Assessment design as supporter or enabler of student learning at an open distance learning private higher education institution

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COMPULSORY DECLARATION

This work has not been previously submitted in whole, or in part, for the award of any degree. It is my own work. Each significant contribution to, and quotation in, this dissertation from the work, or works, of other people has been attributed, and has been cited and referenced.

Signature: Signed by candidate Date: 9 February 2024

Abstract

Assessment design has always been a topic of interest to researchers in higher education and often focuses on assessment as a tool to measure student achievement. Little research exists on assessment design itself, the role of the educator in designing and implementing assessments, judging the outcomes, and the impact of assessment design on student learning (Bearman, Dawson, Noud, Bennett, Hall & Molloy, 2016:545). While the literature suggests that assessment is an essential construct in shaping student learning, the alignment between what assessment literature calls for and the assessment design practices in place is falling short (Medland, 2016:87). Therefore, this study aims to investigate the relations and tensions that shape assessment practices to support or enable student learning at an open distance learning, private higher education institution. The aim is supported by four research questions: What does assessment practice mean for the institution? What types of assessments are set and why? What is the learning intention and learning outcome? What aspects lead to relations or tensions for assessment design? The study is conducted at a private open distance learning institution and focuses on a single programme accredited by an external regulating body from the Faculty of Accounting. A qualitative, approach is employed through personal interviews, focusing on formative assessment, or assessment for learning, with three educators within the programme. The critical data analysis is conducted with the help of Activity Theory to illuminate assessment design as an activity system, along with the tensions and contestations. Findings suggest that the institution regulates assessment design through its stance on assessment practice, the regulating body, and students as co-producers of knowledge. Educators use tools, such as textbooks, videos, and additional activities, to guide the design process but ultimately look to course demands, the regulating body, and student queries to determine learning intentions. Outcomes are judged based on specific key indicators educators deem necessary for student learning, and external, contextual, and personal factors enable or constrain the design process. The study contributes to the literature on assessment design and student learning by providing insights into how assessment design can support or enable student learning and highlights areas where improvement can be made to enhance the student learning experience further.

Keywords: *Assessment design; Assessment practice; Student learning; Higher education; Activity theory; Formative assessment theory; Discourse analysis; Social realism*

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Glossary

Assessment practice: the process that includes all elements of assessment, from conceptualising an assessment, to designing it, conducting moderation, facilitating the assessment to students, marking student submission, and providing students with feedback.

Assessment design: the act of considering what, when and how of assessment, and designing questions based on the theoretical concepts of the curriculum to promote student learning and students acquiring the needed competencies and skills.

Assessment literacy: the knowledge and understanding of educators on the purpose of assessment, and the ability to facilitate, assess and provide constructive feedback.

Course: a series of outcomes within a broader topic taught over a fixed period, that contributes to the curriculum of a programme and achievement of a qualification.

Formative assessment: assessment designed to encourage student learning, with either formal or informal continuous feedback throughout the student's learning journey, to encourage students to engage with the curriculum at a deeper level.

Open distance learning: an asynchronous form of learning within the higher education space, where students can study using online systems and tools, in a relatively flexible manner.

Summative assessment: an assessment with the aim of evaluating whether students have met the outcomes of a course, and whether they possess the necessary competencies and skills dictated by the course.

Chapter 1: Introduction

1.1 Introduction

Assessment practice has become a prominent topic amongst higher education (HE) researchers, and one that has been explored from multiple angles. While some researchers choose to explore the purpose of assessment in the South African HE space (Areekkuzhiyil, 2019; Pienaar, 2022), others choose to dive deeper and explore the underlying constructs that shape assessment practice (McLean, 2016). A particular area of interest is the impact of assessment design on student learning (Gipps, 1999; Biggs, 2003a; Gibbs, Simpson & Macdonald, 2003; Hernandez, 2012; Evans, Zeun & Stanier, 2014). From this body of literature, one area arises to which this study contributes, namely the ability of assessment design to support or enable student learning.

The conceptual framework for this study is laid out in this chapter. The following sections explore the context of this study, research problem, research question, research methodology, purpose and rationale, and an overview of the chapters that make up this dissertation.

1.2 Context: Assessment Design in South Africa

Bearman, Dawson, Boud, Bennett, Hall, and Molloy (2016:545) indicate that little research has been conducted on assessment design and the role of the educator in designing assessments, implementing assessments, and judging the outcomes. According to Mislevy and Riconscente (2005:1), and for the purpose of this study, assessment design is defined as the process during which an assessment plan is first drafted, after which questions or statements, rubrics, and mark allocations are developed. Assessment design is, therefore, a component in the greater process of assessment practice (Mislevy *et al.,*2005:1).

From a South African perspective, the educator is usually responsible for assessment design and is driven by the institution's stance on assessment practice. These educators often have little to no formal training in assessment practice and, therefore, assessment design (Sims, 2020:24). As a result, whether student learning takes place through assessment design becomes a point of concern.

Letseka and Pitsoe (2013) further reflect on assessment in open distance learning in South Africa by exploring the challenges associated with assessment design. The authors acknowledge that assessment design should promote the quality of teaching and learning, but they also state that setting appropriate criteria and high standards for learning quality should form the basis of assessment design, along with systematically gathering, analysing, and interpreting evidence to determine how student performance aligns with the assessment intention (Letseka & Pitsoe, 2013:197). The study indicates that if educators plan assessments in terms of learning needs and demands, the gap between assessment intention and assessment outcome can be closed (Letseka & Pitsoe, 2013:198). These views are corroborated by Brown and Knight (2004) who argue that assessment techniques are linked with the learning outcomes of a course and will promote student learning if learning outcomes are explicitly articulated in advance, shared with students, and aligned with assessment criteria that accurately assess student achievement.

A study on online assessment design as a means of supporting student learning conducted by Padayachee, Wagner-Welsh and Johannes (2018:227) advises that assessments for learning can be a valuable part of teaching and learning if design is carefully considered to empower students to engage with the knowledge. Padayachee *et al.* (2018:227), in agreement with Gibbs (2006:35), state that five design aspects should be considered that can contribute to student learning, namely the educator should have an appropriate timeframe set aside to develop high-quality tasks, a flexible integrated approach should be considered, there should be an optimum use of feedback systems, reduced assessment anxiety should be promoted through communication with students on basic assessment principles, such as fairness, unbiased assessment implementation and system integrity, and the formative and developmental nature of online assessments should be taken into account. The authors conclude that further evidence is required in terms of online assessment design's role in supporting student learning (Padayachee *et al.,* 2018:228).

Weideman (2021), on the other hand, considered construct validity in terms of language assessment design. The author proposes a systematic framework to enhance responsible assessment design and emphasises the need to identify and give shape to principles of assessment design that reach beyond what is considered valid. The author (Weideman, 2021) argues that what is considered valid for one educator, may not be considered as valid for another. Therefore, validity principles for assessment design can serve as guidelines for designing assessments, however, the application of the principles will have to be considered carefully in the context of the assessment, course, and field of study (Weideman, 2021; Van der Walt, 2012).

The above studies emphasise a very important component of assessment design, which is that if assessment design is carefully considered and planned for, it can enhance teaching and learning, student engagement with the curriculum, and therefore enable student learning. With the goal of assessment design being to drive student learning, it becomes important to understand educators' awareness and understanding of assessment design to understand how student learning is supported or enabled.

1.3 Research Problem

The study focuses on assessment design as supporter or enabler of student learning within an open and distance learning (private) HE institution. While research on assessment design can focus on many aspects, this study aims to understand how assessment design is currently understood and to what extent the current understanding produces student learning. To put this into context, three prominent areas of inquiry are highlighted below, namely the extent of consideration given to student- and course-specific demands when designing assessments, the extent to which educators are aware of the student learninging process and the impact of assessments on this, and the extent to which responses from students suggest that learning has occurred.

Assessment design is approached in various ways in HE, and the values upon which it is based express the views of the institution on the nature of learning (Birenbaum, 2003; Sambell, McDowell & Montgomery, 2012). Variations exist between institutions' assessment practices and between ways in which assessment design is implemented across different courses within the same programme (Gibbs, 2006:35). Institutions will, therefore, produce assessments based on what they perceive as valid and the areas of knowledge prioritised by educators. This is often done to overcome the challenge of adhering to the institution's policy on assessment practice, with little consideration given to student learning. To add to this is the dilemma of mass higher education currently experienced in the HE space (Irons, 2008:9). With the increasingly diverse body of students, the pressure on educators is increased to produce quality work (Irons, 2008:9). Prosser and Trigwell (1999) suggest that as a result, assessments do not always assess what is intended and will result in a difference between assessment intention and what is produced by students. Assessments that support, or enable, student learning should encompass the deliberate and holistic design of assessment and learning, which promotes a purposeful and enabling learner-centred approach (Birenbaum, 2003: Biggs & Tang, 2011). It should also consider the disciplinary differences across programmes and therefore, courses that make up the programmes (Gibbs, 2006:35). However, to what extent is this consideration towards course-specific needs and student learning put into practice and is this adequate to encourage student learning?

The minimum requirement for educators at HE level is often a master's degree or doctoral degree in the field of knowledge. While the educator will have the necessary expertise to teach within the field, the educator might not have the necessary awareness of student learning and the impact of assessments on this, other than to evaluate students' knowledge. Academics have been debating whether the methods used to assess students are linked to student learning (Carless, 2015; Douglas, Wilson & Ennis, 2012; Trevalyan & Wilson, 2012; Webber, 2012). Therefore, the question arises of to what extent educators are aware of the student learning process. This often raises issues in terms of how the assessment is constructed and how it contributes, supports, or enables student learning. According to Postareff, Virtanen, Katyavuori and Lindblom-Ylänne (2012), educators do not always link assessments and student learning with quality teaching, but view assessment as a practice of evaluation and for awarding grades (Sambell *et al.,* 2012; Torrance, 2012).

Assessments that are designed as a passive process to gauge students' level of knowledge can have an adverse effect on student learning (Ertmer & Newby, 2013). Assessments that support student learning should enable students to engage with the learning process, instead of merely focusing on marks (Sambell *et al.,* 2012). Students should, therefore, be able to implement previously acquired knowledge and skills, thereby assisting students to become independent learners (Sambell et al*.,* 2012; McDowell, Wakelin, Montgomery & King, 2011). Students' responses should elicit whether learning has occurred and should serve as evidence of learning. A topic of concern raised in the literature suggests that, while a wealth of knowledge exists to suggest that assessment is an important construct in shaping student learning, alignment between what the assessment literature calls for and assessment practices in place is falling short (Medland, 2016:87). This raises the final question of whether the current assessment design does lead to the occurrence of learning, as evidenced by student responses.

