LIBERTÉ, ÉGALITÉ, FRATERNITÉ: CHANGING ERRONEOUS CONCEPTIONS OF CONTINUOUS ASSESSMENT

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ABSTRACT

Scholars agree that assessment drives teaching and learning, which highlights the fact that the purpose of assessment is to enhance learning. In the framework of self-directed learning (SDL), the benefit of assessment for learning is promotion of SDL skills, such as critical thinking. Yet, data gathered from staff and students from a university's education faculty during the first semester of 2023 (after three years of implementing continuous assessment) suggest that staff and students have distorted perceptions of continuous assessment and continue to struggle with it. Instead of being able to freely utilise the opportunity to promote learning in their respective disciplines, lecturers seem to be burdened by constraining programmes of assessment and administration, while students experience continuous assessment as nothing more than the challenge to complete multiple summative tasks, mostly in written form. This paper addresses misconceptions about continuous assessment in education. With the correct conceptual understanding comes the freedom to manage and facilitate assessment in diverse disciplines, to realise students' critical thinking skills. We aim to demonstrate what is possible across the faculty, to set a common goal of excellence in assessment, and to foster enthusiasm for exploring possibilities in training innovative teachers. The participants completed one open-ended questionnaire aimed at gauging

their assessment literacy. We share the findings that emerged from data analysis that involved assigning codes using ATLAS.ti™.

Keywords: Continuous assessment, Critical thinking skills, Formative assessment, Summative assessments

INTRODUCTION

Scholars agree that assessment drives teaching and learning, which highlights the fact that the purpose of assessment is to enhance learning. In the framework of self-directed learning (SDL), the benefit of assessment for learning is the promotion of SDL skills such as critical thinking. Continuous assessment (CA) fosters critical thinking by encouraging students to engage actively with the material, apply their knowledge in various contexts, and receive ongoing feedback. This iterative process helps students develop higher-order cognitive skills, such as analysis, synthesis, and evaluation, which are essential for critical thinking (Andrade and Brookhart 2020; Ibarra-Sáiz, Rodríguez-Gómez and Boud 2021). The findings of this research study, conducted at a higher education institution in South Africa, will shed light on staff and student perceptions of assessment and the role it plays in learning at the university level. In our global digital interconnected environment, society expects that higher education institutions (HEIs) provide students with the abilities needed for school and the workplace (Loh and Ang 2020). Critical thinking is acknowledged to be an important general skill, which contributes to academic and professional performance in the 21st century (Shaw et al. 2019). However, critical thinking skills, according to Saenab et al. (2021), are not innate; they must be developed and supported. We trust that the findings of this paper will clarify how such skills must be developed and supported when using CA in higher education contexts. With the correct conceptual understanding comes the freedom to manage and facilitate assessment in diverse disciplines, to realise students' critical thinking skills (Lubbe and Mentz 2021). Since the Covid-19 pandemic and consequent lockdown, teaching, learning, and assessment procedures have changed rapidly, with continuous assessment becoming the norm at many HEIs (Hedding et al. 2020). Based on this shift in the implementation of continuous assessment (CA) methods, it is necessary to examine its efficacy and sustainability in nurturing much-needed 21st-century skills. For example, in South Africa, a survey was conducted to assess students' experiences with the adoption of online CA after the Covid-19 pandemic (Fynn and Mashile 2022). According to the

findings, many students were not adequately prepared for the significant increase in workload that online CA involved, and it was found that the assessment formats used disadvantaged certain groups of students (Fynn and Mashile 2022). Yashim and Jibrin (2020) assert that successful CA adoption requires a working knowledge of its principles and processes. The current research adds to this working knowledge by exposing challenges or weaknesses in the implementation of effective CA in higher education. Scholars highlight that many CA techniques appear to integrate both formative and summative assessment functions, which complicates the issues educators face when trying to implement CA more effectively (Fynn and Mashile 2022; Hatt 2019; Muskin 2017). The aim of this study was therefore to determine how CA, which was implemented at the level of higher education during the pandemic, might aid in the development of 21st-century skills, such as critical thinking. Although research on the misconceptions of assessment in general is popular, research on misconceptions about CA among lecturers and students in higher education is scarce. This research highlights such misconceptions with a view to enhancing critical thinking skills when using CA.

