

The Importance of Evidence and Progression in Learning Assessment

Pete Bernardin

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Good News From Fall 2006

All Program Assessment Reports were completed.

Amazing progress in the past year.

Faculty beginning to understand the process.

Programs beginning to show integrity in terms of continuous improvement.

Effective Aspects of Program Assessments

Program Weaknesses Frequently Identified by an Audit

- *“The constituents and other stakeholders are not fully involved in the selection and review of program objectives and this link needs be strengthened to ensure that continuous improvement truly reflects changing constituent need.”*
- *“Student assessment needs to be made more formal through documentation of all program assessment processes.”*
- *“The Program needs to provide evidence that the evaluation process specifically addresses how the measurements are used to improve the program.”*
- *“The Program needs to specifically document that it has frequently presented the results of the most recent program assessments to the constituents and other stakeholders and that program improvements have been made based upon these findings.”*
- *“Program Objectives do not show a progression of expectation as students advance through the higher levels of educational experience.”*

Two Areas to Improve Program Assessments Sp 2007 Cycle

Must Have Evidence

Must Show Progression in Learning

Program Evaluator's Checklist

- Written Mission Statement
- Written statement of Program and Learning Outcomes
- Program and Learning Outcomes are Related to the Strategic Plan
- Program has formally evaluated those Program and Learning Outcomes

Executive Summary Section

- Specific Data are available from your Assessments ([where is the data?](#))
- Evidence the Assessment Data were reviewed by faculty and appropriate administrators ([did you take meeting minutes and other documentation](#))
- Evidence Improvements were made based on the Assessment Data
- Evidence the Improvements were evaluated for effectiveness

- | | |
|--|--|
| • External Accreditation | Accreditation Standards Section |
| • Identified Strengths | Analysis – Strength Section |
| • Identified Weaknesses | Analysis – Attention Needed Section |
| • Identified Contributions to the University | Contributions to the Institution |

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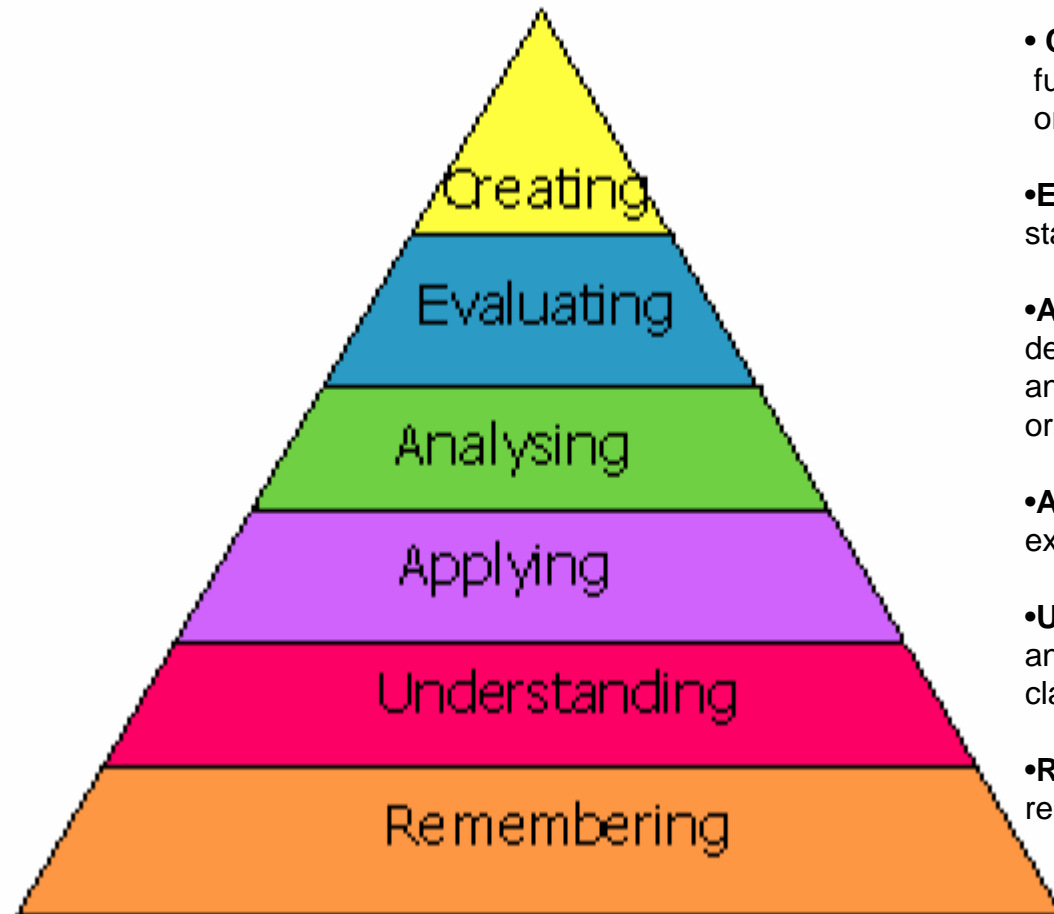
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Showing Progression in Learning

Review: Bloom's Levels of Learning



- **Creating:** Putting elements together to form a coherent or functional whole; reorganizing elements into a new pattern or structure through generating, planning, or producing.
- **Evaluating:** Making judgments based on criteria and standards through checking and critiquing.
- **Analysing:** Breaking material into constituent parts, determining how the parts relate to one another and to an overall structure or purpose through differentiating, organizing, and attributing.
- **Applying:** Carrying out or using a procedure through executing, or implementing.
- **Understanding:** Constructing meaning from oral, written, and graphic messages through interpreting, exemplifying, classifying, summarizing, inferring, comparing, and explaining.
- **Remembering:** Retrieving, recognizing, and recalling relevant knowledge from longterm memory.

