can pinpoint areas of disagreement between assessors
- help students to achieve the learning outcomes
- be used to provide useful feedback to students.

Assessment methods

Critical to the success of any outcomes-based learning programme is the alignment between assessment methods, assessment tasks, learning opportunities and intended learning outcomes (learning objectives).

This alignment of assessment with other features of a course is the basis of course design. Effective assessment methods and tasks are related to the learning outcomes and the methods of learning. Close links between feedback, criteria and the assessment tasks enable students to achieve the learning outcomes of a course or a programme in a systematic fashion.

The outcomes used as the basis for assessment tasks can be either the programme- or the module-level outcomes. Assessing every outcome of every level in every module can lead to over-assessment of students. Assessing solely for programme outcomes, however, risks not assessing essential knowledge and skills in sufficient detail, although it does give a framework for estimating student progression and achievement. A successful strategy is to ensure that within each module, teaching and learning opportunities are provided which move the students closer to the programme outcomes and that some programme outcomes are assessed in some of the modules so that all are covered at least once over the duration of the course.

Methods of assessment in business and management studies

There is a wide variety of assessment methods available to choose from. Each method has its strengths and weaknesses and some are more suited to the evaluation of certain types of learning outcomes than they are to others. A combination of different assessment methods over a course or programme will allow for the testing of a wider variety of outcome types and help sustain students' interest and engagement with the course.

The following list of assessment methods is by no means exhaustive and suggestions are listed in order of likely familiarity.

Essays

A standard method. There are several types of essays that test different styles of writing and types of thinking. They measure understanding, synthesis and evaluation, if the right questions are posed. They are relatively easy to set and grading based on impressionistic marking is fast. However, marking for feedback can be more time-consuming. Criteria are best kept simple.

Projects, Group Projects and Dissertations

Good all-round ability testing with potential for sampling wide range of practical, analytical and interpretative skills. Allows a wider application of knowledge, understanding and skills to real/simulated situations and provides a measure of project and time management. Group projects can provide a measure of teamwork skills and leadership. Marking for grading can be time-consuming. Marking for feedback can be reduced through peer and self-assessment and presentations. Learning gains can be high particularly if reflective learning is part of the criteria. Variations between markers is possible but use of criteria reduces variability.

Presentations

These test preparation, understanding, knowledge, capacity to structure, information and oral communication skills. Feedback can come from tutor, self or peers. Marking for grading based on simple criteria is fast and potentially reliable. Measures of ability to respond to questions and manage discussion could be included.

Cases and open problems

These have potential for measuring application of knowledge, analysis, problem-solving and evaluative skills. Short cases are relatively easy to design and mark. Design of more complex cases and their marking schemes can be challenging. Marking for grading and feedback are about the same as for essay marking.

Work based Assessment

A variety of methods is possible, including learning logs, portfolios, projects, structured reports from supervisors or mentors. Supervisors and mentors need training in the use of criteria. Work experiences can be variable so reliability can be low. Validity is dependent upon clear learning outcomes.

Multiple Choice Questions (MCQs)

A standard method. This can sample a wide range of knowledge quickly and has potential for measuring understanding, analysis, problem solving skills and evaluative skills. More demanding MCQs require more time to set. Better ones are based on case studies or research papers. It is easy to mark and analyse results so they are useful for self assessment and screening with potentially high reliability, validity and manageability. Feedback to students is fast. The danger of MCQs is that they often end up testing only trivial knowledge. To save time, look for banks of items on the Web or in US text books. A team of assessors, working to the same learning outcomes, can brainstorm and produce several questions in an afternoon.

Problems

A standard method. Problems have the potential for measuring application, analysis and problem solving strategies but complex problems and their marking schemes can be difficult to design. Marking for grading of easy problems is fast. Marking for feedback can be slow. Variation between markers is fairly low when based on model answers or marking schemes. Allow for creative, valid solutions by bright students.

Short answer questions

A standard method with the potential for measuring analysis, application of knowledge, problem-solving and evaluative skills. Easier to design than complex MCQs but still relatively slow. Marking to model answers is

relatively fast compared with marking problems but not compared with MCQs. Marking for feedback can be relatively fast.

Learning logs/ diaries

A wide variety of formats exists ranging from an unstructured account of each day to a structured form based on tasks. Some training in reflection is recommended. They are time-consuming for students and require a high level of trust between assessors and students. Measuring reliability is difficult. They may have high validity if the structure matches learning outcomes.