Continuous assessment

CA is "a form of educational examination which evaluates student progress or performance throughout the duration of a course" (Obi and Obineli 2019, 1). The British Council of Teaching English (2019) agrees that CA is used to evaluate student achievement, but it explains that it does so through a series of activities and grades assigned, rather than emphasising one final work for evaluation purposes. CA is characterised by ongoing assessments and feedback conducted during the learning process, with the aim of improving student understanding (Rosidin et al. 2020). The purpose of critical thinking is to develop deep comprehension, which leads to long-term continuous learning (Fahmi et al. 2019). CA can help students develop critical thinking abilities, by providing benefits such as the following:

- It can serve both formative and summative assessment functions, formative in that it "allows educators to monitor and identify critical thinking competencies achieved by students, as well as provide feedback to improve the learning process" (Sánchez-Ruiz et al. 2021);
- CA is summative in the sense that it tries to evaluate students' critical thinking

competencies, by comparing their results to established criteria that correspond to curriculum goals (Sánchez-Ruiz et al. 2021);

- CA enables educators to be more flexible and imaginative in their instruction (Omonigho 2019);
- CA is beneficial in increasing student motivation, improving feedback practice and effectiveness, and assisting students in becoming self-reflective learners (Sánchez-Ruiz et al. 2021);
- CA evaluation occurs throughout the year rather than at the conclusion of the term or year, when most instructional procedures are nearing completion and assessment feedback therefore fails to increase learning (Mkimbili and Kitta 2020);
- CA uses a variety of evaluation techniques to adequately improve students' problem-solving skills (Mkimbili and Kitta 2020); and
- CA is comprehensive in the sense that it considers all the contexts and situations encountered during teaching and learning, as well as everything the student does during the learning process (Omonigho 2019).

To benefit from the advantages of effective CA, an understanding of its concepts and processes is necessary (Yashim and Jibrin 2020). Scholars have identified challenges and limitations that could hamper the effective implementation of CA, such as:

- The focus of students and educators may be on passing final examinations rather than achieving mastery of competencies (Mkimbili and Kitta 2020).
- Educators may lack the necessary training to conduct continuous evaluation in ways that assist the growth and enhancement of student competencies (Omonigho 2019).
- CA places significant demands on instructors' time, initiative, patience, objectivity, diligence, and resourcefulness, which can be viewed as an additional burden on teachers (Omonigho 2019).
- CA practices which involve students answering multiple choice questions and taking an examination do not allow for much variation in how students display their knowledge and skills (Mkimbili and Kitta 2020).
- Given the flexibility of CA (Omonigho 2019) and the use of various evaluation

techniques (Mkimbili and Kitta 2020), ensuring validity and reliability could be a challenge. For example, the standards employed by various educators during CA of students' work, may differ, which raises questions about the comparability of standards (Khan and Jawaid 2020; Omonigho 2019). This emphasises the importance of assessment literacy in implementing CA effectively and ethically.

- Large classroom sizes can make it impossible to deliver effective CA and provide constructive feedback (Mkimbili and Kitta 2020).
- Because CA can serve both formative and summative purposes, students may interpret formative assessment as summative, which would limit their engagement with it as feedback and thereby lower its learning value (Watling and Ginsburg 2019).

Critical thinking skills

According to Van Laar et al. (2020, 3), critical thinking refers to "making informed choices about obtained information and communication by using sufficient reflection and reasoning". Alsaleh (2020), however, asserts that no single definition of critical thinking applies to all disciplines at all levels. In the discipline of science, for example, critical thinking is defined by three skills: (1) higher cognitive skills, such as analysis, synthesis, and evaluation, (2) argumentation and judgment, and (3) interpretation and application of data to substantiate hypotheses (Thompson 2019). Nonetheless, the literature generally agrees that mastery of these skills requires students to be able to ask questions independently, give evidence, and synthesise their own thinking (Jiang et al. 2022). Practice is focused on enabling students to solve problems or achieve goals, by allowing them to make informed decisions about obtained information through sufficient reflection and reasoning (Rivas et al. 2022; Thompson 2019; Van Laar et al 2020). These skills only manifest after a process of development. This links to CA, which emphasises feedback during the learning process with the aim of improved learning (Rosidin et al. 2020). Reflection and reasoning during learning is only possible if feedback on skills development and learning strategies is prioritised.

Instruction models associated with improving critical thinking are based on constructivist learning theories (Saenab et al. 2021). In a constructivist learning theory, learning is seen as an active process of meaning-making that is constructed from experiences (Bada and Olusegun 2015). Research studies that advance the development and assessment of critical thinking assert

that it can be fostered through metacognition and problem-based methodologies (Rivas et al. 2022; Thompson 2019). Critical thinking is promoted in these ways by offering opportunities for students to become aware of their own thinking processes (Rivas et al. 2022). Although the above-mentioned studies provide a foundation for developing principles for critical thinking skills, Saenab et al. (2021) contend that problem-based learning methodologies are not always compatible with all subjects taught at university, and these methodologies can therefore not be refined to meet the needs of all subjects and disciplines. Rivas et al. (2022) state that techniques that focus solely on metacognition will be insufficient for promoting critical thinking, because non-cognitive components also play a role in critical thinking development. Using CA can overcome these inadequacies, because its nature is such that it necessitates the use of many ways and methodologies to examine student learning.

