**Research Article**

# Re-Thinking Assessment as a Fundamental Part of Transformational Teaching and Learning in Higher Education Setting: A Reflective Gaze at Covid-19 Pandemic Experiences

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**Abstract: Background:** COVID-19 pandemic has unveiled unique challenges for both lecturers and students in higher education institutions. However, it also provided unique experiences that aided transformational teaching, learning and assessment in the higher education context. **Purpose:** The purpose of this paper is to reflect on transformational teaching, learning and assessment from the experience of the COVID-19 pandemic. **Objectives:** 1) to assess the effect of criteria-referenced assessment on transformational learning during the COVID-19 pandemic. 2) to establish how principles of assessment transform effective teaching and learning progress in a higher education context. **Method:** This paper is guided by the critical reflection of Donald Schön's Reflection-in-Action as a tool to critique the transformational teaching, learning and assessment experienced during the COVID-19 pandemic epoch. **Findings:** The paper revealed that assessment is an integral part of transformational teaching and learning. Therefore, it cannot be divorced from the process of teaching for effective learning. **Recommendations:** The paper recommended that higher education institutions should encourage academic staff to pursue academic development programmes that focus on critical reflection on teaching, learning and assessment to enable effective and transformational epistemic access.

**Keywords:** COVID-19, Teaching and Learning, Transformational, Principles of Assessment.

## INTRODUCTION

The COVID-19 pandemic triggered a shift from face-to-face class delivery to online learning and brought about major changes in how student transformational teaching, learning and assessments are conducted in a higher education institutions (HEIs) context. The paper took a critical look at a lecturer in numerical subjects during the COVID-19 pandemic and the challenges experienced in assessing student tasks digitally.

The institution conducted its online lessons via the Learning Management System (LMS) during the COVID-19 pandemic, a shift that was abrupt albeit necessary to protect human lives. Live classes were held via the BigBlueButton (BBB) platform within the LMS which presented unique challenges ranging from, losing both audio and visual during lessons, the BBB freezing up during live class sessions, and failing to share the screen with students using the "Share Screen" function. Additionally, uploading study materials onto the LMS was a struggle as the LMS platform restricted the type of documents that could be uploaded in both size and design. All the challenges highlighted above spilt over into the quality of student assessment both in nature and in design since students are assessed based on what they were taught.

For instance, teaching online restricted how assessments were structured, especially in numerical subjects. Since lecturers did not undergo training on how to use the LMS features in either teaching or designing assessments, online assessments were mostly designed in a multiple-questions format instead of structured questions. Even though multiple question tools are equally useful, Biggs (2003: p. 2) points out that these "might be interesting and useful, but they are not the central issue"; the central issue is putting knowledge to work". A student who has not studied for the multiple questions task can easily score i.e.,40% in that task by randomly choosing the answers, however, structured questions require students to think deeply and to link subject contents to the world in general from their own perspectives. RMIT University (2008: p. 1) affirms this by stating that assessments that promote deep learning are usually deemed personal and open for interpretation.

Another threat was the likelihood of students cheating when taking their assessments online owing to a lack of direct supervision or invigilation. Administering an assessment such as a test face-to-face minimises cheating by students as lecturers would normally invigilate the task, however, having students take the test online makes it difficult to assess whether students cheated or not. If students used materials such as textbooks or the internet to obtain answers this will

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hinder the quality of student assessment and overall student competency.

A student-centered teaching, learning and assessment approach is the most effective learning method for developing and enhancing student lifelong learning at Institutions of Higher Education. Clarence et al. (2015) state that despite what people believe, assessment has a larger influence on student learning compared to teaching. Encouraging students' class participation has been noted to 'integrate assessment with learning' (Ellery, 2008: p. 421). The authors further argue that the student-centered teaching, learning and assessment approach is premised on the idea that students are not merely empty vessels waiting to be filled with knowledge by lecturers, on the contrary, students are believed to create their own knowledge by drawing from their own 'understanding, background, experiences, and their view of the world. Equally obvious, it is imperative for educators to align assessment with learning to ensure students receive quality education and are encouraged to view education as a lifelong learning process.

