Thinking Critically About Bloom's Taxonomy

Benjamin Bloom's taxonomy of educational objectives (1956) has been used at WCU in an attempt to provide a theoretical basis for the Foundation 3 section of general education and the critical thinking component in other courses. I want to present very briefly some reasons why Bloom's taxonomy is seriously flawed and, furthermore, simply irrelevant to the purposes of general education.

Bloom identifies six educational objectives which he believes to be common to all disciplines. The objectives are ordered hierarchically with each objective itself described as a hierarchy of subgoals. The six main objectives and their ranking from simple to complex are as follows: (1) Knowledge (or Memorizing), (2) Comprehension, (3) Application, (4) Analysis, (5) Synthesis, and (6) Evaluation.

One of the problems with the taxonomy is its ambiguity. In our discussions here at WCU it has been assumed that the names of the objectives refer to kinds and levels of thought, but Bloom usually uses the terms to refer to kinds and levels of behavior. Bloom's book is thoroughly behavioristic. But when Bloom gives examples illustrating how to use the taxonomy, he classifies not behaviors but test questions. This is confusing since Bloom himself admits that a person's behavior relative to a test question will vary as a function of the person's educational background. Is the taxonomy, then, a scheme for classifying thought, behavior, or test questions? It is not clear.

A second problem is the nature of the taxonomy's structure. The taxonomy orders behavior into a unidirectional hierarchy of increasingly complex behavior such that behavior at a lower level does not include higher level behaviors, although a higher level includes lower levels. Thus a student at the lowest level (Knowledge) would be expected to memorize items without meaningfully relating them to one another (Synthesis) and without assessing their value (Evaluation). Memory thus separated from synthesis and evaluation is emasculated. It is little wonder, then, that memory has been so denigrated in the pedagogical articles we have read and in our discussions about critical thinking. Human memory requires a more adequate treatment than this. The same basic problem arises between other
levels of the taxonomy. A student behaving (thinking?) at the third level of Application would be unable to analyze and synthesize. Students do not learn this way. Even Bloom was unable to find a learning theory which correlated with the taxonomy.

A third problem is Bloom's claim that the taxonomy is value neutral and descriptive instead of prescriptive. The taxonomy's hierarchical form belies these claims since the simple to complex order of behaviors is correlated with a developmental sequence. Students are supposed to progress from lower to higher levels. The taxonomy does represent an educational philosophy, it is value laden and prescriptive, and it has been so understood here at WCU. Why the pretense to value neutrality?

A final problem is that the taxonomy is irrelevant to what should be our major concern in general education. Instead of discussing the taxonomy we should be considering what specific critical thinking skills should be taught and how we should teach them. For example, should students in a F3 course learn how to distinguish between arguments and pseudoarguments, such as sheerly emotional forms of persuasion? An issue such as that can be considered independently of Bloom's taxonomy or any other formal theory of education.

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Editor's note: Bloom's book is available in Hunter Library, and related materials are available at the Center's Resource Library.