Continuous assessment includes ongoing assessments that provide formative feedback. This feedback assists students to reflect on their learning process by understanding their strengths and weaknesses. For example, in a study by Setiawan et al. (2019), CA allowed educators to monitor and identify critical thinking skills and provide targeted feedback to improve learning. Mkimbili and Kitta (2020) highlight that CA enhances students' ability to tackle diverse problems, hence providing problem-solving opportunities, which contributes to developing critical thinking skills through ongoing decision-making and reflection. Continuous assessment enables educators to design assessments that are flexible and imaginative, thus fostering an environment where critical thinking can flourish (Omonigho 2019). Exploring problems and topics from multiple angles and perspectives promotes critical analysis and synthesis of information. CA may, therefore, be a potential resource for promoting the development of a broad range of critical thinking skills across multiple disciplines.

The shift to CA in higher education, accelerated by the COVID-19 pandemic, has brought to light several critical issues that need thorough examination. The rapid transition to online CA methods has raised questions about its efficacy in developing essential 21st-century skills, such as critical thinking. As highlighted in the introduction, the pandemic has not only changed teaching and learning practices but also significantly impacted assessment methodologies, leading to varied student experiences and perceptions. Understanding how CA can be effectively designed and implemented to support critical thinking is crucial, especially in a post-

pandemic educational landscape where traditional assessment methods may no longer suffice. Addressing these issues is vital for informing policymakers and educators about best practices in assessment to enhance student learning outcomes and prepare them for the demands of the modern world.

Research question

This investigation aimed to explore the way CA can be designed and implemented in higher education to support the development of critical thinking skills, by establishing how CA is perceived by academic staff and students.

RESEARCH METHOD

An interpretivist research paradigm underpins this qualitative research. According to Tracy (2019, 51), "reality and knowledge are constructed and reproduced through communication, interaction, and practice". Therefore, it is assumed that "reality should be interpreted through the meaning that research participants give to their life world" (Fouché and Schurink 2016, 309–310). The interpretivist paradigm itself may introduce researcher bias in the interpretation of data. To address this, multiple rounds of coding and theme verification were conducted, involving peer debriefing to ensure the credibility and reliability of the findings.

Research design

A basic qualitative research design was followed to answer the research question, embedded in the interpretivist paradigm (Merriam 2009). This approach is appropriate for understanding how people interpret their experiences, construct their worlds, and attribute meaning to their experiences. By focusing on the lived experiences of both academic staff and students, the study aims to uncover the nuanced perceptions and misconceptions about CA. This design allows for an in-depth exploration of how CA can support the development of critical thinking skills, addressing the research question comprehensively.

Research participants

Twelve lecturers and 41 students in the undergraduate pre-service teacher programmes (the Bachelor of Education [BEd] degree and the Postgraduate Certificate in Education [PGCE]) at a university in South Africa participated in the study. (The PGCE is a professional teaching qualification aimed at graduates interested in a teaching career.) Since 2020, with the implementation of hard lockdown regulations due to the global Covid-19 pandemic, there has been a compulsory shift to implementation of CA practices in the education faculty of the university where the study was conducted. The participants were chosen to provide diverse perspectives on CA, given their direct engagement with its implementation. By including both students and lecturers, the study captures a holistic view of the misconceptions and practical challenges faced in higher education settings.

Data gathering process

Permission to invite lecturers to participate was sought from the Deputy Dean for Teaching and Learning, as well as the Executive Dean, of the education faculty of the university, while permission to invite students to participate was sought from the university's Research Data Gatekeeper Committee. Student participants were recruited via an invitation to participate, which was posted on the learning management system. The informed consent form was signed digitally before the online questionnaire was completed. Data was gathered by means of an online open-ended questionnaire (on Google Forms), as well as individual online interviews (on Zoom). One potential limitation of this study is the reliance on self-reported data, which may be subject to biases such as social desirability bias or recall bias. To mitigate this, data were collected anonymously, and participants were assured of the confidentiality of their responses, encouraging more honest and reflective answers.

Data analysis

Data was inductively analysed by means of the computer-assisted qualitative data analysis software ATLAS.ti™. Relevant quotations were identified and coded. After the process of categorising codes, themes were derived (Saldaña 2009). The themes allowed the researcher to discuss the data and draw certain conclusions in line with the aims of the research. This thematic

analysis enabled the identification of common misconceptions and insights into how CA is perceived and implemented, thereby addressing the research question.