For students, effective assessments spell out what is most significant, what should be taken into consideration, what the students will be doing in their course and the perception they will hold of themselves (Brown, Bull & Pendlebury, 1997, as cited in Luckett & Sutherland, 2000: pp. 98-99). The authors go on further to offer a working definition of assessment describing it as one that mainly entails, "taking a sample of what students do, making inferences and estimating the worth of their actions". Another generally accepted definition of an assessment is an activity or several activities and tasks or processes used to measure whether learning objectives have been fully addressed and whether students have attained the necessary ability, knowledge, and or skills in a particular course (Boud 2007, as cited by Padayachee & Matimolane, 2021).

### Statement of the problem

Biggs (2003) discussed aligning teaching and assessing to course objectives. This led to a Constructive Alignment (CA) model where learning outcomes that learners are intending to achieve are clearly defined to learners before any teaching and learning activities take place. (see **Figure 1**).
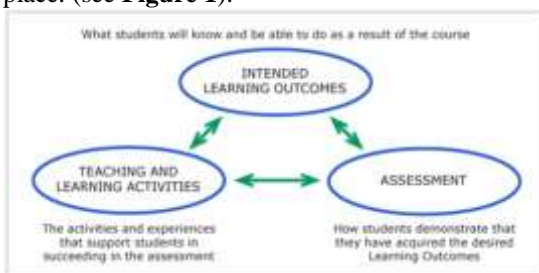


This is starting with the end (assessment) in mind. The constructive alignment process brings into

line the intended learning outcomes, teaching and learning activities and the assessment tasks accentuate the importance of constructivism (Biggs &Tang, 2007). Assessment is a fundamental part of the teaching and learning process that determines whether the instructional objectives are being met. Taking a critical look at COVID-19 experience with its challenges, there are also lessons that academic practitioners could emulate in their teaching practice. Therefore, the purpose of this paper is to reflect on transformational teaching, learning and assessment in order to present the lessons learned from the experience of the COVID-19 pandemic.

### Objectives

This paper is guided by the following objectives:

- to assess the effect of criteria-referenced assessment on transformational learning during COVID-19 pandemic.
- to establish how principles of assessment transform effective teaching and learning progress in a higher education context.

## METHODOLOGY

This paper is guided by the critical reflection of Donald Schön's Reflection-in-Action as a tool to critique without criticising the transformational teaching, learning and assessment experienced during the COVID-19 pandemic period. Schön (1987), defines reflection-in-action as "the thinking what you are doing while you are doing it", (p. xi). Critical reflection, according to Schön (1996) should be done continuously to transform teaching, learning and assessment for improved academic performance. The COVID-19 pandemic experience stimulated academics to take a critical Reflection-in-Action and devise ways to improve teaching, learning and assessment beyond COVID-19. Reflection-in-Action is 'thinking on your feet' (Schön 1983: p. 61). In the post-COVID era, academics should continually take a critical introspection at their contexts. Some studies looked into critical reflection as a new way of creating transformational knowledge (Shandomo, 2010; Stierer, 2008), which is aimed at changing the process that guides effective student learning. Post-COVID-19, academics should critically introspect their teaching, learning and assessment practice in their context so that they enable the transformation that leads to effective student academic achievement. Lyons (1998) sums this up when said: "if students were to be reflective, independent thinkers, there was a need for corollary – teachers who could interrogate their own practices for their effectiveness and join their students, not as sellers but as constructors of knowledge" (p. 116). Critical reflection brings new insight into the community of practice while challenging the status quo.

## LITERATURE REVIEW

Practising critical reflection has been deemed a necessary skill for every teacher as well as adopting

reflective teaching approaches for learning and teaching in education (Brookfield, 1998; Drevdahal et al., 2002; Riskos et al., 2002; Rogers, 2001; Scanlan et al., 2002; Schön, 1983; 1987; Sparks-Langer et al., 1990; Ward & McCotter, 2006; as cited in Giaimo-Ballard & Hyatt, 2012). It is documented that the practice of reflection is not a new phenomenon, it can be traced back to John Dewy (1933), however, reflective learning came to gain popularity through the work of Donald Schön (1983; 1987) and the school reform movement (Lyons, 1998). In the moment of reflection, educators pause in the action, adjust accordingly, and, if needed change their techniques to enhance their teaching (Schön, 1983 as cited in Giaimo-Ballard & Hyatt, 2013).