Portfolios

These can come in a wide variety of types, from a collection of assignments to reflection upon critical incidents. The latter are probably the most useful for developmental purposes. There is rich potential for developing reflective learning if students are trained in these techniques but they require a high level of trust between assessors and students. Measuring reliability is difficult. They may be high on validity if the structure matches objectives of training.

Computer-based assessment

Much talked about. Usually software will be used to format multiple choice questions, mark and analyse results. A wider range of graphics and simulations can be used. Optical Mark readers can be used – but some students may still not mark the items clearly. They are time consuming to set but can be marked very fast. Reliability is high but validity (match with outcomes) needs careful attention. Like MCQs, it can be difficult to go beyond and evaluation of the trivial with these.

Single Essay Examination

Three hours on a prepared topic. These are relatively easy to set but attention to criteria is needed. They allow for a wider range of ability tested including the capacity to draw on a wide range of knowledge, to synthesize and identify recurrent themes. Students are able to show depth as well as breadth of knowledge and understanding. Marking for feedback is relatively slow. Marking for grading is relatively fast providing the criteria are simple.

Reflective Practice Assignments

Measure capacity to analyse and evaluate experience in the light of theories and research evidence. These are relatively easy to set. Feedback can potentially come from peers, self and tutors. Marking for feedback can be slow. Marking for grading is about the same for essays. Use of criteria reduces variability.

Poster sessions

Test the capacity to present findings and interpretations succinctly and attractively. There is a danger of focusing unduly on presentation methods over content but this can be avoided by the use of simple criteria. Feedback potential exists from tutor, self and peers. Marking for grading is fast. Use of criteria reduces variability.

Modified Essay Questions (MEQs)

A sequence of questions based on a case study. After students have answered one question, further information and a question are given. The procedure continues, usually for about one hour. These are relatively easy to set and they may be used in teaching or assessment for developmental or judgmental purposes. They can be computer- or paper-based and they can encourage reflection and analysis. MEQs have potentially high reliability, validity and manageability.

Orals

Test communication, understanding, capacity to think quickly under pressure and knowledge of procedures. There is great potential for immediate feedback. Marking for grading can be fast but some standardization of interview procedures is needed to ensure reliability and validity.

Simulated interviews

Useful for assessing oral communication skills and for developing ways of giving and receiving feedback on performance. Video-recorded sessions take more time to prepare but are more useful for feedback and assessment. Peer and self assessment can be used. Sensitive oral feedback on performance is advisable. Assessment by simple rating schedule or checklist is potentially reliable if assessors, including students, are trained.

Initially used in medicine, this technique can be used in business, legal practice, management, psychology, science courses and social work. It is particularly useful for assessing quickly practical and communication skills. OSCEs are fairly hard to design and organise, but easy to score and provide feedback. Group OSCEs can be useful for teaching, feedback and developmental purposes. OSCEs can be used towards the end of a course to provide feedback or to test performance against outcomes. Reliability, validity and manageability are potentially fairly high. Probably less labour intensive than other forms of marking but several assessors are required at one time. Initially, they are time consuming to design.

Meaning of Objective Type Test:

Simply, an objective type test is one which is free from any subjective bias either from the tester or the marker. It refers to any written test that requires

the examinee to select the correct answer from among one or more of several alternatives or supply a word or two and that demands an objective judgement when it is scored.

Objective-Centered Test/Objective based Test:

When questions are framed with reference to the objectives of instruction, the test becomes objective-based. This type of test may contain essay type and objective type test items.

An essay test may be objective-centered or objective-based, though it may be difficult to score it objectively. An objective type test, on the other hand, can always be scored objectively, though it may not be objective-centered if it is not planned with reference to the objectives of instruction.

Objective-type tests have two characteristics viz.:

1. They are pin-pointed, definite and so clear that a single, definite answer is expected.
2. They ensure perfect objectivity in scoring. The scoring will not vary from examiner to examiner.

Merits of Objective Type Test:

1. Objective type test gives scope for wider sampling of the content.
2. It can be scored objectively and easily. The scoring will not vary from time to time or from examiner to examiner.
3. This test reduces (a) the role of luck and (b) cramming of expected questions. As a result, there is greater reliability and better content validity.
4. This type of question has greater motivational value.
5. It possesses economy of time, for it takes less time to answer than an essay test. Comparatively, many test items can be presented to students. It also saves a lot of time of the scorer.
6. It eliminates extraneous (irrelevant) factors such as speed of writing, fluency of expression, literary style, good handwriting, neatness, etc.
7. It measures the higher mental processes of understanding, application, analysis, prediction and interpretation.
8. It permits stencil, machine or clerical scoring. Thus scoring is very easy.
9. Linguistic ability is not required.

