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Bloom’s Taxonomy: Past and Present

Educators, past and present have all come across Bloom’s Taxonomy at one time or another. Since its inception, Bloom’s Taxonomy has become influential to the point of dogma in American Colleges of Education (Booker, p. 347). Although it was initially designed for higher education, its greatest impact has been in K-12 settings. Not only has Bloom’s Taxonomy been introduced in colleges and universities, it has also been displayed in classroom posters and instructional plan books in educational institutions throughout the world. Bloom supporters proclaim that the essence of the taxonomy is the promise to establish a scientific sense of order regardless of the particular classroom disciplines in the most simplistic manner featuring six categories (Wineburg, & Schneider, 2009).

The traditional pyramid formation has knowledge at the base which was established as the prerequisite to the ascending steps that follow including comprehension, application, analysis, synthesis and lastly, evaluation. Each of these categories was then broken down into subcategories except for application. The function of the taxonomy was to incorporate the use of a multi-tiered scale to express the level of expertise required to achieve each measurable student outcome (UNC: Charlotte, 2015). Based upon the measurable outcomes, student assessments would be developed in order to ensure alignment of the two.

Bloom’s Taxonomy was originally intended to be only one part of a three-part system. The three domains which Bloom and his panel classified were cognitive, affective and psychomotor although the latter was never published (Booker, p. 349). The original publication of Bloom first appeared in 1956 and was known as the Taxonomy of Educational Objectives, The Classification of Educational Goals, Handbook I: Cognitive Domain in 1956. The Taxonomy was a collective product of thirty-four educators, psychologists, and school examiners who met from 1949 to 1953 whose intent was to provide an overarching classification system for test questions (Booker, p. 349). The theoretical framework known as Bloom’s Taxonomy hence evolved as a as a system to classify the educational process.

The idea for this classification system was formed at an informal meeting of college examiners attending the 1948 American Psychological Association Convention in Boston. At this meeting, interest was expressed in a theoretical framework which could be used to facilitate communication among examiners. This group felt that such a framework could do much to promote the exchange of test materials and ideas about testing. In addition, it could be helpful in stimulating research on examining and on the relations between examining and education (Bloom, Englehart, Furst, Hill, Krathwall, 1956, p.4).

Since then, the initial model was revised to create a two-dimensional framework: Knowledge and Cognitive Processes.

The former most resembles the subcategories of the original Knowledge category. The latter resembles the six categories of the original Taxonomy with the Knowledge category named Remember, the Comprehension category named Understand, Synthesis renamed Create and made the top category, and the remaining categories changed to their verb forms: Apply, Analyze, and Evaluate. They are arranged in a hierarchical structure, but not as rigidly as in the original Taxonomy (Krathwohl, p.218).

This new framework was a direct result of Anderson and Sosniak’s Forty-Year Retrospective which was presented in 1994. This resulted in a series of conversations in the course of which Krathwohl and Anderson took on the role of revising the Taxonomy along with Merl Wittock and Richard Mayer (Krathwohl & Anderson, p.64) In the original taxonomy, the Knowledge category embodied both the noun and the verb aspects whereas in the revised Taxonomy the noun and verb form separate dimensions. In this case, the noun would provide the basis of the Knowledge dimension and verb forming the basis for the Cognitive dimension (Krathwohl, p.213).

Sam Wineburg, a professor at Stanford University and Jack Schneider, a doctoral student at Stanford disagree with the original framework and have challenged Bloom enthusiasts. The premise behind their thinking is quite simple. According to Wineburg & et al., for students of history, the pyramid posters have it wrong-or at least upside down. Putting knowledge at the base implies that the world of ideas is fully known and that critical thinking involves gathering known facts to cast judgment (Wineburg & Schneider, 2009). Bloom’s Taxonomy fuels the belief that higher order thinking can exist in isolation (Booker, p. 352). In other words, it is their belief that in order for students to gain true knowledge they must first explore, question and challenge the existing material. Then and only then, will they be able to work towards gaining a true understanding of the content knowledge.

Wineberg and Schneider plead a strong case in rethinking the theory that knowledge is the basis of all learning. Although knowledge is certainly an essential element, we must provide students with opportunities to challenge their thinking in order to maintain a more active role in the learning process. It’s time that we reflect upon past practices and adopt new means and modes of meeting the needs of 2st century learners.

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