**Authentic assessment theory**

The paper discusses the two common forms of assessment, the norm-referenced assessment (NRA) and the criteria-referenced assessment (CRA) with a deeper focus on the CRA method as it is the best-considered form of assessment. NRA is a commonly practiced form of assessment in traditional universities where students' performance is rivalled against their peers and where student achievement is determined after a customary allocation of grades (Carlson et al, 2000: p. 104). In their paper, 'implementing criteria-referenced assessment within a multi-disciplinary university department', the authors Carlson et al., (2000), offer a discussion of what they deemed as an appropriate assessment theory called authentic assessment. Authentic assessment is defined as an assessment that is consistent and continuous, linking pedagogical activities and assessment, and which is based on noticeable results, utilising questions, and activities relevant to the students, and in turn setting a basis for assessment which is clear for the students (Gipps, 1995; Graue, 1993 as cited in Carlson et al., 2000: p. 102).

Furthermore, Wiggin (1989) as cited in Carlson et al., (2000: p. 104), recommends four fundamental characteristics of a correctly outlined authentic assessment. Firstly, authentic assessment should be structured to provide a fair representation of achievement. Secondly, the standard of the assessment used in teaching and learning is prioritised. Thirdly, assessments that focus on self-reflection are considered more significant than traditional assessment techniques. Finally, to measure students' evident competence, presentations are frequently required.

There is a need for educators to make reflective teaching practice an essential component of their teaching and learning. Students who are opportune to practice critical reflection as part of their assessments reap the benefits of becoming critical and independent thinkers. Some of the reported benefits of such practice were as follows:

One, critical reflection encourages students to pay attention during lessons and learn from one another when sharing their varying aha moments.

This participative process greatly helps stimulate learning in students who in turn enjoy the new way of learning. Additionally, this assessment method is most helpful for student learning as it enables lecturer–student and peer interaction all at once, ultimately prompting timely feedback. Chickering and Gamson (1987) as cited in Gibbs and Simpson (2004-05: p. 16) emphasise that "students need feedback on performance to benefit from courses".

The principles of assessment are discussed in the next section.

**Principles of assessment**

The students teaching and learning progress, understanding, and skills relative to course contents are measured via assessment. As such, a university's assessment policies and procedures should be considered key in ascertaining the quality of its qualifications to the world (Durham University [n.d.]). There are four main types of principles of assessment namely, validity, reliability, fairness, and flexibility.

*Validity*

Assessments are regarded as valid when they are designed to sasses what they purport to assess (McAlpine, 2002). Student learning is contingent upon course learning objectives and the one way that university teachers measure student learning is via assessment. As such, it is imperative for education practitioners to design assessments that are constructive, in that they truly measure what the educators intend to assess students based on learning outcomes (McAlpine, 2002). The authors further add that for the assessment to be valid, it should be aligned with the program's curriculum objectives and should possess a predictive and confirmatory value.

*Reliability*

For an assessment to be deemed reliable, it should yield the same outcomes even when assessed by a different practitioner. This can be achieved by providing assessment questions and respective memorandums to guide any other assessors when grading the same task; or if the task is in an oral form, providing both questions and answers as well as the marking guideline on how student responses are allowed to vary from those in the memorandums (Welton, 2017). It is common practice at my university that all examination setters should provide both question papers and memorandums to the respective head of departments. Similarly, educators should apply the same practice when designing student assessments to ensure fairness, consistency, reliability, transparency, and validity are upheld.

### Fairness

When the assessment is plainly explained to students and both the assessor and student explicitly "understand and agree to the process", then the assessment is said to be fair (Welton, 2017, para. 4). Prior to handing out or distributing assessments to students, assessment instructions should always be clear both orally during lessons and in a written format (usually as part of the assessment), and students should be encouraged to seek further consultation should they need further clarification.

### Flexibility

A flexible assessment takes into consideration the different "needs of students" (Welton, 2017, para. 2). Normally, a student population of a particular classroom encompass a diverse group of students. For instance, some students may already possess work experience while some may not, and some may be attending on a part-time mode while others attend full-time, all these qualities should be taken into consideration when developing assessments. Additionally, a classroom comprising these diverse groups of students should require the assessor to tailor the tasks to the students' context be it the work environment or application. A case in point, students already employed or possessing work experience their task may be "applied to the type of work they need to perform" and for those unemployed or lacking work experience, the assessment may be performed in a work like an environment (Welton, 2017, para. 2).