Limitations of Objective Type Test:

1. Objectives like ability to organise matter, ability to present matter logically and in a coherent fashion, etc., cannot be evaluated.
2. Guessing is possible. No doubt the chances of success may be reduced by the inclusion of a large number of items.
3. If a respondent marks all responses as correct, the result may be misleading.
4. Construction of the objective test items is difficult while answering them is quite easy.
5. They demand more of analysis than synthesis.
6. Linguistic ability of the testee is not at all tested.
7. Printing cost considerably greater than that of an essay test.

Guidelines for Constructing Better Objective Type Test Items:

To be a good item writer, one should have:

- (a) A thorough understanding of the subject matter;
- (b) A thorough understanding of the pupils tested;
- (c) Perseverance; and
- (d) A little creativity to prepare fertile kind of items.

It is of paramount importance for him to be cognizant of the pitfalls involved in writing objective type test items.

We shall now offer some general guidelines for the writing of objective type test items:

1. Each item must be clearly expressed i.e. there must be precision in writing the test items.
2. Test for important facts and knowledge and not for trivial details; e.g.,
 - (a) Give the name of the ship that Columbus was on when he discovered America.
 - (b) Give the date (and/or time) when Edison invented the light bulb.These items test the ability to recall or supply trivial details and therefore are unsound.
3. Avoid ambiguous statements. Each item should be subjected to one and only one interpretation.

Poor:

Rabindranath Tagore wrote Gitanjali in..... The item is ambiguous because the examinee does not know whether the teacher wants to know the year, the date, the language or the place.

Better:

In which language did Rabindranath Tagore write Gitanjali?

4. Quantitative rather than qualitative words should be used. Words such as few, many, low, high, large, etc. are vague, indefinite, and, therefore, should be avoided.

Poor:

TF Many people are literate in Orissa.

Better:

TF About 85% of the people are literate in Orissa.

5. Use good grammar and sentence structure to improve clarity.

Poor:

TF In a triangle, whose one of the angle's measure is 90° , the hypotenuse is equal to the square root of the sum of the squares of the other two sides.

Better:

TF In a right-angled triangle, the square on the hypotenuse is equal to the sum of the squares on the other two sides.

6. Avoid lifting statements verbatim from the text-book. The use of text book language in a test encourages a pupil to memorise rather than to understand the subject matter.

7. There should be only one correct answer.

Poor:

Fill in the blank by inserting an operational symbol.

2..... 2 = 4

Here, some students may write +, others may write X.

8. Avoid negative questions whenever possible. An indiscriminate use of the negative should be avoided. It takes more time to answer.

Poor:

TF The longitude of Bombay is not 73°E .

Better:

TF The longitude of Bombay is 73°E.

9. Directions to questions should be specific. Ambiguous wording and double negatives should be avoided in questions.

Introduction to Essay Test:

The essay tests are still commonly used tools of evaluation, despite the increasingly wider applicability of the short answer and objective type questions.

There are certain outcomes of learning (e.g., organising, summarising, integrating ideas and expressing in one's own way) which cannot be satisfactorily measured through objective type tests. The importance of essay tests lies in the measurement of such instructional outcomes.

An essay test may give full freedom to the students to write any number of pages. The required response may vary in length. An essay type question requires the pupil to plan his own answer and to explain it in his own words. The pupil exercises considerable freedom to select, organise and present his ideas. Essay type tests provide a better indication of pupil's real achievement in learning. The answers provide a clue to nature and quality of the pupil's thought process.

That is, we can assess how the pupil presents his ideas (whether his manner of presentation is coherent, logical and systematic) and how he concludes. In other words, the answer of the pupil reveals the structure, dynamics and functioning of pupil's mental life.

The essay questions are generally thought to be the traditional type of questions which demand lengthy answers. They are not amenable to objective scoring as they give scope for halo-effect, inter-examiner variability and intra-examiner variability in scoring.

Types of Essay Test:

There can be many types of essay tests:

Some of these are given below with examples from different subjects:

1. Selective Recall.

e.g. What was the religious policy of Akbar?

2. Evaluative Recall.

e.g. Why did the First War of Independence in 1857 fail?

3. Comparison of two things—on a single designated basis.

e.g. Compare the contributions made by Dalton and Bohr to Atomic theory.

4. Comparison of two things—in general.

e.g. Compare Early Vedic Age with the Later Vedic Age.

5. Decision—for or against.

e.g. Which type of examination do you think is more reliable? Oral or Written. Why?

6. Causes or effects.

e.g. Discuss the effects of environmental pollution on our lives.

7. Explanation of the use or exact meaning of some phrase in a passage or a sentence.

e.g., Joint Stock Company is an artificial person. Explain 'artificial person' bringing out the concepts of Joint Stock Company.

8. Summary of some unit of the text or of some article.

9. Analysis

e.g. What was the role played by Mahatma Gandhi in India's freedom struggle?

10. Statement of relationship.

e.g. Why is knowledge of Botany helpful in studying agriculture?

11. Illustration or examples (your own) of principles in science, language, etc.

e.g. Illustrate the correct use of subject-verb position in an interrogative sentence.

12. Classification.

e.g. Classify the following into Physical change and Chemical change with explanation. Water changes to vapour; Sulphuric Acid and Sodium Hydroxide react to produce Sodium Sulphate and Water; Rusting of Iron; Melting of Ice.

13. Application of rules or principles in given situations.

e.g. If you sat halfway between the middle and one end of a sea-saw, would a person sitting on the other end have to be heavier or lighter than you in order to make the sea-saw balance in the middle. Why?

14. Discussion.

e.g. Partnership is a relationship between persons who have agreed to share the profits of a business carried on by all or any of them acting for all. Discuss the essentials of partnership on the basis of this partnership.

15. Criticism—as to the adequacy, correctness, or relevance—of a printed statement or a classmate's answer to a question on the lesson.

e.g. What is the wrong with the following statement?

The Prime Minister is the sovereign Head of State in India.

16. Outline.

e.g. Outline the steps required in computing the compound interest if the principal amount, rate of interest and time period are given as P, R and T respectively.

17. Reorganization of facts.

e.g. The student is asked to interview some persons and find out their opinion on the role of UN in world peace. In the light of data thus collected he/she can reorganise what is given in the text book.

18. Formulation of questions-problems and questions raised.

e.g. After reading a lesson the pupils are asked to raise related problems- questions.

19. New methods of procedure

e.g. Can you solve this mathematical problem by using another method?

Advantages of the Essay Tests:

1. It is relatively easier to prepare and administer a six-question extended- response essay test than to prepare and administer a comparable 60-item multiple-choice test items.

2. It is the only means that can assess an examinee's ability to organise and present his ideas in a logical and coherent fashion.

3. It can be successfully employed for practically all the school subjects.

4. Some of the objectives such as ability to organise idea effectively, ability to criticise or justify a statement, ability to interpret, etc., can be best measured by this type of test.

5. Logical thinking and critical reasoning, systematic presentation, etc. can be best developed by this type of test.

6. It helps to induce good study habits such as making outlines and summaries, organising the arguments for and against, etc.

7. The students can show their initiative, the originality of their thought and the fertility of their imagination as they are permitted freedom of response.

8. The responses of the students need not be completely right or wrong. All degrees of comprehensiveness and accuracy are possible.

9. It largely eliminates guessing.

10. They are valuable in testing the functional knowledge and power of expression of the pupil.

Limitations of Essay Tests:

1. One of the serious limitations of the essay tests is that these tests do not give scope for larger sampling of the content. You cannot sample the course content so well with six lengthy essay questions as you can with 60 multiple-choice test items.

2. Such tests encourage selective reading and emphasise cramming.

3. Moreover, scoring may be affected by spelling, good handwriting, coloured ink, neatness, grammar, length of the answer, etc.

4. The long-answer type questions are less valid and less reliable, and as such they have little predictive value.

5. It requires an excessive time on the part of students to write; while assessing, reading essays is very time-consuming and laborious.

6. It can be assessed only by a teacher or competent professionals.

7. Improper and ambiguous wording handicaps both the students and valuers.

8. Mood of the examiner affects the scoring of answer scripts.

9. There is halo effect-biased judgement by previous impressions.

10. The scores may be affected by his personal bias or partiality for a particular point of view, his way of understanding the question, his weightage to different aspect of the answer, favouritism and nepotism, etc.

Thus, the potential disadvantages of essay type questions are:

(i) Poor predictive validity,

(ii) Limited content sampling,

(iii) Scores unreliability, and

(iv) Scoring constraints.

Suggestions for Improving Essay Tests:

The teacher can sometimes, through essay tests, gain improved insight into a student's abilities, difficulties and ways of thinking and thus have a basis for guiding his/her learning.

