Dear Editor,

There is an ongoing debate in the field of evaluation, specifically about the approach of using multiple choice questions (MCQ) within online assessment.\(^1\) The concern is that students tend to perform better on MCQ assessments than through other assessment approaches, and MCQ scores are even higher if the MCQ exercise is completed online and unsupervised. Given that assessment is expected to test students’ critical thinking and cognitive skills,\(^2\) MCQ is not recommended for use in online examinations of clinical reasoning.\(^3\) This concern was underscored by an e-Learning consultant who reportedly took a MCQ exam for a course offered for physicians and “passed without actually taking the course.”\(^4\)

There is no arguing the fact that distance education and online learning are here to stay, and that information technology has replaced the prior ‘correspondence education’. So what must be asked of any framework of distance education used as in-service training is, ‘Can training and assessment of practical skills be done within distance education?’

Assessment of practical skills by online MCQ will lack validity. We first point out that online quizzes were introduced for convenience and low cost. That is, the original intention of online quizzes was for the convenience of faculty and for its low cost.\(^1\) This is different from its use to enhance students’ scores in a ‘weighted’ assessment.\(^2\) Secondly, many tertiary care institutions offer courses for health professionals wherein much of the course material is delivered through distance education but for teaching practical components, students are required to attend residential schools and clinical placements. This same approach can be used in assessment of learner skills that require critical thinking, which cannot be validly assessed by online quizzes.

Assessment in a distance education setting can be through Quality Control programs: For medical laboratory professionals interested in distance learning as part of their in-service training, external quality assurance program (QAP) and internal quality control (QC) programs can be employed as a form of in-service problem-based learning, whereby a participant’s performance becomes the assessment of what they have learned. Marinucci has rightly recommended external QAP offered by accreditation process as a valid and worthy assessment method.\(^5\) We point out further that an ‘inter-laboratory’ QC program is also a workable option, and it is essentially PBL by distance. This is particularly pertinent for private and small laboratories that may not be served by an external QAP.

The purpose of teaching and learning in higher education and in in-service training may be questionable if pedagogy follows the concept of unsupervised learning environment, i.e. if both the learning and assessment processes are unsupervised. Further, if online assessment continues without evaluating students’ critical independent thinking development, then analytical skills among graduates, including critical and reflective judgment may cease to be a focus of graduate attribute. The implication could be that updating the so-called online information may come to an end by natural attrition of current independent thinkers.

While this letter is a contribution to the discussion of distance education for medical laboratory professionals in Sub-Saharan Africa,\(^6\) it has implications for courses for other health professionals. Virtually all health professions are involved in some form of distance education and are also engaged in QC activities, reading journal articles, and discussing best care approaches with colleagues. How the impacts of these learning activities on the learners are best assessed requires faculty and teachers to consider the validity of assessment approach to the intended domain of knowledge. For facilities that may not be served by the external QAP, we suggest that ‘inter-facility’ QC program is an option.

In summation, this letter cautions against online unsupervised quizzes, especially in assessing hands-on practical skills. While problem-based learning approaches are encouraged in undergraduate studies, coordinated QC programs should be strongly considered as a form of in-service ‘problem-based learning by distance education.’

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References