The institution selected for this study is an open, distance learning (private) HE institution that offers a range of degree qualifications, as well as post-graduate qualifications, diplomas, and higher certificates. The institution values quality and produces graduates of a significant level. Educators are appropriately qualified within the fields of knowledge and are well-versed in assessment design, as per the institution's requirements. Challenges faced by educators, though, include having to compensate for a wide variety of students that will undertake the assessment, while ensuring to abide by the institution's policy on assessment practice. With few educators having formal training in assessment design, skills in doing so have been acquired through informal training opportunities offered by the institution which all educators have to undertake. While these skills are adequate, it is necessary to understand the extent to which educators consider student learning when attempting assessment design, and whether assessment outcomes (student responses) indicate that the assessment intention was met, therefore producing student learning.

This study thus seeks to contribute to the literature on assessment design and student learning by providing insights into how assessment design can support or enable student learning. Exploring the current understanding of these concepts will highlight areas where improvement can be made to further enhance the student experience and therefore produce higher quality, independent, life-long learners. Educators and HE institutions will benefit from interrogating the tried-and-tested assessment methods, often taken for granted, that are used to construct knowledge (Pienaar, 2022:16).

1.4 Research Question

The research question is framed as follows: how does assessment design support or enable student learning at an open distance learning, private higher education institution? The aim is, therefore, to investigate the relations and tensions that shape assessment practices to support or enable student learning at an open distance learning, private higher education institution. As this study is specific to the context of an open distance learning, private higher education institution (see Chapter 4, section 4.4.1), the analyses and judgements are accordingly limited to this context. The question phrased above forms the purpose of this study.

To answer the research question, the following guiding questions inform this study:

1. What does assessment practice mean for the institution?
2. What types of assessments are set and why?
3. What is the learning intention and learning outcome of the different assessments?
4. What aspects constrain or enable assessment design?

Answering these questions will not only contribute to our understanding of how assessment design can support or enable student learning but will also highlight opportunities for improvement to current assessment practices.

1.5 Research Methodology

This study follows a qualitative approach underpinned by activity theory and social realism. Using a qualitative research approach is well-suited to the nature of this study as the aim is to develop an understanding of a phenomenon, which is the ability of assessment design to support or enable student learning (Quinlan, Babi, Carr, Griffin & Zikmund, 2019:128). This approach offers an opportunity to gather detailed, rich, and problem-specific information, which can easily be translated into themes and emerging trends required to answer the research question.

Activity theory effectively assists in studying and explaining human activities (Mwalongo, 2016:21). Driven by a set of principles, the theory proposes that an activity is a hierarchical structure consisting of multiple systems (Kaptelinin & Nardi, 1997:158). For the purpose of this study, activity theory is the lens through which assessment design for student learning is studied.

Activity theory proposes assessment design as a supporter or enabler of student learning, either occurring or not occurring due to social relations between the developer, students, course demands and student learning. It is well-suited to the nature of this study as it assists in making sense of a complex data set and sheds light on the social structure of assessment design as an individual activity as well as part of a system (Baran & Cagiltay, 2010).

Social realism contributes to the study as a philosophical underpinning and strengthens data analyses by offering a practical account of the assessment system (Luckett, 2012:340). Social realism essentially illuminates the reality of a phenomenon through a realist methodology that produces real outcomes (Spasser, 2002:90). Accordingly, social realism understands that social interactions are governed by customs, rules and the division of labour that can result in constraints and tensions within a social system (Spasser, 2002:90). Social realism paves the way for the implementation of activity theory along with the phenomenological paradigm and allows the researcher to delve deeper into the nodes of assessment design as an activity system.

1.6 Rationale and Purpose

The motivation for this study is fuelled by both personal experience and academic curiosity. From a personal perspective, I have observed that each institution has a bespoke approach to assessment practice, which often emphasises a learner-centred approach and quality assurance. While this is good standard practice, I want to understand whether these practices inhibit or promote the space for educators to implement assessment design at a level that not only considers the variety of students, but also the impact of assessment on student learning and the process that elicits such a practice. This has raised further questions on the matter, such as whether assessment practice does, in fact, encourage student learning and whether student responses elicit such practice. In other words, how can we claim that student learning has taken place because of assessment design?

Furthermore, from an academic perspective, this study seeks to contribute to the body of knowledge on assessment design and its ability to support or enable student learning in the HE space through the literature review and findings. Ultimately, the findings of this study seek to highlight the level of awareness amongst educators on assessment design and student learning, while further highlighting what improvements can be made to further student learning because of assessment design. This study, therefore, could be used by both HE institutions and educators alike.

Chapter 2: An Analysis of Assessment Design and Student Learning

2.1 Introduction

Assessment design as a topic has always interested researchers in Higher Education (HE) and is one that often focuses on assessment as a tool to measure student achievement (Joughin, 2009:1). Four prominent themes in the literature are identified, namely defining assessment not only as a practice, but as a component of student learning, the concept of assessment as a driving force of student learning, whether changes in assessment can improve students' approaches to learning, and lastly, the concept of feedback in theory versus its implementation (Gibbs, Simpson & Macdonald, 2003; Bennett, 2011; Fuentealba, 2011; Hernandez, 2012; Joughin, 2009:13; Areekkuzhiyil, 2019). While each of these is important, this study considers the first two of these themes.

Therefore, the purpose of this chapter is to explore the literature on assessment design and student learning to ultimately understand the relationship between these two components in the HE space. Such an understanding will contribute towards judgements drawn on the ability of assessment design to support or enable student learning, and how this process can be facilitated.

This literature chapter starts by considering the relationship between assessment and student learning, followed by an overview of assessment-for-learning and factors influencing assessment design and formative assessment. The chapter includes contributions from prominent studies within the field that contribute to both the aim of this chapter and this study.

2.2 The Relationship Between Assessment and Student Learning

Assessment is often described as defining the actual curriculum, as students learn what they believe they will be tested on (Biggs, 2003b:182; Joughin, 2009:17). Gibbs (2006a:23) claims that "assessment frames learning, creates learning activity and orients all aspects of learning behaviour", while Bryan and Clegg (2006:1) believe that students employ cue-seeking techniques concerning work that was assessed. These statements support the belief that assessment determines the direction of student learning while also acting as a catalyst for engaging with the curriculum. The literature on assessment and student learning is extensive and often focused on a specific assessment component or the student learning experience. However, formative assessment can contribute to student learning in the following ways (Irons, 2008:17; Gibbs, 2006b; Knight, 2001:8; Black & Wiliam, 1998; Marshall & Rowland, 1998).

1. Design learning sequences embedded in formative assessments can stimulate learning-rich dialogues between the student and educator;
2. Formative assessments hold less risky stakes than summative assessments, which means students are more likely to experiment and take risks;
3. The opportunity for feedback on students' assessment outcomes and learning needs is great;
4. Independent learning can be greatly enhanced;
5. It aids the development of students' self-assessment practices and skills;
6. Reflective learning can be improved; and
7. Increased opportunities are provided for peer- and self-evaluation.

Rowntree (2007) believes that assessment plays a variety of key roles in student learning. In Rowntree's (2007) article on the main strategic issues with assessment systems, the author identifies six ways in which a properly designed assessment can positively impact students' learning (Rowntree, 2007):

- Students are reminded that their learning is taken seriously;
- The most important constructs in the course are highlighted, reminding students of what is most worth learning;
- Students' efforts are directed towards key aspects of the content;
- Students are engaged in learning activities that are subject-appropriate;
- Students' strengths, weaknesses, and learning styles are revealed, enabling them to focus on their improvement; and
- Feedback is given to students, which further enables their improvement and learning.

These roles highlight not only the potential benefits that assessment holds for the student learning experience but also serve as a guideline for assessment developers. Rowntree (2007) states that awarding marks or grades should not be the sole focus of an assessment, but the assessment should assist in reaching a conclusion on the standard attained by the student, as well as the effectiveness and quality of the course.

Khan (2012:580) adds that an effective assessment should ultimately focus on four key components, namely the assessment should benefit the student in terms of their educational journey, the information the student attains through participating in the assessment should be useful, the performance criteria should identify positive achievement, and the assessment techniques should be appropriate and valid for the student's learning experience (Kan, 2012:580).

If these components are considered and action is taken to ensure the assessment benefits the student's learning experience, assessment will no longer be seen as a mechanical process but one that adds value to the student's learning experience and contributes to its improvement (Khan, 2012:581).

Two prominent studies that speak to the nature of assessment as a determinant of student learning specifically, are that of Snyder (1971) and Miller and Parlett (1974). Snyder's (1971) study, *The Hidden Curriculum*, focussed on first-year students from two institutions in the United States of America (USA), through which the author concludes that students are cue-seekers and motivated by the desire to achieve high grades. Snyder (1971) states that students will listen for topics that are emphasised by the educator and take that as a cue on what should be studied for assessment purposes, therefore directing their learning.

Miller and Parlett (1974) build on Snyder's findings and suggest that students look for certain 'cues' sent by the educator on what is important, such as tips on what assessments will focus on, topics favoured by the educator, and topics included in tutorials and class activities. The authors state that students will use such cues to direct their learning, either by being sensitive towards cues or by actively seeking cues by approaching the educator (Joughin, 2009:17).

Other studies further attempted to describe the relationship between assessment and student learning or argue the effectiveness of innovation in assessment practice. Gibbs and Simpson (2003) attempted to measure the consistency of students' efforts over a semester using the Assessment Experience Questionnaire (AEQ). From this study, the authors determined that assessment has a degree of influence on the distribution of effort and engagement with the syllabus (Gibbs & Simpson, 2003). Although, it is noted that the strength of this influence and whether it applies more to some students than it does to others, is unclear (Joughin, 2009:19).

Gammon and Lawrence (2006) considered the concept of flow as an innovative method that can improve the student learning experience. Flow theory describes the experience derived from situations that bring the participant enjoyment, satisfaction, and spontaneity (Gammon & Lawrence, 2006:132; Csikszentmihalyi, 1975). The implementation of flow theory involves balancing skills and challenges while stating clear goals and the ability to provide immediate feedback to the participant (Gammon & Lawrence, 2006:132). The authors conclude that the use of flow theory in assessment practice can positively influence students in terms of reduced performance anxiety, increased enjoyment, an increased student learning experience, and can ultimately invoke life-long learning (Gammon & Lawrence, 2006:132).

Evans, Zeun and Stanier (2014) argue that the outcome of any formative assessment should be one that ultimately improves student learning by informing students of the required levels of learning, highlighting gaps in their learning, and providing feedback on how to close those gaps. The authors' study on the use of formative assessment as a way of motivating students makes use of a mixed methods approach to assess students' usage and reactions to formative assessment (Evans *et al.,* 2014:299).

