



**CALIBRATING LEARNING AUTHENTICITY THROUGH UTILIZATION OF
MULTIDIMENSIONAL ASSESSMENT IN GAUGING LEARNERS'
DEPTH OF KNOWLEDGE IN VARIOUS RESEARCH SUBJECTS**

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ABSTRACT

As the demands of higher education and the workforce continue to intensify, ensuring the authenticity of learning through quality assessment has become a critical concern in secondary education. Authentic assessment, particularly when grounded in multidimensional frameworks, enables learners to demonstrate deeper understanding and real-world application of knowledge. This action research examined the utilization of multidimensional assessment in gauging learners' depth of knowledge in various research subjects at Talisay Senior High School, with the aim of calibrating learning authenticity and improving assessment practices.

Specifically, the study measured the extent of teachers' knowledge in employing assessment dimensions—factual, conceptual, procedural, and metacognitive—based on the Revised Bloom's Taxonomy. It also determined the level of understanding displayed by learners using the Structure of Observed Learning Outcomes (SOLO) framework, categorized into unistructural, multi-structural, relational, and extended abstract levels. A descriptive quantitative research design was employed, involving purposively selected research-subject

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teachers and a representative sample of Grade 11 and Grade 12 learners from the HUMSS, ABM, STEM, and TVL strands. Data were collected through researcher-made questionnaires administered via Google Forms and analyzed using frequency, percentage, weighted mean, and ranking.

Findings revealed varying levels of teacher preparedness and learner depth of understanding across assessment dimensions, indicating the need for strengthened alignment between instructional goals and authentic assessment practices. Based on the results, Project TAMA (Transforming Assessment in Multidimensional level to provide Authentic Learning) was proposed, emphasizing collegial collaboration, assessment bank development, and sustained monitoring of multidimensional assessment implementation. The study highlights the value of authentic, multidimensional assessment in promoting deeper learning and provides a practical basis for enhancing assessment practices in senior high school research subjects.

Keywords: *authentic assessment, multidimensional assessment, depth of knowledge, SOLO taxonomy, Revised Bloom's Taxonomy, action research*

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