Relate Objectives to General Education Elements in Assessment Tool

The University of Texas at Dallas

Current General Education curricular elements

- ☐1: Communication
- ☐2: Mathematics
- ☐3: Quantitative Methods
- ☐4: Natural Science
- ☐5: Visual & Performing Arts
- ☐6: Humanities
- ☐7: US and Texas History
- ☐8: US and Texas Government & Politics
- ☐9: Social & Behavioral Science
- ☐10: Foundational Knowledge in Discipline(s)
- ☐11: Advanced Knowledge in Discipline(s)
- ☐12: Guided Research
- ☐13: Independent Research
- ☐14: Ongoing Research
- ☐15: Research & Design
- ☐16: Independent Thought
- ☐17: Internship
- ☐18: Practicum

General Education Elements
Ranked Approximately According
To Bloom's Progression

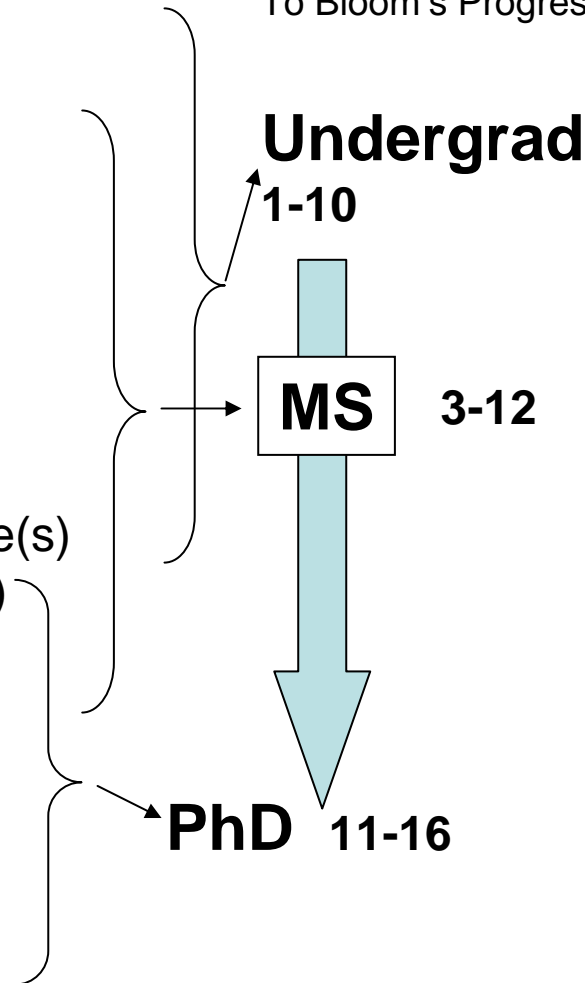
Undergrad

1-10

MS

3-12

PhD 11-16



Progression of Bloom's Verbs in Objectives

Level	Verbs	Outcome Measures for Assessment of Learning
Creating	Compose, construct, create, develop, hypothesize, implement, speculate, write,	Detailed plans, papers with new ideas/original research, art
Evaluating	Assess, choose, conclude, defend, grade, judge rate, score, support, validate	Self-evaluation, developing criteria lists, listing pros/cons
Analyzing	Analyze, arrange, break down, classify, compare/contrast, debate, deduce, differentiate, diagram, interpret, illustrate, test	Constructing spreadsheets, applying statistical methods, diagramming
Applying	Apply, calculate, classify, complete, demonstrate, develop, graph, modify, operate, predict, solve, teach, transfer, use as a template	Simulations, solving problems, using templates in new situations
Understanding	Compute, describe, discuss, explain, generalize, give examples of, interpret, outline, restate, paraphrase, solve, tell	Summaries, paraphrased sentences; equivalent equations/programs
Remembering	Define, describe, identify, list, memorize, name, outline, quote, recall, recognize, underline	Worksheets, fact charts, lists, multiple choice rote questions, matching questions

PhD (more creating and evaluating)

Sample Objectives

Students will develop a well-designed investigation to explore the period of a pendulum. **11,13, 16**

Students will critique the well-designed procedures of other teams. **3,11, 12**

Students will contrast the geocentric and heliocentric models of the Solar System. **3, 4, 11**

MS

Students will apply the principles of vector analysis to a two-dimensional collision. **2, 3, 11**

Students will explain the relationship between structure and function of cell organelles. **3,4**

Students will list the organelles of a cell. **4,10**

Undergrad (more remembering and understanding)

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