Chapter 11

Tech-ology (Level 6.0)

Definition and Historical Origins

At the apex of the Taxonomy for the Technology Domain lies the study of technology, an often overlooked, yet uncommonly important venue for the application of technology for teaching and learning. Closely akin to the highest level of Bloom’s taxonomy of educational objectives in the cognitive domain,
Tech-ology concerns itself with the “ability to judge the universal impact, shared values, and social implications of technology use and its influence on teaching and learning.” Given the impact of technology on society over the past six decades, this level of the taxonomy also concerns itself with judgments, recommendations, implications, influences, values, effect, and affect on teaching and learning. Some of the most essential considerations are presented here.

**Student Achievement**

Since educators first used technology in the classroom, researchers have tried to confirm whether its use has a significant and reliable impact on student achievement. Searching for an answer, they have come to appreciate that technology cannot be treated as a single independent variable. In other words, student achievement is gauged not only by how well students perform on standardized tests but also by their ability to use higher-order skills to critically isolate realistic, logical, and practical solutions to problems. For instance, technology assists in gathering usage and course enrollment data by school. It disaggregates that data based on basis of race, gender, language status, disability status, and income level and analyzes these data to determine the extent of inequities and possible alternatives to remediate these imbalances.

**Student Assessment**

Judging the impact of any particular technology requires an understanding of the learning goals considered important to students, teachers, and administrators and how the technology is used in the classroom to address these objectives. Technologies impact the types of assessments used to evaluate student achievement and offer a perspective of the complex nature of change in the school environment.

**Equal Access**

Although there has been a strong push to get educational technology into the hands of teachers and students, many obstacles to implementation remain. Equipment may not be placed in easily accessible locations. Hardware and
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