A more recent study conducted by Khamlichi and Chkirbane (2022) aims to investigate the impact that the attitudes of students in Morocco have on learning strategies. Employing a mixed methods approach, the authors conclude that despite a generally positive attitude towards assessment practice, the method of assessment impacts student learning (Khamlichi & Chkirbane, 2022:538). The authors suggest that the sole reliance on conventional assessment methods results in assessment becoming mechanical and the focus is placed on awarding marks or grades (Khamlichi & Chkirbane, 2022:549). Instead, it is suggested that a shift from conventional assessment methods towards alternative, innovative methods will not only motivate students to engage with the curriculum at a higher level but will also result in more enriching student learning (Khamlichi & Chkirbane, 2022:549).

The above overview on the relationship between assessment and student learning agrees on two aspects. Firstly, all studies agree that assessment significantly influences student learning, including assessment serving a motivational purpose, contributing to the development of skills and abilities, and acting as a form of knowledge acquisition itself. Secondly, feedback serves an important role in assessment practice, as it not only provides the student with insight into their weaknesses but also provides guidance and direction on how to overcome such weaknesses and improve their learning.

2.3 Assessment-for-Learning

Assessment-for-learning is defined as an ongoing evaluation process of students' learning (Khamlichi & Chkirbane 2022:3) and is also referred to as formative assessment (Yüksel & Gündüz, 2017:339). It serves as an informative measure where feedback is obtained and used to adjust and improve instruction and learning, as well as to improve the curriculum (Khamlichi & Chkirbane, 2022:3).

A key element of formative assessment is the ongoing interaction between the student and the educator (Schildkamp, Van der Kleij, Heitink, Kippers & Veldkamp, 2020:2). Therefore, formative assessment should take place on an ongoing basis and can take various forms, including conversations, practical demonstrations, portfolios, paper-and-pen tests, peer assessment, and self-assessment (Schildkamp *et al.,* 2020:2). The focus is then placed on student-educator interaction, in whichever form, and the stimulation of dialogue during which the student discovers, reflects on, understands, and reviews knowledge acquired (Schildkamp *et al.,* 2020:2; Hargreaves, 2005). The educator should have the necessary skills to identify evidence of student learning, use it to make judgements about the level of student learning that took place, and then be able to use such information to make instructional decisions and provide feedback to students (Schildkamp *et al.,* 2020:2; Bennett, 2011).

Formative assessment is meant to improve students' learning; therefore, feedback plays an important role in students' progress towards achieving the learning outcomes (Robinson & Udall, 2006:93; Biggs, 2003b; Knight, 1996). However, feedback that is given timely and regularly and that closely relates to the learning outcomes, best supports the student's learning process (Robinson & Udall, 2006:93). Robinson and Udall (2006:93) further add that while this type of feedback influences student learning, feedback given when prompted by the student's inquiry is more effective and the student will thus draw greater meaning from the feedback. Therefore, formatively assessing students in a manner that will initiate critical reflection may cause students to shift their focus to the progress they are making in terms of achieving the learning outcomes, because of the feedback they sought (Robinson & Udall, 2006:93). The challenges herewith include that students might not want to fully engage with the formative assessment activity, students might not use the feedback to further their progress, it increases the educator's workload, and the student often sees feedback as criticism from the educator (Robinson & Udall, 2006:94).

Boud and Molloy (2013) developed and analysed two models of feedback. The first model positioned educators as the drivers of feedback (Boud & Molloy, 2013:698). The second model positioned the student as the driver of learning through generating and soliciting their own feedback (Boud & Molloy, 2013:698). While the first model is believed to have an impact on the immediate task, the second model equips the student beyond that and does not mislead the student towards false promises of what the course cannot deliver (Boud & Molloy, 2013:698). The authors further suggested that the second model highlights the importance of curriculum design in creating opportunities for students to develop the ability to judge their own learning (Boud & Molloy, 2013:698).

Zhang and Zheng (2018) investigated the feedback practices and perceptions of lecturers and students at a university in the United Kingdom (UK). The aim was to explore the practices and perceptions of feedback and its use as a tool for learning (Zhang & Zheng, 2018:1128). The authors determined that differences exist between understanding and the significance of feedback among lecturers and students (Zhang & Zheng, 2018:1128). While students believe that feedback represents aspects that should be considered for future assessments, lecturers tend to emphasise the student's role as a co-producer of knowledge and guidance for future assessments (Zhang & Zheng, 2018:1128). The authors claim that suggestions and the use of vague language are useful when giving feedback to students, as this does not impose the lecturer's ideas on the student, but instead encourages the student to reflect on the feedback received (Zhang & Zheng, 2018:1130). Zhang and Zheng (2018:1130) advise that indirect feedback, given through asking questions such as what, how, who, and when, tends to develop awareness and self-learning capabilities more effectively and provide students with reflective opportunities.

More recently, innovative approaches to assessment have been considered, such as gamified learning, or gamification (Subbash & Cudney, 2018:192). Gamification allows interactive learning in the classroom by incorporating game elements such as badges and levels to capture students' attention, motivate, enhance teamwork and communication, and promote positive competition (Subbash & Cudney, 2018:192). Findings from the systematic review conducted by Subbash and Cudney (2018) indicate that gamified learning and teaching systems can improve student engagement with the curriculum, motivation toward goal achievement, and overall performance.

Students' different approaches to learning should also be recognised for formative assessment. Assessment methods and tasks influence students' approaches, which require educators or designers of the assessment to avoid the exclusive use of conventional methods (Boud, 1995; Struyven, Dochy & Janssens, 2005; Wen & Tsai, 2006). A combination of conventional and alternative assessment methods has a greater impact on the development of students' skills and capabilities (Pereira *et al.,* 2016:1010).

Carless and Boud (2018) believe that feedback is the most important influence on student achievement. The authors (2018:1315) propose four interrelated features as a framework that underpins students' feedback literacy: appreciating feedback, making judgements, managing affect, and acting. Within this framework, it is proposed that educators play a facilitative role through curriculum design, guiding and teaching (Carless & Boud, 2018:1315).

Similarly, Malecka, Boud and Carless (2022), in their study on mechanisms for embedding student feedback literacy within the curriculum, state that students' feedback literacy should contribute to the development of a capacity to make the most out of feedback through active involvement in the feedback process. To embed feedback mechanisms within the curriculum, the authors advise that eliciting information to improve learning, processing feedback information, and enacting outcomes of processing of feedback information should be considered key mechanisms (Malecka *et al*., 2022:908, 91).

Lastly, Boud and Dawson (2023) developed a feedback literacy competency framework representing the competencies required of educators to design and enact feedback processes effectively. The competencies identified include macro, mesa and micro competencies. Macro competencies include aspects related to the programme design and development, such as strategic planning, resource utilisation, and creating authentic feedback-rich environments (Boud & Dawson, 2023:162). The meso competencies relate to the course design and implementation, including maximising effects of limited opportunities and optimising timing, location and sequencing of feedback (Boud & Dawson, 2023:162, 164). The micro competencies include feedback practices that relate to individual student assignments, such as identifying and responding to student needs, crafting appropriate inputs, and differentiating between varying student needs (Boud & Dawson, 2023:162, 166).

With a combination of assessment-for-learning techniques that include both conventional and alternative assessment methods, the institution can not only determine whether a student can be awarded the applicable credentials but also that the graduate has the necessary skills and capabilities to succeed in the working environment. This, coupled with effective feedback practices, causes students both to enhance their understanding and become mindful of their own learning.

2.4 Factors Influencing Assessment Design

Various factors will have an influence on the educator's conceptions, experiences, and preferences in terms of assessment design. This includes personal and contextual factors.

Both internal and external factors influence educators' decision-making about assessments. Internal factors relate to the educator's personal and professional values, which can differ from educator to educator (Izci, 2016:2775). Such factors include beliefs, values, conceptions, attitudes and emotions, perceptions, assessment literacy, and professional identity. Beliefs and values: The beliefs and values adopted by educators, including their view on and support of student learning, willingness to provide a variety of assessment strategies, and their ability to encourage student engagement with the assessment process will influence assessment design (McMillan, 2003:36).

1. Conceptions: Conceptions are rooted in educators' beliefs about good teaching, how meaning is constructed, and what should be focussed on in teaching (Kálmán, Tynjälä, & Skaniakos, 2020:597). Educators who conceive the purpose of teaching to be that of transmitting knowledge are likely to conceive assessment as something that follows the occurrence of learning, rather than something that enables learning (Halinen, Ruohoniemi, Katajavuori &

Virtanen, 2014:17). Educators' conceptions of assessment are as much influenced by personal factors as existing practices influence it in the institution and academic environment (Halinen *et al.,* 2014:17).

2. Attitudes and emotions: The educator's attitude towards teaching, learning, and assessment will affect assessment design (Izci, 2016:2775). The literature suggests that educators who harbour a positive attitude toward the role of assessment in student learning are more likely to deliver assessments that support or enable it (Lee & William, 2005). It is further identified that assessment design can evoke both positive and negative emotions, which includes issues of assessment validity, assessment methods, pedagogical development, and assessment culture (Myyry, Karaharju-Suvanto, Vesalainen, Virtala, Raekallio, Salminen, Vuorensola & Nevgi, 2020:1). Regulation of negative emotions towards assessment design can significantly improve this practice (Myyry *et al.,* 2020:1).
3. Perceptions: Perceptions are understood as how people give meaning to experiences and are used to evaluate others (Black, Harrison, Lee, Marshall & William, 2003). Educators who perceive their role to be a promoter of student learning are more inclined to deliver assessments designed to enable student learning (Black *et al.,* 2003).
4. Assessment literacy: Expertise in and knowledge of assessment design, domain-specific knowledge, and practical experience has a considerable influence on assessment design (Berendonk, Stalmeijer & Schuwirth, 2013:568; Medland, 2016:88). A positive correlation is found between the length of experience with assessment design and the educator's confidence in designing assessments that support student learning (Goos & Hughes, 2010:315).
5. Professional identity: Most educators in the HE space have not been trained to teach, although they possess the necessary expertise in the field in which they teach (Cantillon, Dornan & de Grave, 2019:1610). According to Alsup (2006), there exists an interface between oneself, as the educator, the environment, and others that contribute to shaping the professional identity. This identity is continuously changing and adjusting. However, the professional identity that is assumed by the educator influences the approach used for assessment design (Stenfors-Hayes, Weurlander, Dahlgren & Hult, 2010:399).

Contextual factors, on the other hand, relate to teaching context, which includes the institution, discipline, and realities (Izci, 2016:2777). Sims (2020:52) identifies two prominent contextual factors that influence assessment design, namely institutional, departmental, and disciplinary factors, and internal support. Izci (2016:2777) and Waitling and Ginsburg (2019) add social and cultural preferences to contextual factors that will influence assessment design. These factors can act as a barrier to assessment design in the sense that educators are limited by certain practices or aspects, or they can facilitate such practices (Sims, 2020:52).

1. Social and cultural preferences: Student learning is not the sole product of the mind, but is shaped by beliefs, values, and practices reflective of the educator, institution, society, and culture (Waitling & Ginsburg, 2019:80; Izci, 2016:2778). Society and culture will influence the teaching, learning, and assessment practices of an institution as well (Waitling & Ginsburg, 2019:80; Izci, 2016:2778). As a result, such practices often influence the uptake, use, and significance of assessment (Waitling & Ginsburg, 2019:80).
2. Institutional, departmental, and disciplinary factors: This includes the department and institution's view on assessment practice and how it is advocated for across the institution through policies, guidelines, and best practice standards. It also includes requirements as set out by external bodies of accreditation, such as the South African Quality Association (SAQA), and disciplinary requirements. Organisational, institutional, departmental, and disciplinary aspects can either become a barrier to quality assessment design, or it can be a facilitator (Van Lankveld, Schoonenboom, Volman, Croiset & Beishuizen, 2017:330). Oftentimes, when the institution, department, or discipline offers an unsupportive and resistant environment, the educator's ability to design assessments that are student-centred will be negatively influenced. A supportive and accepting environment, on the other hand, will result in a supportive community of practice that encourages student-centred assessment design.
3. Internal support: This includes time, motivation, and professional support for educators to ensure student-centred assessment design (Izci, 2016:2777). Time should be awarded to educators to learn new assessment strategies and to discuss challenges they face with colleagues (Izci, 2016:2777). Sims (2020:52) adds that a large workload, conflicting responsibilities, costs, and the availability of resources will have a further influence on assessment design. The institution and knowledge and attitudes of departmental heads play a significant role in motivating the adoption of student learning-centred assessment design, encouraged by policies and practices reflexive of this (Carless, 2005; Popham, 2008). Furthermore, professional development and training, often enforced by the institution as support mechanisms to teaching practice takes place after the individual has taken on the role of the educator (MacPhail, Ulvik, Guberman, Czerniawski, Oolbekkink-Marchand & Bain, 2019:848). However, professional development can enhance or change educators' assessment practices to ensure a greater quality of student learning takes place (Van Schalkwyk, Leibowitz, Hermann & Farmer, 2015:5).

Factors that influence educators' decision-making when designing assessments were considered in a study in New Zealand (Edwards, 2020). The findings from this qualitative study agree that contextual and personal factors influenced educators' decision-making in terms of assessment actions (Edwards, 2020:379). Contextual factors that were found to either facilitate or inhibit assessment design include social and cultural factors, while personal factors were found to include educators' beliefs about assessment, ethical matters relating to assessment design, and educators' emotional responses to assessment (Edwards, 2020:387). The study thus advises that lecturer cognizance should be present in terms of personal and contextual factors that will impact, amplify, or filter assessment practice decisions (Edwards, 2020:379).

In response to the importance of assessment conceptions, Hodgson and Garvey (2019) reported on lecturer and student conceptions of assessment in a Biomedical Science degree. A quantitative approach was used to gather direct responses from lecturers and students (Hodgson & Garvey, 2019). The responses indicate a misalignment between two concepts. Firstly, students perceive assessment as a reflection of institutional quality as important, and secondly, students do not believe that assessment can be used to modify teaching practices (Hodgson & Garvey, 2019). Thus, the study advises that the identification of assessment conceptions among educators is important when trying to improve student learning (Hodgson & Garvey, 2019).

Norton, Floyd and Norton (2019) explored lecturers' views on assessment design, marking, and feedback through two questionnaires. The study aimed to explore the existence of assessment professionalism in terms of three inter-related elements of assessment in a broad sense, which includes lecturers' perceptions and beliefs, perceived challenges to professional assessment practice, and possible effects of the discipline in which the lecturer operates (Norton *et al.,* 2019:1209). Two universities in the UK participated in the study, with a total of 356 participants. The findings indicate the existence of assessment professionalism in current assessment design practices, with challenges to assessment design being time, workload, and the cost of assessment (Norton *et al.,* 2019:1216). It is worth noting that the study also found little incentive for lecturers to innovate their assessment practices as a further challenge to professional assessment practice (Norton *et al.,* 2019:1216). Lastly, the findings indicate that subject disciplines are not only important to assessment practices but should also be considered when describing assessment practices (Norton *et al.,* 2019:1218).

Activity theory highlights the personal and contextual factors through *rules*, *community*, and *division of labour,* which includes unwritten and tacit rules, such as values and norms, and the written rules governing the activity system (McMillan, 2011:5). Social realism further recognises the educator as an active agent in the activity system with cultural historical background and offers a way of understanding how factors, such as the below, influences the activity system (Spasser, 2002:90; Allen, Brown, Karanasios & Norman, 2013:836). An interdependence on customs and rules can often lead to constraints and tensions within the activity system that can be illuminated by activity theory.

2.5 Conclusion

This chapter aimed to review the literature on assessment design and student learning. Three topics were discussed, namely the relationship between assessment and student learning, an overview of assessment-for-learning, and the factors that influence assessment design.

Existing literature on assessment is vast but tends to focus on lecturer-student perceptions of assessment and feedback and selection of assessment methods. How assessment is understood has undergone transformation, where assessment is now understood to be of greater influence on the teaching and learning process, rather than merely awarding a mark or credentials. While the true purpose of assessment is generally understood, the implementation and use thereof differ from institution to institution. Assessment design specifically, has, however, become complex. It now plays multiple roles in the student learning process, including a motivational role, it forms a point of inquiry, enhances student engagement with the curriculum, and serves as a way of acquiring knowledge itself. This shift causes an impact on the educator, where the decision-making actions relating to assessment design should also consider the impact that the assessment will have on the student's overall learning experience. Therefore, alternative methods of assessment, such as peer evaluations and practical examinations, are being considered more frequently. Educators must understand the role and impact of assessment design on student learning, to avoid misalignment between assessment input (design) and outcome. Care should be taken during assessment design to consider student learning and the contribution the assessment makes to the overall student learning experience. The literature further highlights that the field of study, or subject in which assessment is conducted, should be considered as it will influence assessment practices.

The results from this literature review contribute to an understanding of the components that should be considered when exploring assessment design as a supporting or enabling aspect of student learning. This study hopes to add to the literature and broaden the understanding of assessment as a supporter or enabler of student learning.

Chapter 3: Theoretical Framework

3.1 Introduction

This study is concerned with understanding assessment design as a supporter or enabler of student learning, and is guided by the research question *how does assessment design support or enable student learning at an open distance learning, private, higher education institution?* In chapter 1 the background and context of the study were presented, and a review of the relevant literature was presented in chapter 2. This chapter aims to present the theoretical framework that informs the research question, approach to research, methodology, and findings.

Quinlan, Babin, Carr, Griffin and Zikmund (2019:9) state that concepts are fundamental to research and form the building blocks of theory, and theory, in turn, is fundamental to academic research. This study makes use of activity theory as a theoretical lens. Embedded within this lens, the construct of formative assessment theory will be used to inform the data analyses and is, therefore, critically reviewed as well.

3.2 Theoretical Framework: Activity Theory

Activity theory is driven by a set of principles that view an activity as a hierarchical structure, consisting of multiple systems (Kaptelinin & Nardi, 1997:158). The activity is a unit of analysis motivated by an object that guides the activity (Kaptelinin & Nardi, 1997:158). The theory states that, for the activity to be fulfilled, goal-directed actions must be taken conscientiously, often through automatic operations (Kaptelinin & Nardi, 1997:158). Such operations provide a stimulating environment to make and adjust goal-directed actions (Kaptelinin & Nardi, 1997:158). The components of activity theory are not fixed but exist in a dynamic and changing environment (Kaptelinin & Nardi, 1997:158).

The following section provides an analysis of activity theory, the evolution of the theory since it was first conceptualised, and its applicability to this study.

3.2.1 Understanding the Activity System

An activity system consists of various components, namely rules, the community, division of labour, subject, tools, object, and outcome (Peruski & Mishra, 2004; Hardman, 2005; Murphy & Rodriguez-Manzanares, 2008a; Cliff, Walji, Mogliacci, Morris & Ivancheva, 2020). These components are not static, nor do they exist in isolation, but continuously interact dynamically with other components, creating the contradictions and tensions mentioned previously (McMillan, 2011:5).

This view of activity theory has evolved over three generations (McMillan, 2011:5). The first generation of activity theory included three essential elements, namely subject(s), object(s), and tool(s) (Figure 3.1). The subjects are the individuals, or subgroups, who are involved in the activity, such as the assessment designer (Cole, 1996). The focus of the first-generation activity theory is on the relationship between the subject and object as mediated by the tool (artefact) (Engeström, 2015: xiv). Vygotsky (1997:86) solidified the idea of mediation and described this model as a "complex, mediated act." This model highlights that the individual can no longer be understood without cultural means, and society can no longer be understood without the agency of individuals who utilise and produce artefacts (Engeström, 2015:xiv). The first-generation model had one limitation, though, that being the unit of analysis remained individually focused and did not explain the collective nature of the activity (Engeström, 2015:xiv; Gedera & Williams, 2016:54).

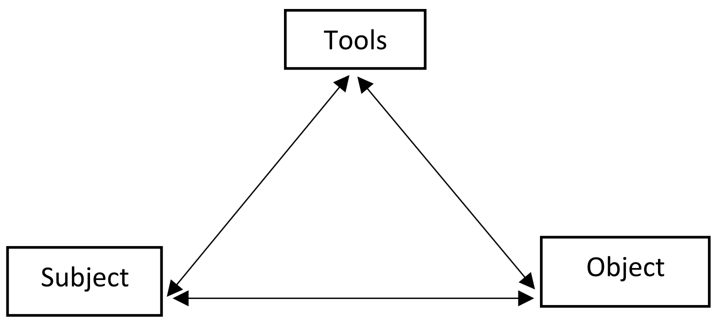

Figure 3.1 First-generation activity theory

Source: Vygotsky (1978) and Gedera & Williams (2016:53)

This limitation led to the second-generation activity theory (Figure 3.2), inspired by Leont'ev's work (1981:210). Together with Engeström's activity systems model, Leont'ev's concept of the collective nature of human activity is considered the essential element of the second-generation activity theory model (Gedera & Williams, 2016:54). Leont'ev added the three hierarchical levels of activity, namely rules, community, and division of labour (Barab, Evans & Baek, 2004), thus drawing attention to the interrelationships between the individual and the community of which he/she is a member (McMillan, 2011:5). The addition of rules within the activity system is generally understood to be not only formal and explicit rules governing the activity but also those that are 'unwritten and tacit', such as norms, routines, habits, values, and conventions (Engeström, 1996; Russel, 2002; McMillan, 2011:5). The community interacts with the activity as the broader group, while the division of labour refers to the power relations and different roles within the activity, often causing contradictions (McMillan, 2011:5).

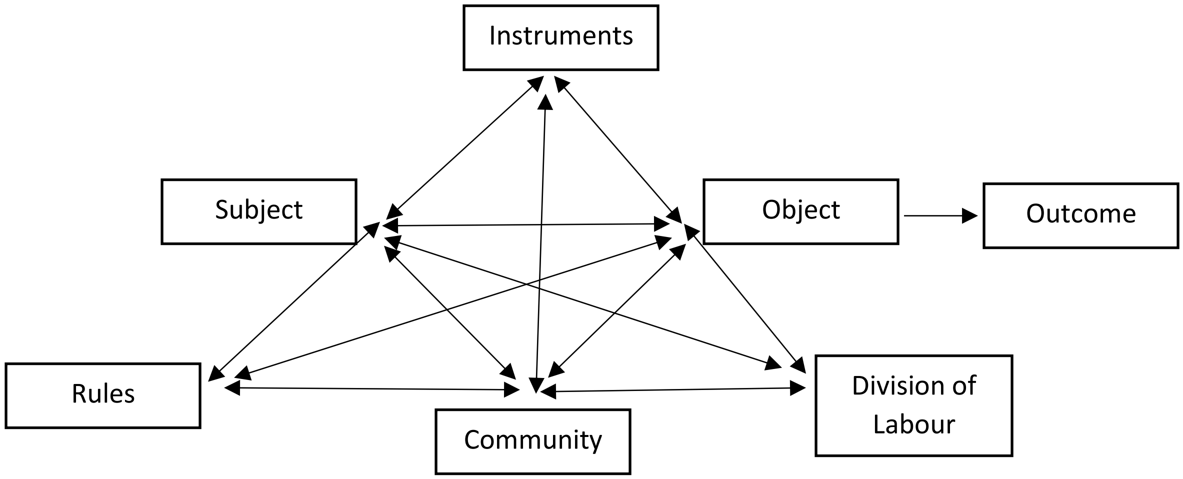

Figure 3.2 Second-generation activity theory

Source: Gedera & Williams (2016:56)

Lastly, the third-generation activity theory aims to provide tools and concepts that enable understanding and exploration of multiple viewpoints, value systems and networks of interacting activity systems (Daniels, 2001:91; McMillan, 2011:5). Through this, contradictions emerge that are highlighted by contested activity system objects (McMillan, 2011:5). Thus, the third-generation activity theory model (Figure 3.3) moves from one activity system to two minimal activity systems (Engeström, 2001).

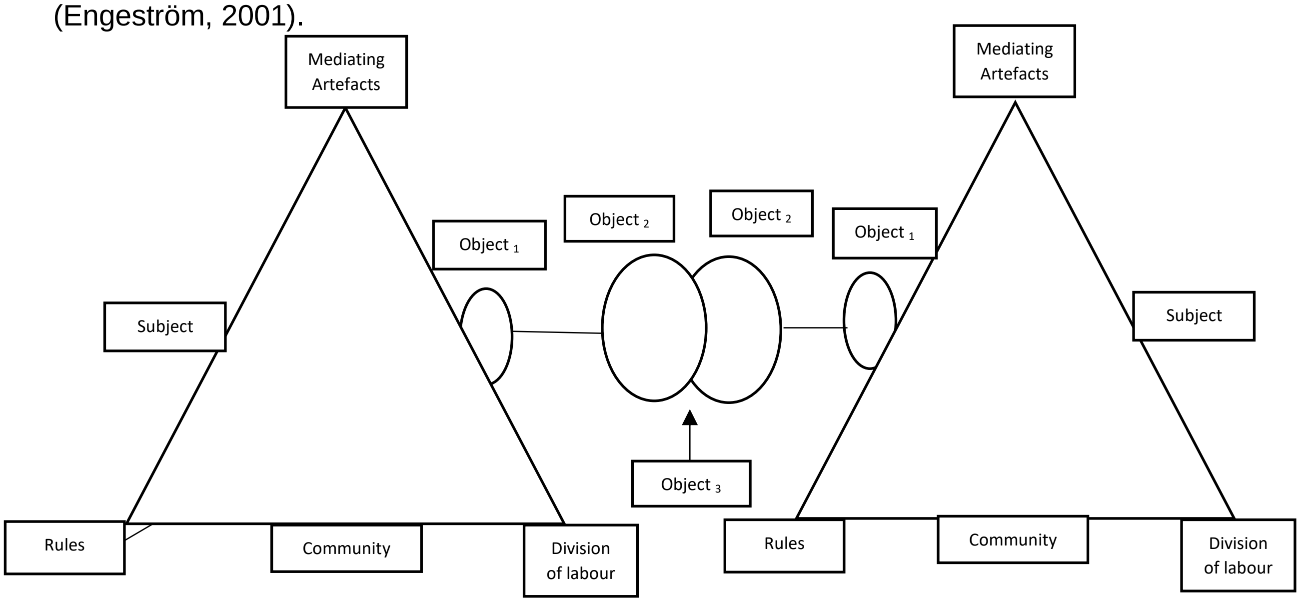

Figure 3.3 Third-generation activity theory

Source: Engeström (2001)

3.2.2 Contradictions and tensions within activity theory

The term “contradiction” signifies a misfit within and between the components of the activity system (Foot, 2014:339). Four levels of contradictions are illuminated: contradictions within components of the system, contradictions between these components, contradictions between different activities, and contradictions between different developmental phases of a single activity (Kuutti, 1996:34; Foot, 2014:339).

The primary contradiction in an activity system reflects the fundamental tensions in society stemming from the opposition between the use and the exchange value within each of the six nodes of the activity system (Foot, 2014:339). Tensions arise within each node of the system due to all components and individuals involved having inherent value and being an exchangeable commodity within socioeconomic relations (Foot, 2014:340). This contradiction is always present and forms the foundation for other contradictions present (Foot, 2014:340). Assessment design in HE, for example, takes place both as a function of the educator’s job, where the educator might be expected to have high pass rates and to foster student learning. This can become a primary contradiction within the activity system.

Secondary contradictions occur when two activity system nodes conflict with each other, such as tools and rules (Foot, 2014:340). This type of contradiction can prompt the primary contradiction to surface, thus taking the form of a specific problem as tension builds between different parts of the activity (Foot, 2014:340). For example, because of having to ensure student learning takes place, the educator might want to explore other forms of assessment, however, the nature of the institution might constrain this endeavour. The pressure arising from aggravated contradictions might lead individuals to rethink their behaviour to alleviate the pressure it causes (Foot, 2014:340).

Tertiary contradictions arise because of the introduction of a more culturally advanced object to the activity system (Engeström, 1987). While the motive for introducing such an object might be to relieve the pressure caused by secondary contradictions and tensions, it can also trigger the redefinition and reconfiguration of the activity system (Foot, 2014:340). The introduction of simulation-type assessments in favour of paper-based assessments might have an influence on the educators’ perception of assessment for learning, while also influencing assessment outcomes.

Lastly, quaternary contradictions arise between the primary activity system and its neighbouring activity systems when a new practice is implemented, based on a revised or expanded object (Foot, 2014:341). Therefore, the revision or introduction of an object, such as the assessment method, will lead to a disturbance in the relationship that the activity system has with neighbouring systems (Foot, 2014:341), such as student learning and quality assurance of learning material. This is especially relevant in systems where the object is intertwined with other activity systems (Foot, 2014:341).

3.2.3 Justification of Activity Theory

Activity theory is shaped by three core ideas (Foot, 2014:330). Firstly, humans act collectively, learn by doing, and communicate through their actions (Foot, 2014:330). Secondly, humans create, utilise, and adapt various types of tools to learn and communicate (Foot, 2014:330). Thirdly, the concept of community is a central component of the process of making and interpreting meaning and thereby becomes a central component for learning, communicating, and acting as well (Foot, 2014:330; Vygotsky, 1978). Assessment design as supporter or enabler of student learning either occurs or does not occur because of social relations between the developer, students, course demands and student learning. Essentially, activity theory's task is to understand the systemic whole of an activity, such as assessment design for student learning, and not just the separate components within the system, while allowing for the analysis of multiple relations (Foot, 2014:330). Activity theory thus allows for the analysis of the complex and evolving practice of assessment design for student learning and for engaging reflectively with this practice (Foot, 2014:329).

As a complex environment, decisions within the HE space are impacted by various stakeholders, which include the students, rules, and the community (Hodgkinson-Williams & Deacon, 2013:89). The pursuit of student learning as an outcome of assessment design does not take place in a social vacuum (Mak & Lee, 2014:74). Instead, activity theory proposes that assessment design as supporter or enabler of student learning is a socially anchored activity, influenced by contradictions and tensions within and between the subject, object, rules, and community, and similarly mediated by tools, rules, and division of labour (Bertelsen & Bodker, 2003:295). Morf and Weber (2000:81) state that the activity becomes the primary unit of analysis, where doing precedes thinking and that goals, cognitive models, intentions, images, and abstract notions are derived from the behaviour of individuals.

The activity system is influenced by various inputs, amongst which the division of labour creates different positions for participants of the system, which includes the assessment designer, moderator, external moderator, educator, and student (Engeström, 2001). These participants also carry their own histories, while the activity system itself further carries multiple layers of history (Engeström, 2001; Hardman, 2005:381; Hodgkinson-Williams & Deacon, 2013:89). People are seen as active cognising agents that act in roles not always of their choosing, with tools that either constrain or enable their actions (Hardman, 2005:381). The activity system is thus shaped and transformed over an extensive period and holds the possibility for expansive transformation, such as student learning (Hardman, 2005:381). With this, activity theory offers a multi-dimensional perspective of the continuous reconstruction of the components of the activity system, such as the revision and reformulation of rules and tools. Rules governing assessment development and the tools that mediate the activity, such as textbooks and class notes or video material, are continuously revised and reformed to ensure the credibility and validity of the assessment design as the activity (Lim & Hang, 2002:4).

Therefore, as a theoretical framework, activity theory is well-suited to understanding the power of assessment design to support or enable student learning. The theory provides a systemic understanding of real-world phenomena entrenched within assessment design (Yamagata-Lynch, 2010:6). It illuminates assessment design for student learning as an activity within a social setting, by providing a helpful way of analysing and understanding how assessment design can support or enable student learning (Murphy & Rodriques-Manzanares, 2008b; Mwalongo, 2016:21) by making sense of a complex data set in a manageable and meaningful manner (Yamagata-Lynch, 2010). Furthermore, activity theory sheds light on the social structure of assessment design that shows the activity individually, but also as part of a system (Baran & Cagiltay, 2010). Activity theory can, therefore, be useful in understanding the interplay between assessment design, student learning and the environment in which learning takes place.

Activity theory is less of a predictive tool and more useful for the organisation of complex data while assisting with the systemic understanding of the contradictions and tensions between human activity and the social context (Roth & Lee, 2007). Viewing the nodes and components of the system as multi-dimensional allows for the exploration of contestations in the assessment system and the analysis of the relevant data. The ability of activity theory to illuminate the intersecting systems of the activity, which is assessment design and student learning, as well as to enable the analysis of human behaviour within the specific context of assessment design within HE becomes a leading factor for selecting activity theory for this study (Cliff *et al.,* 2020:5).

3.3 Intermediate theory

The following intermediate theoretical concept is utilised to connect activity theory to the specific context and data for this study (Engeström, 2015:vii).

3.3.1 Formative Assessment Theory

Black and Wiliam (1998) first developed the theory of formative assessment as an explicit domain of practice (Heritage, 2010:2). The theory was developed from a range of research findings and practices to produce a theoretical framework that speaks to what the learner knows, where learning should be directed, and how learning will be achieved (Black & Wiliam, 2009). Formative assessment theory provides an understanding of how intermittent assessment, occurring throughout the curriculum, informs both the educator and the learner by illuminating both what the student knows and the gaps in the student's learning, thereby determining what should be learned (Black & Wiliam, 2009).

Black and Wiliam (1998) proposed that formative assessment is based on three principles. Firstly, educators adjust their teaching and learning in response to evidence from assessment outcomes (Black & William, 1998). Secondly, students receive feedback from the educator on how to improve; and thirdly, students should participate in the process of assessment through self-assessment (Black & Wiliam, 1998; Heritage, 2010:2). The theory holds that student learning takes place most through formative assessment, in comparison with other educational interventions (Black & Wiliam, 1998). As a result of the principles of formative assessment, the following three outcomes can be derived (Black & Wiliam, 2006):

1. Students' weaknesses and strengths are identified;
2. Students' motivation and metacognition are enhanced; and
3. Feedback is provided to students to inform teaching and learning.

The implementation of the principles of formative assessment can pose a challenge for educators in practice, as it is not always possible or necessary for educators to follow the principles (Atkin, Black & Coffey, 2001). The educator must learn to recognise opportunities giving rise to the implementation of the principles if and where necessary (Atkin *et al.*, 2001). Support offered to educators from the community and rules can either lend structure to recognise such opportunities and then benefit from them, or it can inhibit such abilities (Atkin *et al.,* 2001). However, if the assessment is to be successful in ensuring student learning, the learner should also be involved in the process, which means students must be actively and mindfully involved in the assessment and feedback (Black & Wiliam, 2003:631; Taras, 2002). Feedback allows the student to identify gaps in their learning and provides guidance for improving their skills and knowledge, which emphasises the importance of feedback that is focussed on learning goals, rather than self-esteem (Black & Wiliam, 2003:631). The general assumption of formative assessment theory is that student learning is best supported when the student is actively involved in the learning process. Improving formative assessment practices can lead to changes in the approach to student learning, which ultimately leads to improved student learning.

The use of formative assessment theory for the purposes of this study is, therefore, two-fold. Firstly, the literature is clear that formative assessment can aid student learning. With the focus of this study being the way in which assessment can support or enable student learning, the use of formative assessment theory will illuminate the ways in which student learning is supported or enabled by means of assessment design. Secondly, formative assessment goes beyond current assessment strategies, as it can occur regularly and in different ways, while taking into consideration external constraints operating within and on the formative space (Black & Wiliam, 2003:634). Therefore, formative assessment theory will consider the activities designed under low-stakes conditions that students can use to apply to further their understanding of course content, which becomes the artefact under investigation in this study.

3.4 Conclusion

This chapter aims to review the theoretical constructs that this study draws on. Firstly, the theoretical framework is built on activity theory, which argues that assessment design for student learning is an activity influenced by the social and cultural environment in which it is practised. The theory situates assessment design within an activity system that will illuminate contradictions and tensions within and between system elements. The intermediate construct that will be drawn from to support activity theory is formative assessment theory. Formative assessment theory argues the positive influence of formative assessment methods on student learning and is therefore drawn upon for the purpose of this study.

The intermediary construct supports activity theory as the theoretical framework for this study to ensure that the research question is answered. This will strengthen the analysis process to ensure contradictions and tensions are surfaced, and therefore, an understanding of how assessment design can support or enable student learning will be reached. Activity theory and the intermediary construct emphasise assessment design as a socially situated activity system and aid with interpretation by guiding the analysis in the required direction.

Chapter 4: Methodology And Design

4.1 Introduction

This study aims to determine how assessment design supports or enables student learning at an open distance learning, private higher education institution. To meet this aim, four guiding questions have been set, namely:

5. What does assessment practice mean for the institution?
6. What types of assessments are set and why?
7. What is the learning intention and learning outcome of the different assessments?
8. What aspects constrain or enable assessment design?

In Chapter 1 the context of the research was provided. In contrast, Chapter 2 provided an overview of the literature applicable to the study and Chapter 3 shed light on the theoretical framework underpinning this study. This chapter aims to shed light on the methodological and design considerations. Together with the aim of the study, the questions above guided the decisions made about the methodology and design.

The following sections provide an outline and justification of the approach adopted for this study. Following this, discussions of the design, methods, and analytical approach informing this study are provided. The chapter concludes by discussing the ethical and validity considerations applicable to the study.

4.2 Research Approach

This study uses a qualitative approach underpinned by social realism and discourse analysis. Qualitative research perceives humans as complex and unpredictable, with individual differences and idiosyncrasies (Omona, 2013:171). Qualitative research supports the role of research in understanding human behaviour, by revealing the values, interpretations, belief systems and rules people use in their lives (Omona, 2013:171).

Social realism, as the philosophical underpinning for this study, posits that outcomes, such as student learning arising from assessment design, are the result of sets of internally related practices and objects acting in contingently configured contexts (Spasser, 2002:90). The theory aims to offer a practical account of patterns of social phenomena, which views society as open, stratified, and differentiated (Luckett, 2012:340). According to Archer (1995:1), society and human beings are interrelated; society is transformable and social agents are affected by society. However, the motivations and actions of human beings stem from three orders of reality, which ultimately become concerns, namely the empirical, actual, and real (Archer, 1995:1; Luckett, 2012:340). Ultimately, agents must confront their context's constraints and enabling factors to realise their concerns. In the context of this study, educators will engage with the enabling factors and constraints relevant to the environment in which assessment design takes place to realise their concerns.

Social realism rests on two assumptions; firstly, it assumes that what is observed around us is real, and secondly, what we observe as real is the product of complex and contingent casual mechanisms not always directly accessible (Spasser, 2002:90). Particularly, social realism seeks to understand for whom, and in which circumstances an activity works through the study of contextual conditioning (Spasser, 2002:90). Social realism unpacks what is real about a phenomenon, employs a realist methodology, and has real outcomes as its goal (Spasser, 2002:90). Spasser (2002:90) states that social interaction leads to interdependencies that develop into real-world customs, rules, and division of labour, which in turn can either enable or constrain the interests and opportunities of a community of actors. Assessment design is interdependent on a range of factors, including assessment policy, course demands, students, prescribed course material and quality assurance mechanisms, amongst others. A key concept of social realism is that social forms, such as assessment design for student learning constitute new ideas, the transformation of social conditions, and the ultimate introduction of appropriate ideas and opportunities for actors within a community and socio-organisational conditions (Spasser, 2002:90).

In the context of this study, social realism provides a foundation for the employment of activity theory in general, as well as for the investigation of assessment design as supporter or enabler of student learning. Social realism recognises assessment designers as active agents within the activity system and assists with understanding the specific conditions under which assessment design can support or enable student learning (Allen *et al.,* 2013:836). Therefore, social realism presents a way in which we can dig deeper into the nodes of the activity system that represents assessment design for student learning and guides the methodological decisions for this study's data collection and analysis process.

The method yields an understanding of behaviour, explains the actions from the participant's perspective without dominating the participant, and makes use of methods, such as open-ended interviews and questionnaires, observations, focus groups and think-aloud protocol (Scotland, 2012:12). This paradigm, together with the use of a qualitative approach, provides for the interpretation of meaning without the correlation of facts (Thanh & Thanh, 2015:25). Two sets of data were used for this study, including course documentation and semi-structured interviews. The use of course documentation assumes that insight will be gathered into the institution's view on assessment design and the intentions towards learning. This correlates with the ontological assumption that assessment design is conducted within a social and perspectival space while drawing on the epistemological assumption that knowledge is constructed from interaction with various stakeholders. It is further assumed that the data from the semi-structured interviews will shed light on the learning intentions of formative assessment, factors that enable or constrain assessment design, and what indicates that learning has taken place.

Discourse analysis focuses on examining the meanings of texts, such as the assessment policy of a higher education institution (see Chapter 4) (Burck, 2005:248). It provides a way for the researcher to critically consider the policies and texts through which individuals account for and make sense of themselves and their social context (Gee, 1989:14; Burck, 2005:248). A principle of discourse analysis is that people make use of language to construct their understanding of the social world, and that language serves a constitutive function (Burck, 2005:248). According to discourse analysis, assessment policy will ultimately inform and shape assessment design, as educators are constituted and reconstituted through discourses and descriptions of assessment practice. Ultimately, discourse analysis seeks to identify the discourses and interpretive techniques that educators will draw from to make sense of their world, and to examine the consequences and limitations of assessment design within the institution (Gee, 1989:14; Burck, 2005:248).

For this study, discourse analysis is considered an analytical tool to illuminate the true meanings behind the discourse. Discourse analysis will be used to analyse policy and course-related documentation to answer the questions of what the discourse says about the purpose of assessment and what it says about the assessment design expectation and assessment outcomes. The identification of relevant themes from the assessment policy will involve the implementation of three components of discourse analysis. Implementing discourse analysis requires the researcher to first examine the assessment policy in relation to how language is used to construct meaning (Burck, 2005:249). After this, variability is sought, and the implication of a particular account is highlighted to examine what the discourse achieves (Burck, 2005:249).

Therefore, the approach to this study assumes that assessment design as a supporter or enabler of learning cannot be understood outside the context in which it occurs (Jonassen & Rohrer-Murphy, 1999). Assessment design is seen as an activity underlined by those who carry out assessment design, their goals and intentions, rules and norms that govern assessment design, the community, as well as the outcome produced by the activity (Jonassen & Rohrer-Murphy, 1999).

4.3 Research Design

In Chapter 3, activity theory was discussed as the theoretical framework for this study. Considering the assumptions that assessment design is a social and perspectival system that considers various components to influence the activity, second-generation activity theory guides the design for this study.

The prime unit of analysis in activity theory is a collective, artefact-mediated, and object-orientated activity system, seen as a network related to other activity systems (Hodgkinson-Williams & Deacon, 2013:89). Assessment design as supporter or enabler of student learning is therefore defined as the prime unit of analysis for this study (Figure 4.1). It is mediated by *instruments* such as textbooks, notes, and learning outcomes, while formative assessment becomes the *object*, and the assessment designer becomes the *subject*. The *outcome* is whether student learning took place. This is influenced by *rules*, *community,* and *division of labour*, each of which carries socio-historical meanings and serves to mediate actions (Hodgkinson-Williams & Deacon, 2013:89).

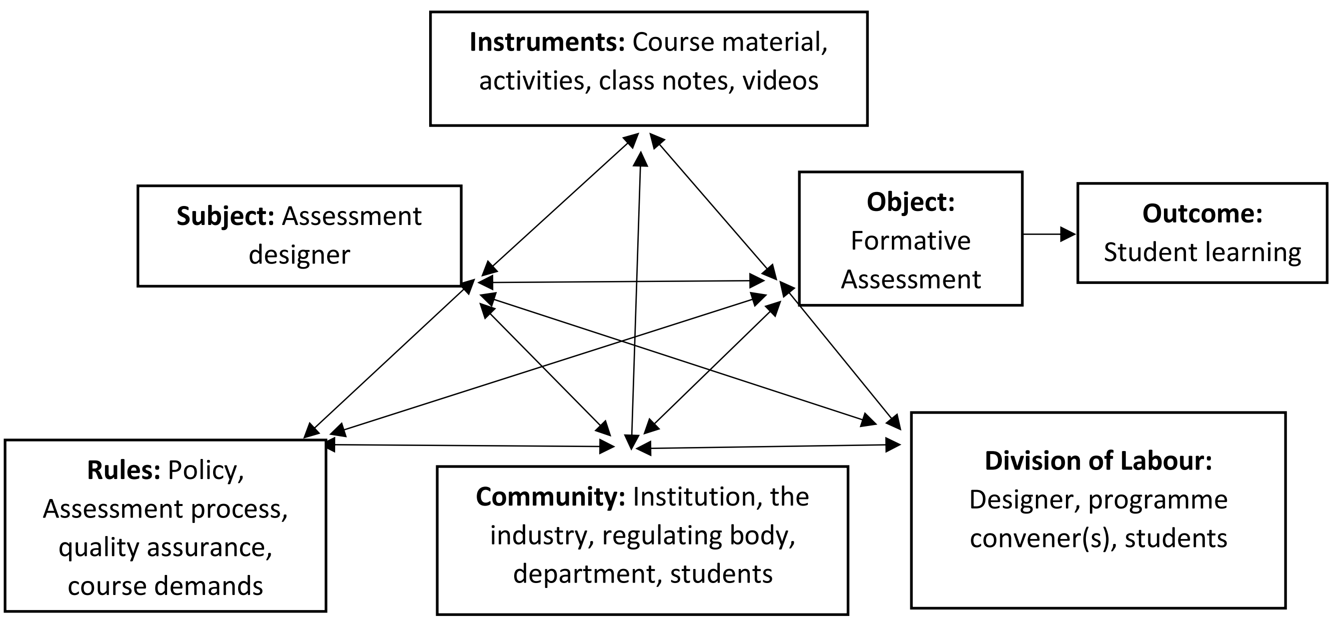

Figure 4.1 Second-generation activity theory depicting the intersections between assessment design and student learning.

Source: Adapted from Hodgkinson-Williams & Deacon (2013:88).

The assessment designer, therefore, gives meaning to the designed formative assessment as a supporter or enabler of student learning, through mediating components such as the institution's stance on formative assessment, course-related materials, policies, quality assurance processes and all stakeholders, including the community participants, programme convener(s), moderators, educators, and students, who play a role in the production of the assessment. Through a phenomenological design, first-hand accounts from the assessment designer illuminate aspects of assessment design as supporter or enabler of student learning, producing a rich source of data. As a means of triangulating and verifying the first-hand accounts from the designers, policy and course-related documentation adds dimension to the activity system by providing evidence of *rules*, *community,* and *division of labour*.

4.3.1 Role of the Researcher

With my experience in assessment design at the institution, recognition of bracketing throughout the research process becomes imperative. Through bracketing, I can refrain from judgment and can separate myself from what is being studied to arrive at an unprejudiced description of assessment design as supporter or enabler of student learning (Kvale & Brinkan, 2209:27). As a result, semi-structured interviews present an optimal data collection method, as the researcher simply guides the discussion to extract meaning from participants on their experience as assessment designers (Heotis, 2020:2).

To implement the bracketing process within the current study, I considered my own experiences and assumptions before and during the research process as a way of sorting my perspective from those of the participants. This allowed me to report on the participants' perspectives more clearly (Kvala & Brinkman, 2009:27). As the researcher, my ultimate role is to focus on the experience as the object or direction throughout the study. I mainly focussed on assessment design as supporter or enabler of student learning, which presented both the object of this study and gave direction throughout the study (DeHart, 2020:598).

During data analysis, I focussed on interpreting the participant’s interpretation of assessment design as supporter or enabler of student learning (Heotis, 2020:2). The result is therefore an analysis that reflects the interpretation of emerging themes and the creation of a narrative that describes the meaning of assessment design as supporter or enabler of student learning (Heotis, 2020:2).

4.4 Research Methods

In this section, the research methods employed for this study are discussed.

4.4.1 Site Description

The higher education institution selected for this study is a private, open distance learning higher education institution that offers undergraduate and postgraduate programmes in various fields, including Accounting, Commerce, Social Sciences, Law, and Information Technology. Assessment forms a key component of teaching and learning at the institution and is designed to suit the requirements of the programme, as stipulated by the institution, governing bodies and programme demands. This study will focus on one programme, the Bachelor of Accounting, offered at this institution, governed by a regulating body.

The educators who take responsibility for the courses within the programme are responsible for assessment design and other elements of the teaching and learning component, as well as quality assurance. Each assessment undergoes internal moderation, and courses at the exit level undergo external moderation as well. This ensures that each assessment has been adequately reviewed by both educators and experts in the field. From the student's perspective, assessments are published on the learning management system at the beginning of the semester, with due dates established in advance. Feedback is provided to students via the learning management system along with students' grades. Formative assessments take on different forms, depending on the nature of the course and its unique demands. However, typical forms of formative assessment include projects, assignments, calculations and simulations. Assessment design is regulated by the institution's policy on assessment but is also subject to governing bodies and the requirements set by such bodies. For example, the Bachelor of Accounting is registered with the South African Institute of Chartered Accountants (SAICA) and as such, should adhere to the requirements set by SAICA for programmes that give entry to Chartered Accountancy in South Africa. The institution emphasises graduate skills and workplace readiness and strives to produce graduates who are not only able to operate in the world of work but also to be successful in their chosen careers.

Selecting this institution as the site of enquiry is further due to the researcher's familiarity with the institution. The study is motivated by my interest in how assessments are designed to support or enable student learning within a space that is regulated not only by the institution's policy on assessment but also by governing bodies, course demands and educator perspectives. While I am an insider at the institution, I am also an outsider to the courses selected for this study, which allows for objectivity during the research process and a deeper understanding of the historical and social aspects of the assessment system (Pendlebury & Enslin, 2004:362).

4.4.2 Selection and Sampling

A maximum variations sampling method was used to select the programme for this study, which is implemented by looking at a subject from all angles to achieve a greater understanding of it (Etikan *et al.,* 2016:3). With the sample pool being small and not selected at random, this method allows for a sample to be selected that is representative of a broad spectrum relating to the subject

(Etikan *et al.,* 2016:3). With a limited number of programmes to choose from, a programme governed by an external body is selected, namely the Bachelor of Accounting (B.Acc).

The population consisted of all educators who teach within the programme selected as the point of enquiry. Purposeful sampling was used, with a maximum variation sampling method. The aim was to establish learning intent from various formative assessments used for the courses in the programme and to illuminate knowledge demand achieved by students because of assessment design, thereby developing an understanding of how assessment design can support or enable student learning.

Purposeful sampling is a non-probability sampling method where the researcher decides who (or what) to include in the sample (Quinlan *et al.,* 2019:185). According to Welman and Kruger (1999), purposeful sampling is considered an important type of non-probability sampling and guides the sampling process towards selecting participants who have had direct experiences with the phenomenon being studied. This approach considers all perceived phenomena, both objectively and subjectively (Omona, 2013:171). It is a non-random technique where each sampling unit is a deliberate choice because of the qualities that the unit possesses (Etikan, Musa & Alkassim, 2016:2). In simple terms, the researcher decides what should be known and selects sampling units that are well-informed about the phenomenon being studied (Etikan *et al.,* 2016:2).

Each sampling unit is a key informant of the assessment system implemented in the programme and contributes to the overall aim of this study (Quinlan *et al.,* 2019:185). The use of purposeful sampling for this study allows the researcher to select a sample that contributes rich information, representative of the programme in which it is situated. Therefore, two educators who teach within the B.Acc programme and a Programme Convener were selected as the sample. This study is limited in generalisability and aims to understand a single context. According to O-Reilly and Parker (2012:192), the number of participants required for a qualitative study depends on the nature of the research and the resources available.

The requirements met by the interviewees include the following:

- The educators teach three courses each on varying levels of the programme (NQF Level 5, 6 and/or 7);
- The programme convener and educators have been involved with assessment design at the institution for two years or more; and
- The programme convener is responsible for the quality assurance of the courses facilitated by the selected educators.

The programme consists of 33 courses offered over a three-year period (six semesters) and exits at the National Qualifications Framework (NQF) Level 7. Two courses were selected from the programme to supplement the data collected from the Educators and Programme Convener, one at NQF level 6 and one at NQF level 7. It should be noted that the course-related documentation is standardised across all courses in the programme, with nuanced differences being details about the course, such as the outcomes to be achieved and the course purpose. Therefore, the course documentation of one course provides little unique information in comparison with another.

Each course selected adheres to the following criteria:

- One course is on NQF Level 7 and one on NQF Level 6, which allows for the exploration of the phenomenon at a lower and exit level of the learning spectrum;
- The course selected is a core course in the programme;
- The course uses two formative assessments; and
- The course is taught by one of the educators and managed by the Programme Convener included in the sample.

By selecting different courses from this programme, the likelihood of findings reflecting deeper information on the enablers and constraints on assessment design and practices increases (Green & Bowden, 2009:60). The contrasting nature of the courses selected ensures that a varied range of understanding, experiences and conceptions are included. Furthermore, the programme demands, student demands and the presence of a regulating body will give further information on how assessment design is approached to ensure student learning takes place.

According to Tavakol and Sanders (2014:841), the sample size can range from 1 to 10 sample units and depends on several factors. These factors include the scope of the study, the nature of the topic, the study design, and the use of shadowed data (Morse, 2000). Judgment is therefore applied to select a sample size that will contribute to the quality of the information collected (Tavakol & Sanders, 2014:841). A key factor in determining the sample size that was considered is the concept of data saturation (Hewing, 2011). Data saturation is reached when redundancy is achieved, in other words, no new information is revealed, and this indicates that the sample size is sufficient (Tavakol & Sanders, 2014: 841). The selection of three interview participants and two courses within the programme is therefore in line with the literature about phenomenological studies and is deemed representative.

4.4.3 Data Collection

The data was collected from existing sources, and the theoretical framework for this study informed semi-structured interviews, and the analysis. The following documents were collected for analysis purposes alongside the semi-structured interviews:

- The course outline for two courses; and
- The institution’s policy on assessment design.

Semi-structured interviews were conducted with the programme convener and course educators and supplemented with the course-related documentation and the policy to triangulate the data and to include a perspective other than the researcher’s. With semi-structured interviews, the interviewer has a pre-determined set of questions to ask during the interview (Tavakol & Sanders, 2014:843). While asking pre-determined questions, a two-way dialogue is established and participants can describe, in detail, a situation according to their perspective and understanding (Tavakol & Sanders, 2014:843). The interviewer may ask the questions in varied sequences and may pursue certain constructs in more depth, as they emerge for each participant (Knox & Burkard, 2009:568). Thus, the protocol serves as a guide but allows for flexibility and creativity in pursuit of information (Knox & Burkard, 2009:568).

Semi-structured interviews are commonly used in phenomenological research, as they allow the participant to fully deliver their understanding of the phenomenon while the researcher can reflect deeply on the information collected (Tight, 2016:324). In line with the aim and objectives of this study, semi-structured interviews are most suited for the collection of data from educators and the programme convener, as they seek the co-creation of knowledge with participants through a process of mutual discovery and testing of ideas and theories (Daniel & Harland, 2018).

Interviewees were asked questions about what assessment practice means for the institution and the programme, and questions regarding their perspectives on assessment intention, how it correlated with what students produced, and the enablers or constraints on assessment design and practice.

The face-to-face interviews ranged from 30 to 60 minutes and were recorded and transcribed verbatim. Each participant was asked for permission to record the interview, which was granted. Notes were also made during the interviews or immediately after each interview, recording nonverbal cues, such as tone of voice, expressions and reactions, the researcher’s personal feelings and thoughts, as well as field notes containing ideas, themes, similarities, and differences (Knox & Burkard, 2009:572).

4.5 Analysis and Interpretation

The analytical process was informed by activity theory and the guiding questions. Firstly, the data was organised, and notes were made on the essential components of the documentation and interview transcriptions. The topics into which data was organised include assessment-related information, activity-related information, and interview transcriptions. This also reduces data and retains only what is necessary for answering the research question. In other words, that which is directly related to assessment design and practices.

Secondly, a matrix was drafted, and evidence was placed into categories with relevant data coding. The guiding questions of this study guided data collection, along with activity theory, and to draw up the categories into which evidence was placed, namely the meaning of assessment practice at the institution, types of assessments set and why, learning intentions and learning outcomes of the different assessments, and enabling and constraining aspects in terms of assessment design.

Once the data was reviewed and categorised according to the guiding questions and elements of the activity system, an analysis was compiled of the interviewees' perspectives on assessment design and student learning. Together with the information extracted from the documentation, an understanding of assessment design as a supporter or enabler of student learning was formulated by making sense of inferences and meanings extracted. Both a deductive and inductive approach was used when analysing the data. Meaning, an idea of what is required was formulated before the analysis, but openness was maintained to ensure categories or findings were not overlooked.

The following section describes how the interviews and documentation were respectively analysed.

4.5.1 Interviews with Key Participants

Phenomenological research views data analysis as a systematic procedure that guides the identification of essential features and relationships within and between the data sources (Coffey & Atkinson, 1996:9). The data collected from the interviews with the programme convener and course educators were transcribed and transformed through interpretation. This process is guided by Hycner's (1999) analytical process. The process consists of five phases: bracketing and phenomenological reduction, delineating meaning, clustering of data to formulate themes, analysing data sources, validating it and modifying where needed (Groenewald, 2004:49).

Firstly, the interview recordings were transcribed, and the transcriptions were read a few times to ensure familiarity with the words used by the participant (Hycner, 1999). Secondly, statements that were identified as illuminative towards assessment design as supporter or enabler of student learning were isolated. From here, the isolated statements were clustered, or grouped, into themes, and units of significance were identified (Groenewald, 2004, p. 50). Guided by the guiding questions and activity theory, the interviews allow for the educators' and course convener's perspectives to be critically analysed and inserted into the study (Czerniewicz, Glover, Deacon & Walji, 2016:289).

A critical data analysis informed by activity theory was conducted that incorporates all the themes extracted from the data to give a holistic perspective of the information, after which a validity check was conducted by reviewing the interview transcriptions in correlation with the analysis (Hycner, 1999:154). Any necessary modifications were made in line with the transcripts (Hycner, 1999:154). At this point, the participants' expressions, words, and opinions are transformed into expressions appropriate to the scientific discourse supporting this study (Sadala & Adorno, 2001:289).

4.5.2 Documentation and Course-Related Information

The documentation analysed for this study includes two sets of documents. Firstly, the institution's assessment policy was analysed to determine what assessment practice means for the institution. This analysis was informed by discourse analysis and illuminates the primary role that assessments play at the institution, the purpose of assessments for student learning, and how the policy outlines assessment design.

Secondly, the course outlines of the different courses that form part of the sample were analysed to determine the types of assessments used. These documents analysed the rules and parameters governing each course to determine what knowledge demands should be achieved through the various assessments. This assists in determining the knowledge needs at the selected level of learning. Discourse analysis guided the documents' analysis and interpretation, presenting important information from the institution's perspective and using assessment design to support the data collected from the interviews.

For reasons of respecting confidentiality and anonymity at the express request of the institution, the documentation cannot be included in an Appendix.

4.6 Ethical Considerations

Ensuring the ethicality of this study required clearance and consent from various participant groups. Firstly, ethical clearance was sought from the School of Education Research Ethics Committee of UCT (Reference number EDNREC20220807). No potential ethical issues were identified for this study. Ethicality was thus ensured through confidentiality and informed consent from the institution. Informed consent was required from the institution's Board of Directors to access data sources for this study. Confidentiality is understood as keeping any personalised information directly related to participants of a study anonymous. Therefore, the data collected was not used for any other purposes than for this study, the institution’s participation was voluntary, and information was not shared with third parties outside of the scope of this study. Any information directly related to participants or the institution was anonymised r removed to ensure confidentiality.

To ensure validity and reliability, the data collected from the semi-structured interviews were triangulated with information from the course outlines and the institution’s policy on assessment design. To further ensure reliability, the status of the researcher is also considered and clarified.

The researcher’s direct involvement in the institution whose programme is the subject of this research carries the threat of subjectivity, even though there is no direct involvement with the chosen sample units. Pendlebury and Enslin (2001:363) believe that researchers are in a position of power that can potentially lead the researcher to betray participants' trust. According to Pendlebury and Enslin (2001), however, the research should promote human capabilities, including agency and choice, which are both necessary for the quality of this research. Therefore, to remove critical subjectivity, Pendlebury and Enslin’s (2001) universalist response was implemented to guard against misinterpretation and betrayal in the research exchange.

4.7 Conclusion

This study aims to determine how assessment design supports or enables student learning at an open distance learning, private higher education institution. To meet this aim, the study's research approach, design, methods, and analytical framework are laid out in Chapter 4. The research approach selected for this study, which is a qualitative approach informed by activity theory, guides the methodology and data analysis for this study. Two courses, each at a different NQF level, were selected from a single programme governed by an external body. Through interviews and discourse analysis on relevant documentation, it is believed that rich and meaningful data will be collected on assessment design as enabler or supporter of student learning. The collected data focuses on learning intentions, determining whether learning was achieved, the enablers and constraints on assessment design and practice, and the influence of the governing body on assessment design. The results from the data sources are discussed in Chapter 5.

Chapter 5: Empirical Analysis

5.1 Introduction

The aim of this study was to determine how assessment design supports or enables student learning at a private, open, distance-learning higher education institution. To answer the research question, four sub-questions were posed:

1. What does assessment practice mean for the institution?
2. What types of assessments are set and why?
3. What is the learning intention and learning outcome of the different assessments?
4. What aspects constrain or enable assessment design?

In the previous chapters, important constructs were discussed and analysed, including the context of this study (Chapter 1), the relevant literature on assessment design and student learning (Chapter 2), and the theoretical framework for the study (Chapter 3). In Chapter 4, a discussion on the methodological framework for the study was undertaken for the collection and analysis of data. The research question and sub-questions were considered throughout.

The primary data source was findings from semi-structured interviews conducted with educators from the institution, which are triangulated with findings from relevant course documentation and the institution's policy on assessment practice. The purpose of this chapter is to present an analysis of the findings yielded from the data as a means of establishing how assessment design can support or enable student learning. Figure 5.1 below indicates the data sources used and their purpose in answering the research question.

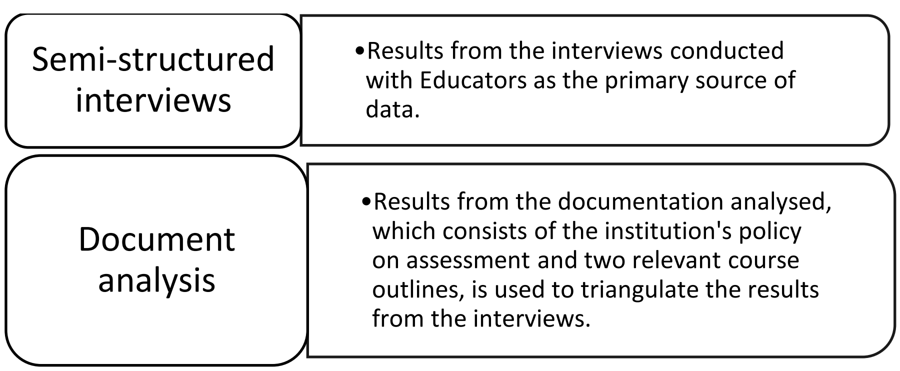

Figure 5.1 Outline of the chapter

Source: authors' own design

5.2 Results from the Interviews and Document Analysis

The interviews were conducted with stakeholders directly related to the activity system, namely two educators and a programme convener, in the Faculty of Accounting at the institution. The interviews were conducted as semi-structured interviews and included a total of 16 questions. The interviews were recorded and transcribed verbatim by the researcher and amounted to 9450 transcribed words. Interviewees' responses in relation to each question represent only that which is relevant to the question. Data that are not directly related to assessment design and practices are excluded to ensure only relevant information is represented and to ensure the manageability of the data. