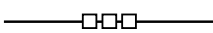


Goal-setting & Instructional Objectives



1

---

---

---

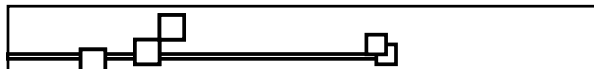
---

---

---


---

---



**Goal-setting** is the key to much of what a psychologist does, including:

- Writing instructional objectives for Individual Education Plans (IEPs) in the school setting and...
- Writing treatment plans in the clinical setting.



2

---

---

---


---

---


---

---

---



Having goals necessitates also having some means by which to assess progress toward goals.



3

---

---

---

---

---

---

---

---

A psychological *assessment* is a general term for the process of appraising performance and can include elements of both *measurement* and *evaluation*.

- *Measurement* - using an instrument (e.g ruler, tape measure, scale, test) to gauge the *quantity* of something. (a quantitative process)
- *Evaluation* – involves making a *value judgment*; the highest level of intellectual skill according to Bloom; the ability to render judgments about the value of methods or materials for specific purposes, making use of external or internal criteria. (a qualitative process)

4

---

---

---

---

---

---

---

---

Benjamin Bloom's *Taxonomy of Educational Objectives*

- Exhaustive lists of possible educational outcomes that can serve as a guide for compiling instructional objectives.
- Contains both cognitive and affective educational objectives.
- *Affective objectives* have to do with the learner's emotional reactions, such as interest, motivation, involvement, commitment, and positive and negative evaluation.
- 

5

---

---

---

---

---

---

---

---

Benjamin Bloom's *Taxonomy of Educational Objectives*

1. *Knowledge*—items of factual information, such as, "Who wrote *A Midsummer's Night Dream*?"
2. *Comprehension*—understanding and obtaining meaning, such as, "What was the author trying to say?"
3. *Application*—using the information and principles to solve problems: "Given what you know about the authenticity of the first quarto and about weather conditions in England in the summer of 1594, when do you think the play was written?"

6

---

---

---

---

---

---

---

---

□ Benjamin Bloom's *Taxonomy of Educational Objectives*

4. *Analysis*—arriving at an understanding by looking at the individual parts: “Find the most basic metaphors in Act I and explain their meaning.”

5. *Synthesis*—arriving at an understanding by looking at the bigger picture or by combining the individual elements: “Identify the four themes in *A Midsummer Night's Dream* and discuss how they contribute to the central action.”

7

---

---

---

---

---

---

---

---

□ Benjamin Bloom's *Taxonomy of Educational Objectives*

6. *Evaluation*—arriving at value judgments: “Do you agree with the statement that *A Midsummer Night's Dream* is Shakespeare's first undisputed masterpiece? Explain your answer.”

8

---

---

---

---

---

---

---

---

□ *Gagne's Learning Outcomes:*

▪ **The new capabilities that can result from learning include:**

1. Intellectual skills
2. Verbal Information
3. Cognitive strategies
4. Attitudes
5. Motor skills

9

---

---

---

---

---

---

---

---

**Types of Evaluation**

- *summative evaluation* - summarizes the effects of learning and instruction and provides a grade
- *formative evaluation* – provides both the learner and the instructor with information which is designed to guide and improve the whole teaching and learning process
- *measurement driven instruction* – an approach to instruction which is geared specifically toward increasing student performance on specific achievement measures

10

---

---

---

---

---

---

---

---

Elton & Laurillard (1979) “The quickest way to change student learning is to change the assessment system.”

11

---

---

---

---

---

---

---

---

**Goals & Objectives**

- ***Educational / therapeutic goal*** – a statement of the desired outcome of the educational / therapeutic process
- *Instructional / behavioral objectives* – short- or long-term intended results; statements about the type of performance / behavior that can be expected of students / clients once they have completed a course of instruction or treatment

12

---

---

---

---

---

---

---

---

**Mager's Instructional Objectives**  
(1962, 1984)  
**Effective instructional objectives must:**

- *Specify clearly what the learner should be able to do following instruction*
- *Be worded in behavioral terms, i.e. in unambiguous terms of something observable*
- *Specify exactly what the student must do to demonstrate that they have reached a goal*

13

---

---

---

---

---

---

---

---

**Mager's Instructional Objectives**  
(1962, 1984)  
**Effective instructional objectives must:**

- *Provide the teacher with specific guidelines for determining whether goals have been reached*
- *Establish specific criteria of acceptable performance*

14

---

---

---

---

---

---

---

---

**EXAMPLES:**

- *The student should understand evolutionary theory.*  
*This is a general objective. It offers nothing about what the student must do to demonstrate mastery or what are specific criteria of acceptable performance. The terms are general and not in behavioral terms.*
- *The student should be able to state two Darwinian laws of evolution and give examples of each.*  
*This is an example of a Mager-like instructional objective.*