FINDINGS

The findings of the study reveal three prominent misconceptions among students and lecturers that hamper the effective implementation of CA. These misconceptions are outlined and discussed below, with direct quotes from the participants to underline these points. Additionally, a comparison of lecturer and student perspectives is included to add depth to the analysis.

Misconceptions about CA

The first misconception was that CA has **no formal, or summative, assessment component**. This misconception was evident in 7 per cent of the student responses and 42 per cent of the lecturer responses. Students generally understood that CA includes various forms of assessment. For example, one student noted, "continuous assessment allows for ongoing feedback and multiple assessments, which helps in understanding the subject better over time" (Student 13). However, lecturers expressed more confusion. One lecturer stated, "I thought continuous assessment was purely formative and didn't realize it could include summative assessments like exams" (Lecturer B). This misconception points to a need for clearer communication and training regarding the dual nature of CA. Students generally perceive CA as a comprehensive approach to learning that combines both formative and summative assessments. In contrast, lecturers' misconceptions highlight a gap in understanding, suggesting that additional training and resources are necessary to align their perceptions with the intended practices of CA. While CA can and usually does make use of both formative and summative assessment (Hernández 2012; Muskin 2017; Petersen 2021), it is driven by assessment for learning, which is formative in nature (McDowell et al. 2007; Petersen 2021). CA is “ongoing assessment that takes a snapshot of the learning but still with the possibility for improvement” (Said Pace 2023, 343), and therefore it can be, and should act as, formative assessment, and if marks are needed, summative assessment is included. There seems to be a misconception that CA cannot make use of examinations or end-of-semester tests. If the examination is not the sole

contributor of a significant proportion of the overall mark, what is it other than an invigilated test that forms part of the CA process? The question is whether an examination is necessary and meaningful to lead to the desired learning outcomes. Although one also needs to acknowledge that in some contexts CA often has no overall mark, this is not the case in South African educational institutions, where module marks need to be awarded to determine if a student may progress to the following academic year. Thus, CA has a dual nature. Feedback and active participation throughout a course are therefore needed to ensure that the formative assessment purpose of CA is realised. What distinguishes CA from traditional assessment is that with the former there are multiple opportunities to apply knowledge and skills, and there is continuous feedback to improve said knowledge and skills.

The second misconception was that CA means that "students are allowed to do the same task over and over until they achieve a certain result or obtain a certain mark". This misconception was not found among students but was apparent in 67 per cent of the lecturer responses. For instance, Lecturer D remarked, "with continuous assessment, students should be given multiple attempts until they pass, which I find problematic." Another lecturer echoed this sentiment: "It becomes too easy for a student to pass a module because of the multiple opportunities" (Lecturer A). By contrast, students seemed to understand CA as a means to continuously develop their skills. One student commented, "continuous assessment helps us learn by doing and receiving feedback, not just by repeating tasks" (Student 8). The absence of this misconception among students suggests they grasp the developmental intent of CA, while lecturers' concerns indicate a need for more explicit guidelines on how CA should be structured to avoid repetitive task completion without meaningful learning. Considering this, it is necessary to emphasise that the main goal of CA is to ensure quality education, by enhancing quality learning throughout a semester or term, instead of waiting for the end of the semester to become actively involved in assessment (Yahya and Yamin 2014). Thus, the rationale for using CA is not for students to redo tasks until they obtain a certain mark so they can pass. Therefore, CA does not mean that every summative task should be redone until the student has accumulated sufficient marks to pass. However, a key characteristic of CA is that it is flexible (Muskin 2017). Lecturers should thus be motivated to use CA feedback to make important decisions about subsequent assessment in their modules (Muskin 2017), which implies that

should a lecturer deem it necessary to allow students to redo a certain task several times in order for the students to achieve the module outcomes, the lecturer should be given the opportunity to do so. Nonetheless, the purpose of CA is not for students to pass easily by just redoing, but rather to improve their skills and abilities, through continuous development, practice, and application of these skills.

