

## ABSTRACT

Education institutions are tasked with the responsibility to educate, transform, and train students in their respective fields of study. This education involves assessing students' acquisition of content, skills, and values. These assessments, especially summative assessments are used to make high stake decisions, which have long term implications for students, educators, and institutions. The assessments need to be of high quality to ensure that they yield accurate, objective, and dependable results for making the relevant decisions. Low quality assessments could lead to unfair decisions and mediocre graduates. This is particularly true with online assessments that are rarely invigilated. In addition, the assessment of students' understanding of Biodiversity content has been cited in literature as problematic. This qualitative case study therefore investigated the quality of first year and Honours 'online biodiversity summative assessments administered at a South African teacher training institution, during covid-19. Data were collected using documents analysis and a semi-structured interview and analysed qualitatively. For Documents analysis, a total of eight biodiversity summative assessments, four from first year, and four from Honours level of study were collected and analysed against frameworks for content validity, authenticity, cognitive levels, and alignment of the assessments with course objectives to determine their quality. Interviews were conducted to determine the lecturer's perceptions regarding the quality of online summative assessments. Documents analysis results revealed that even though online biodiversity summative assessments at the institution of study were content valid, they were mostly based on topic one of the prescribed contents which were 'principles of classification' and 'The notions of biodiversity and climate change' for first year and Honours levels respectively. Furthermore, it was found that the summative assessments were also commonly aligned to objective one of the specified course objectives. Regarding Cognitive levels of the summative assessments, findings revealed that most items were pitched at lower order thinking skills which are 'remembering' and understanding. It was also determined that all first-year biodiversity summative assessments were highly unauthentic while all Honours' summative assessments were authentic with over 50% of authentic items for each paper. Interview results revealed that the lecturer at the institution could be confused about what constitutes a quality assessment and he did not know how to ensure most quality assessment attributes within his summative assessments.