15

---

---

---

---

---

---

---

---

**EXAMPLES:**

- The learner will be able to translate a simple passage from French to English. (General)
- The learner will be able to translate a simple passage from French to English without the use of a dictionary. The passage will be taken from a prescribed text, and the translation will be considered correct if there are no more than 5 errors for each 100 words of text and acceptable if the translation is completed in no more than 20 minutes for each 100 words. (Mager)

16

---

---

---

---

---

---

---

---

**Gronlund's General and Specific Objectives**

- Mager's objectives are consistent with a behavioral orientation which emphasizes measurable outcomes. It lends itself to an objective assessment such as a multiple choice test.
- Gronlund's objectives are more in line with the current orientation of education and psychology which is a cognitive orientation or a combination of cognitive and behavioral. It is best served by performance-based assessment.

17

---

---

---

---

---

---

---

---

**Gronlund's General and Specific Objectives**

- A cognitive orientation emphasizes understanding and other cognitive outcomes that are difficult to measure.
- Gronlund suggests that objectives be stated first in a general sense and then elaborated in more specific learning outcomes or actual examples of the behavior that would reflect the primary objective.

18

---

---

---

---

---

---

---

---

**Examples of Gronlund's  
General and Specific Objectives:**

- Primary (general) objective: the student understands how to perform simple multiplication
- Specific objectives:  
The student will be able to:
  - define what multiplication means in his own words
  - define relevant terms such as multiplier and product
  - solve single-digit multiplication problems

19

---

---

---

---

---

---

---

---

**Examples of Gronlund's  
General and Specific Objectives:**

- Primary (general) objective: the student should develop knowledge and appreciation of, and liking for the Romantic poets
- Specific objectives:  
The student will:
  1. choose to read or write poetry during a free reading period
  2. attempt to evaluate poetry as either good or bad or to compare different poems

20

---

---

---

---

---

---

---

---

**Measuring progress toward  
objectives requires good  
measurement instruments.**

21

---

---

---

---

---

---

---

---

Validity - **the most important characteristic of a measurement instrument (test); does it measure what it intends to measure?**

Types of Validity:

- 1) Face Validity
- 2) Content Validity
- 3) Construct Validity
- 4) Criterion-related Validity
  - a. predictive validity
  - b. concurrent validity

22

---

---

---

---

---

---

---

---

Validity

- *Face validity* – the extent to which a test appears to measure what it intends to measure.
- Face validity is important for teacher made tests. A math test should look like a math test and actually have math problems on it. Psychological tests designed to measure certain personality characteristics may need to avoid face validity, lest it “give away” the true purpose of the test and adversely affect the results.

23

---

---

---

---

---

---

---

---

Validity

- *Content validity* – the most crucial kind of validity for school achievement tests; the extent to which the test actually samples course content and course objectives; determined by a careful analysis of test items in comparison to the course content.

24

---

---

---

---

---

---

---

---

Validity

- *Construct validity* – very important for psychological tests, such as personality and intelligence tests; a construct is a hypothetical variable / an unobservable characteristic or quality inferred from a theory; construct validity is the extent to which test results agree with and reflect the theories that underlie the test.

25

---

---

---

---

---

---

---

---

Validity

- *Criterion-related validity* – the extent to which predictions based on test results are accurate (predictive validity) and how well the test agrees with other related measures (concurrent validity)
- *Predictive validity* – refers to how well test scores predict future performance in related areas
- *Concurrent validity* – refers to how closely related score are to those obtained by similar tests

26

---

---

---

---

---

---

---

---

**Reliability – how consistent are test results**

- *Repeated measures* – determining the consistency of test results by giving the test twice to the same individual and comparing the scores; the degree of similarity between the scores is its reliability
- *Parallel forms* – determining the consistency of test results by giving the two different forms of the test to the same individual and comparing the scores; the degree of similarity between the scores is its reliability

27

---

---

---

---

---

---

---

---

**Reliability** – how consistent are test results

- *Split-half reliability* – determining the consistency of test results by giving administering the test and then dividing it into two halves for scoring and comparing the scores; the degree of similarity between the scores of each half is its reliability

28

---

---

---

---

---

---

---

---

**Factors affecting reliability:**

1. The stability of what is being measured. Some things, such as state anxiety, are expected to fluctuate and therefore tests measuring state anxiety are not expected to be reliable.
2. Chance, especially with true-false or multiple-choice tests can affect reliability.
3. Length of tests — longer tests have more reliability generally

29

---

---

---

---

---

---

---

---

**Standardized Tests**

- Professionally developed tests that are normed and provide some basis for judging the relative quality of the characteristic measured relative to their age- or grade- peers

30

---

---

---

---

---

---

---

---