(A) White Framing Questions:

1. Give adequate time and thought to the preparation of essay questions, so that they can be re-examined, revised and edited before they are used. This would increase the validity of the test.
2. The item should be so written that it will elicit the type of behaviour the teacher wants to measure. If one is interested in measuring understanding, he should not ask a question that will elicit an opinion; e.g.,
“What do you think of Buddhism in comparison to Jainism?”
3. Use words which themselves give directions e.g. define, illustrate, outline, select, classify, summarise, etc., instead of discuss, comment, explain, etc.
4. Give specific directions to students to elicit the desired response.
5. Indicate clearly the value of the question and the time suggested for answering it.
6. Do not provide optional questions in an essay test because—
 - (i) It is difficult to construct questions of equal difficulty;
 - (ii) Students do not have the ability to select those questions which they will answer best;
 - (iii) A good student may be penalised because he is challenged by the more difficult and complex questions.
7. Prepare and use a relatively large number of questions requiring short answers rather than just a few questions involving long answers.
8. Do not start essay questions with such words as list, who, what, whether. If we begin the questions with such words, they are likely to be short-answer question and not essay questions, as we have defined the term.
9. Adapt the length of the response and complexity of the question and answer to the maturity level of the students.
10. The wording of the questions should be clear and unambiguous.
11. It should be a power test rather than a speed test. Allow a liberal time limit so that the essay test does not become a test of speed in writing.
12. Supply the necessary training to the students in writing essay tests.
13. Questions should be graded from simple to complex so that all the testees can answer atleast a few questions.
14. Essay questions should provide value points and marking schemes.

(B) While Scoring Questions:

1. Prepare a marking scheme, suggesting the best possible answer and the weightage given to the various points of this model answer. Decide in advance which factors will be considered in evaluating an essay response.

2. While assessing the essay response, one must:

- a. Use appropriate methods to minimise bias;
 - b. Pay attention only to the significant and relevant aspects of the answer;
 - c. Be careful not to let personal idiosyncrasies affect assessment;
 - d. Apply a uniform standard to all the papers.
3. The examinee's identity should be concealed from the scorer. By this we can avoid the "halo effect" or "biasness" which may affect the scoring.
4. Check your marking scheme against actual responses.
5. Once the assessment has begun, the standard should not be changed, nor should it vary from paper to paper or reader to reader. Be consistent in your assessment.
6. Grade only one question at a time for all papers. This will help you in minimising the halo effect in becoming thoroughly familiar with just one set of scoring criteria and in concentrating completely on them.
7. The mechanics of expression (legibility, spelling, punctuation, grammar) should be judged separately from what the student writes, i.e. the subject matter content.
8. If possible, have two independent readings of the test and use the average as the final score.

1. LONG QUESTION

- a. Discusses capital BLOOM'S taxonomy.
- b. Discusses cognitive domain.
- c. What are the criteria of selecting appropriate learning objectives?
- d. What is objective based objective type test?
- e. What is objective based essay type test?

2. SHORT QUESTION

1. who is BLOOM?
2. What is cognitive domain?
3. what is learning objectives?
4. what is evaluation?
5. what is objective type test?

YOUTUBE LINK

FOR MORE INFORMATION YOU HAVE TO GO MY CHANNEL
EXTRA HAND OR GO THE FOLLOWING LINK-

1. <https://www.youtube.com/watch?v=DdMZ8n57c1w>
2. <https://www.youtube.com/watch?v=jTHEoKKhIn4>
3. <https://www.youtube.com/watch?v=X4hj63ewmsE>
4. <https://www.youtube.com/watch?v=dO9t6kEj07c\>
5. https://www.youtube.com/watch?v=yEf_mv6zOxQ
6. <https://www.youtube.com/watch?v=ElqAmr3K2OE>
7. <https://www.youtube.com/watch?v=28PdclikQlg>
8. <https://www.youtube.com/watch?v=DsMzYWcY-tg>
9. <https://www.youtube.com/watch?v=jTHEoKKhIn4>
10. <https://www.youtube.com/watch?v=DdMZ8n57c1w>
11. <https://www.youtube.com/watch?v=LmlvU-g9Ve4>
12. <https://www.youtube.com/watch?v=HfPJ45yTcgk>
13. <https://www.youtube.com/watch?v=epmsGa3iHvE>
14. <https://www.youtube.com/watch?v=3F7kRst21mk>
15. https://www.youtube.com/watch?v=pMEjJU_wpPY
16. <https://www.youtube.com/watch?v=CuQ3cFbYIW4>