## DISCUSSION

In *educating the reflective practitioner: toward a new design for teaching and learning in the professions,* Hirschhorn (1991) cited in Schön (1991), one of the seventeen authors that Schön invited to write case studies on reflections in action and practices, claims that one can acquire practical knowledge in their field by thinking-in-action using three moments of experience namely, triggers, patterns, and affirmations.

The first moments of experience are triggers that can be used to determine the appropriate theory or judgement about a situation that one is confronted with. The author then identifies the three common triggers as anomalies, contradictions, and metaphors. Anomalies stimulate one's thought process and force them to ask for explanations and understanding about what is happening, why it is happening when it happens and so on. An outlier about a situation one is faced with could be a trigger for a deeper analysis which in turn could present solutions. Furthermore, contradictions could stimulate deeper thinking. This is by attempting to understand and resolve a 'feeling towards authority' dilemma among team members in a work environment, as a consultant. The author compared stories from team members about their boss and related them with his own observations upon meeting the boss and found that they were conflicting. Which then prompted a deeper understanding and

triggered questions such as those highlighted above. Finally, metaphors may infer people's internal conversations and feelings. It implies that one can deduce what or how another person is feeling without them verbalising it.

The second moments of experience which are patterns begin to form when for example, an educator compares a classroom situation with professional experience. Upon recognizing a pattern, an educator can stop-in-action to reflect thereby devising a better way to handle the situation.

Finally, affirmations are classified as the third moments of experience and expounded that having a suspicion or theory confirmed can be a guiding tool in taking an action or risk. The author explains that confirmations can be gained either directly (i.e., a question asked and answered); "from the feeling-tone of an encounter" (i.e., discomfort in a student); and through silence. Having established that education practitioners should be encouraged to become reflective educators and practice reflective teaching methods in their teaching and learning, it is worth noting challenges that can stem from these practices.

Firstly, since Schön's reflection-in-action case studies are not depicted from a classroom experience, it can be challenging for practitioners to apply these 'moments of experience' to their context. The case study from which the above analysis is made was drawn from a corporate environment. Therefore, it may be easier to identify and apply these 'moments of experience' in a work environment than it is to identify and apply them in a classroom climate.

Secondly, it is undeniable that reflective practices require time and commitment. Despite the benefits reaped through reflective teaching and learning practices, it can be challenging for practitioners to balance time, teaching, lesson preparations and facilitating meaningful student learning activities.

Thirdly, reflective teaching and learning practices are a non-ending process that may require continual monitoring of own progress by noting down adjustments made in moments of reflection or through student feedback. What this process made clear is that there is no such thing as one-size-fits-all in teaching and learning. Each student is unique with different learning skills. It is up to the educator to stimulate these varying learning skills in students, achieving deep learning in the process.

Finally, a lack of formal support and guidance in a work environment can discourage practitioners who wish to adopt this mode of teaching. Assessing students via portfolio assessment methods can cause a disjunction between an educator's adopted teaching practices and institutional assessment policies. Which in turn can be

risky for the practitioner's career. Erickson and MacKinnon, (1991) sums this up by noting that achieving any kind of notable transformation either as an individual or as an institution in our view on learning will take practitioners or individuals who are willing to undertake risks both personally and professionally. Adding it will also demand an applicable supportive climate from institutions of Higher Learning structures to promote this type of inquiry-based learning.

# CONCLUSION AND RECOMMENDATIONS

## Conclusion

This paper aimed to examine assessment as a fundamental part of transformational teaching and learning in a Higher Education context during the COVID-19 era. Through self-reflective teaching practices, the paper offered insight into reflective assessment, teaching and learning techniques that can transform teaching and learning for both students and teachers. The study further contributed to the literature on reflective assessment, learning and teaching in Higher Education. Some of the findings from this study are that reflective teaching practices enhance student learning by encouraging critical thinking and equally, help educators develop habitual thinking that promotes ongoing career development. On the other hand, a lack of formal support and guidance in a work environment can discourage practitioners who wish to adopt this mode of teaching for fear of risking their careers. A case in point, assessing students via portfolio assessment methods can cause a disjunction between an educator's adopted teaching practices and institutional assessment policies.

## Recommendations

Based on the conclusion, the paper made the following recommendations:

• It is recommended that academic development programmes that focus on critical reflection on teaching, learning and assessment should be strengthened in higher education institutions.

• It is recommended that academics adopt transformational teaching, learning and assessment techniques that encourage students to share a new thing they have learned during the lesson.

• It is further recommended that academics encourage self-reflection through team presentations where the audience is asked to actively engage the presenters by asking questions and asking them to comment on the strengths and weaknesses they picked up in their peers' presentations.

# REFERENCES

1. Biggs, J. (2003). *Aligning Teaching and Assessing to Course Objectives. Teaching and learning in Higher Education: New Trends and Innovations*, 2(April), 13-17.
2. Biggs, J. & Tang, C. (2007). *Teaching for Quality Learning at University*. (3rd Edition), McGraw Hill, UK.
3. Boud, D., & Falchikov, N. (2006). Aligning Assessment with Long-term Learning. *Assessment and Evaluation in Higher Education, 31*(4), 399–413.
4. Carlson, T., MacDonald, D., Gorely, T., Hanrahan, S. & Burgess-Limerick, R. (2000). Implementing Criterion-referenced Assessment Within a Multidisciplinary University Department, *Higher Education Research & Development, 19*(1), 103-116,
5. Clarence, S., Quinn, L., & Vorster, A. (2015). *Assessment in Higher Education: Reframing Traditional Understanding and Practices*. Rhodes University.
6. Ellery, K. (2008). Assessment for Learning: A Case Study Using Feedback Effectively in an Essay-Style Test. *Assessment and Evaluation in Higher Education, 33*(4), 421–429.
7. Erickson, G. L., & MacKinnon, A. M. (1991). Seeing Classrooms in New Ways: On Becoming a Science Teacher. In D. A. Schön (Ed.), *The reflective turn* (pp. 15-36). Teachers College Press.
8. Giaimo-Ballard, C., & Hyatt, L. (2013) "Reflection-in-Action Teaching Strategies Used by Faculty to Enhance Teaching and Learning," *Networks: An Online Journal for Teacher Research, 14*(2). https://newprairiepress.org/networks/vol14/iss2/3/
9. Graham, G., & Claire, S. (2005) *Conditions Under Which Assessment Supports Students' Learning*. Learning and Teaching in Higher Education (1). pp. 3-31.
11. Luckett, K. & Sutherland, L. (2000). Assessment Practices that Improve Teaching and Learning in Makoni, S. (Ed). I*mproving Teaching and Learning in Higher Education: A Handbook for Southern Africa*. Witwaterstrand University Press.
12. Lyons, N. (1998). Reflection in Teaching: Can it be Developmental? A portfolio Perspective. *Teacher Education Quarterly*, 115-127.
13. McAlpine, M. (2002). *Principles of assessment*. University of Luton.
14. Padayachee, K., & Matimolane, M. (2021). Assessment Practices During Covid-19: The Confluence of Assessment Purposes, Quality and Social Justice in Higher Education.
15. Richardson, V. (1991). Book Review: The Reflective Turn: Case Studies in and on Educational Practice Donald Schön, Editor. Teachers College Press, 1991, 376 pp. 48.95cloth; 24.95 paper. *Journal of Teacher Education, 42*(4), 309-313.
16. RMIT University. (2008). *Developing Criterion-Referenced Assessment Tasks*. 1-3
17. Sadler, D. R. (2005). Interpretations of criteria-based assessment and grading in higher education. *Assessment and Evaluation in Higher Education, 30*(2), 175–194.

18. Schön, D. A. (1983). *The Reflective Practitioner: How Professionals Think in Action*. Basic Books.
19. Schön, D. A. (1996). *Educating the Reflective Practitioner: Toward a New Design in the Teaching and Learning in the Professions*. Jossey-Bass.
20. Schön, D. A. (Ed.). (1991). *The Reflective Turn: Case Studies in and on Educational Practice* (Vol. 131). Teachers College Press.
21. Shandomo M. H. (2010). The Role of Critical Reflection in Teacher Education. School-University Partnerships, *[online] 4*(1), pp. 101-112.
22. Stierer, B. (2008). Learning to write about teaching: understanding the writing demands of lecturer development programmes in higher education. In R. Murray, *The Scholarship of Teaching and Learning in Higher Education* (pp. 34 -44). McGraw.
23. University of Durham. (n.d.). *Principles of Assessment*. https://www.dur.ac.uk/learningandteaching.handbook/6/principles/
24. Welton, S. (2017). *Principles of Reliability* – Part 1 (Reliability). https://ittacademy.net.au/principles-assessment-part-1/