The third and final misconception was that CA is a way for students to get marks easily and is cognitively undemanding. This misconception was evident in 7 per cent of the student responses and 42 per cent of the lecturer responses. Lecturers expressed concerns that CA might lower academic standards. For example, Lecturer E said, *"*for the weaker student it worked excellent, but the rest of the students did not like it, due to helping each other and receiving all good marks*."* Lecturer F had a similar response: *"*For the weaker student, yes, but for true marks, no*."* Another response read, "lecturers should be aware of the levels of Bloom's taxonomy and the NQF[i] [National Qualifications Framework] level of the year group. My opinion is the standard of education will become lower, and our students will not be ready for the profession*"* (Lecturer G). The pivotal role of the designer of the CA plan cannot be underestimated. If CA is perceived to be cognitively undemanding, it is because tasks used as part of the CA plan are not set at the desired cognitive levels. However, students highlighted the cognitive challenges presented by CA. One student shared, "the continuous assessments we do are varied and require deep understanding and critical thinking, not just rote memorization" (Student 5). This contrast suggests that while students perceive CA as rigorous, some lecturers fear it compromises academic integrity. The discrepancy between students' recognition of the rigor involved in CA and lecturers' concerns about its perceived leniency underscores the need for educators to experience and understand the diverse and challenging nature of CA tasks firsthand. With reference to Figure 1, most assessments contributing to the module mark clearly are pitched at higher cognitive levels, which highlights that it is a misconception to say that CA is cognitively undemanding.

The data reveal significant differences between lecturer and student perspectives on CA. Students generally view CA positively, recognising its potential to enhance learning and critical thinking. They appreciate the ongoing feedback and diverse assessment methods that help them

engage with the material more deeply. For example, Student 23 stated, "the portfolio's reflective element afforded me the opportunity to internalize the knowledge and apply it practically."

Conversely, lecturers exhibit more scepticism, often due to misunderstandings about the nature and purpose of CA. Their concerns about CA being too lenient or lacking rigor highlight the need for better training and support to align their perceptions with the intended outcomes of CA. Lecturer K mentioned, "there needs to be more clarity and support on how to implement CA effectively without compromising standards." These misconceptions lead to a distorted understanding of what CA entails and what its purpose is. Figure 1 serves as an example of effective CA. The figure illustrates that CA has a dual nature, in that it makes use of both formative and summative assessment. Additionally, it is clear that in this example the purpose of CA is not to complete the same task over and over, but rather to provide multiple opportunities to demonstrate a variety of skills. Finally, the figure also illustrates that the different tasks are not cognitively undemanding, but often require critical thinking, analysis, evaluation, and creation of presentations.

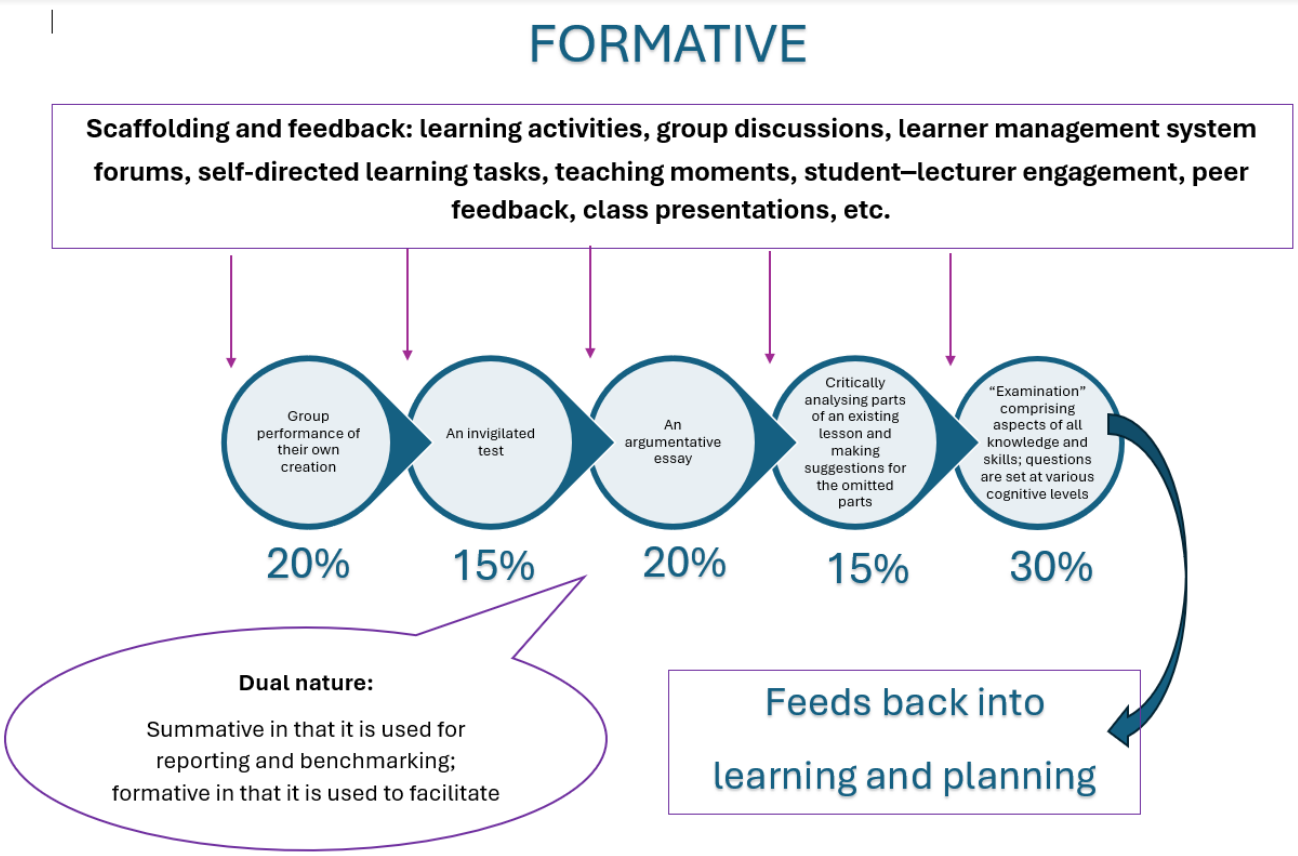

Figure 1: Clarifying the misconceptions about CA

Effective implementation of CA in higher education

Regarding the main aim of this study, which is to explore the way CA can be designed and implemented in higher education to support the development of critical thinking skills, it should be considered how effective implementation of CA can lead to ***liberté***, ***egalité***, and ***fraternité*** in higher education.

Liberté

Firstly, the findings show that CA develops self-directed learning (SDL) skills. This theme was apparent in 34 per cent of the student participant responses and 33 per cent of the lecturer participant responses. For example, Student 3 said, *"*The portfolio's has a reflective element that afforded me the opportunity to internalize the knowledge that I gained by reflecting on it, challenging myself to determine how well I understood the learning content and considering how I will be able to apply it in practice as a teacher.*"* Another student said that CA was beneficial as it helped to rectify mistakes, learn more about the content, and be strategic about how to overcome weaknesses in terms of content and skills (Student 23). Lecturer K mentioned that *"*they must now become critical thinkers, work independently and learn to tackle a situation creatively". This emphasises that CA encourages students to develop SDL skills. It is also worth noting that although not mentioned in the findings, one can deduce that being a self-directed lecturer could encourage students to become and remain assessment-literate. Thus, autonomous learning and SDL skills could lead to enhanced teaching and learning, thereby" liberating" students and lecturers from erroneous conceptions of CA that do not ensure deep and meaningful learning.

Secondly, it was found that CA develops higher-order thinking skills. This theme was apparent in 24 per cent of the student participant responses and 67 per cent of the lecturer participant responses. Although a fair proportion of the lecturer participants indicated that they believe that CA is cognitively undemanding, a substantial majority of the lecturer participants said otherwise. For example, Lecturer K said that CA ensures the *"*development of higher-order thinking, innovation and working in groups to solve challenging problems". Another lecturer said, "Students work on assignments over a longer period of time (e.g. software development)[,]

which cannot necessarily be effectively assessed in one assignment or a 3-hour exam" (Lecturer I). Some of the student participants agreed: *"*Using critical thinking skills with assignments through my own research. With formal assessments such as exams, I forget everything as soon as I walk out of the examination centre*"* (Student 5); "The approach shifted the focus on a different manner [,] instead just merely how many facts the student can recall on an exam paper*"* (Student 4). Thus, if higher-order thinking skills are encouraged by CA, they have the ability to lead to meaningful and lifelong learning, once again "liberating**"** students and lecturers from assessment practices that do not serve a sustainable purpose.

Finally, it was found that CA leads to sustainable learning and active involvement in the learning process. Although this theme was not evident in any of the lecturer participant responses, 44 per cent of the student participant responses reflected this theme. For example, the students mentioned: *"*It shows a more accurate picture of your understanding and allows you to be more involved in the subject*"* (Student 13); *"*I enjoy the […] deep involvement; […] it gives a true presentation [representation] of my ability to understand what I am learning over a longer period of time, instead of just grading me during one sit down session*"* (Student 9). Other responses confirm that CA leads to more sustainable learning and involvement among students: *"*The various assessment tasks really enabled me to grow [,] without the added pressure of memorising everything for an exam paper" (Student 11); "Continuous assessment allows for more practical application of the knowledge and skills gained[,] instead of just learning facts to pass an exam*"* (Student 31). It is thus clear that, as explained by a student participant, CA *"*makes learning much more meaningful in the long run*"* (Student 8). If lecturers and students could engage in meaningful CA that encourages sustainable learning and active involvement, they would be "liberated" from assessment practices that do not serve the purpose of lifelong learning, and where students are not actively involved as agents in the learning and assessment process.

Egalité

Effective CA could lead to equality in learning and assessment practices. A theme that emerged from the findings is that CA provides a variety of assessment opportunities as proof of learning. This theme was evident in 96 per cent of the lecturer participant responses, but in only 16 per

cent of the student participant responses. Student 24 stated that *"*it has given me an opportunity to experience and learn from various forms of assessment I can also use as an educator in the future*"*. Another student mentioned that *"*one bad assessment does not impact your overall grade as negatively as it would if we still worked on the one assignment one exam system", and that "having more opportunities to show your knowledge and mastery of the subject is preferable" (Student 20). This underscores the way CA caters for a diverse student population and assists in ensuring the student value proposition, by acknowledging different backgrounds, learning styles, strengths, and weaknesses. Students are provided with a fair number of tasks to apply their knowledge and skills. In addition, CA encourages the use of a variety of assessment tasks to contribute to an overall grade. This enhances **equality** in assessment, in that there are opportunities for all students to demonstrate their knowledge and skills in different ways.

Additionally, the data shows that student-centredness is a characteristic of CA. This theme was apparent in 17 per cent of the student participant responses and 67 per cent of the lecturer participant responses. Lecturer K maintained that *"*students stress less when they complete continuous assessments [,] because they realise the importance of working throughout the semester to achieve their goals*"*. Similarly, Student 9 stated that *"*as a mom of 2, full-time employed and studying, it took away the burden, stress and anxiousness of sit-down exams*"*. Student 10 said, *"*I love being creative[,] and that gave me an opportunity to express what I have learned in a creative way.*"* Thus, CA is student-centred in that it considers the contexts and needs of the students who are involved in the learning process. By catering for the contexts and needs of students, "equality" is enhanced, in that students have a fair chance over a longer period to develop and demonstrate their knowledge and skills. This acknowledges the needs of 21st-century students, who are expected to apply skills in the real world, rather than merely retaining knowledge. As an example, one might argue that not all students are able to function at their best under high-stress conditions, such as in a timed examination. With CA, however, learning is a process, and there are opportunities to prove skills development in less stressful situations that are more conducive to sustainable learning.

Fraternité

When considering how CA could lead to a mutual understanding of and shared goals for assessment, one must keep all stakeholders, such as students, lecturers, management, and policymakers, in mind. One theme that emerged strongly in the lecturer participant responses was that of **feedback**. Although not specifically mentioned in any of the responses, one could argue that feedback among various stakeholders could lead to improved assessment practices. For example, if lecturers provide feedback to management and policymakers on the support needed to implement effective CA, some of the barriers to effective CA could be addressed. Thus, feedback could serve a much greater purpose in attaining fraternity than just feedback between lecturers and students. From the findings of this study, it is clear that lecturers found giving feedback challenging, despite it being an integral component of CA. Most lecturer participants explained that they "wanted to give feedback that is more than just a mark" (Lecturer C), and that they wanted to spend time providing adequate and personalised feedback. However, due to constraints such as limited time, large class sizes, and apparent lack of interest in feedback among students, giving feedback was perceived as a great challenge. It is positive that the data shows that most lecturer participants acknowledged feedback to be an integral part of CA. However, not a single student participant mentioned feedback. This is concerning, as one can assume that the lecturers' efforts to provide clear feedback were not effective, as the students did not even mention it. Nonetheless, feedback is essential in formative assessment, as it creates a support network in which students are scaffolded and guided in their learning, and where lecturers also receive feedback from students and their performance regarding their teaching and assessment practices. Thus, feedback has the potential to create **fraternity** in education around effective CA and how it can be used to enhance teaching and learning. However, it is clear from this study that the efforts by the lecturers to provide feedback were not acknowledged by the students, and that the lecturers were constrained in their efforts in this regard.

DISCUSSION

In summary, there are certain misconceptions about CA that could hamper effective implementation thereof. These misconceptions are the belief that CA cannot have a summative component, the reduction of CA to mean only that students have multiple opportunities to complete the same task until they achieve a certain mark for it, and maintaining that CA is cognitively undemanding and is just a way for students to get marks easily. Such misconceptions point to assessment illiteracy. A very low proportion of student participant responses reflected these misconceptions, which shows that these misconceptions were mainly held by the lecturer participants. If these preconceived ideas about CA are held, assessment practices will not lead to critical thinking and effective learning. Although many lecturers and students acknowledged the potential of CA in ensuring self-directed, autonomous, and sustainable learning (liberty), catering for a diversity of students and learning styles (equality), and forming a support network for effective learning (fraternity), 40 per cent–60 per cent of the lecturer participant responses indicated a lack of understanding of what CA entails and what it aims to assess. The misconceptions about CA identified in this study align with existing literature, which underscores the need for a clear understanding of CA's dual nature and its potential to foster critical thinking skills (Mkimbili and Kitta 2020; Sánchez-Ruiz et al. 2021). The literature suggests that CA can serve both formative and summative purposes, providing ongoing feedback that enhances learning (Andrade and Brookhart 2020). However, misconceptions among educators about CA's role and implementation can hinder its effectiveness. Several policy and practice recommendations can be made to address these misconceptions and improve the implementation of CA. Firstly, professional development of educators can take place through training programmes, workshops and seminars. Institutions should offer comprehensive training opportunities that educate lecturers on the principles and practices of CA. These programmes should cover how to design assessments that balance formative and summative functions and how to provide effective feedback continuously. Regular workshops and seminars can help educators stay updated on best practices in assessment, andprovide a platform for sharing experiences and strategies. Secondly, clear guidelines and support can be provided to academic staff. Institutions should develop clear guidelines that outline the objectives, benefits, and implementation strategies for CA. These

guidelines should address common misconceptions and explain how CA can be effectively implemented across disciplines. Establishing support systems, such as assessment communities of practice or mentoring programmes, can assist educators in navigating the complexities of CA and ensure consistency in its application across different disciplines. Thirdly, staff and students should be supported in developing their feedback literacy. Emphasising the importance of constructive feedback in CA, institutions should encourage and support educators to provide detailed, actionable feedback that guides students' learning processes. Students should be encouraged and supported to actively engage with feedback, reflecting on their performance and using feedback to improve their learning. Institutions could implement workshops or courses on self-assessment and reflection to enhance students' feedback literacy. Lastly, students' assessment and feedback literacy development should be prioritised. Developing educational programmes focusing on assessment literacy can assist students in understanding the purpose and benefits of CA. These programs can include modules on critical thinking, self-assessment, and the effective use of feedback. We acknowledge the complexity of including additional modules to existing educational qualifications. Therefore, a more feasible approach would be to equip academic staff with the necessary skills to incorporate critical thinking, self-assessment, and aspects of assessment literacy into their existing modules. Additionally, students can be provided with resources and tools, such as guides on interpreting and using feedback, which can support their learning and development.

Institutions can take several practical steps to address the misconceptions about CA and enhance its implementation, including redesigning assessment tasks to ensure they are cognitively demanding and promote critical thinking skills. For example, incorporating project-based assessments, case studies, and authentic assessment tasks can engage students in critical thinking. Encouraging both educators and students to engage in reflective practices might assist in eliminating misconceptions about CA. Educators can reflect on their assessment strategies and seek feedback from peers and students, while students can reflect on their learning processes and feedback received. Creating collaborative learning environments where students can work together on assessments, share feedback, and learn from each other can enhance critical thinking and problem-solving skills through peer learning and support. Lastly, by conducting regular reviews and evaluations of assessment practices, staff can identify areas for

improvement and ensure alignment with institutional goals and educational standards.

This calls for the development of assessment literacy among lecturers. Another concern is that not one student participant mentioned feedback in any of their responses, which suggests that the formative purpose of CA might not have been realised as effectively as intended. Thus, to enhance CA, which would lead to critical thinking and deeper learning, lecturers' assessment literacy needs to be improved, and effective feedback needs to be provided by lecturers, while students need to acknowledge that feedback is an integral part of the CA process, by actively engaging with and using feedback as part of their learning.

CONCLUSION

This study highlights the importance of addressing misconceptions about continuous assessment (CA) to enhance its implementation in higher education and support the development of critical thinking skills. The findings underscore the need for clear communication, professional development, and comprehensive support systems to align educators' and students' perceptions of CA with its intended purposes.

To effectively implement or improve CA, educators and institutions can take the following concrete steps to create a more supportive and engaging learning environment: (1) Enhance professional development programmes, (2) develop clear guidelines and resources, (3) foster a culture of reflective practice amongst staff and students, (4) promote assessment literacy among students, (5) implement diverse assessment tasks as part of continuous assessment, (6) establish effective feedback mechanisms, (7) promote feedback literacy among staff and students, and (8) regularly review and evaluate assessment practices.

Future research should explore the long-term impacts of improved CA practices on student learning outcomes and critical thinking development. Additionally, studies could investigate the effectiveness of different training and support programmes for educators in enhancing their assessment literacy and CA implementation skills. Examining the role of technology in facilitating CA and feedback processes could also provide valuable insights for further improving assessment practices in higher education.

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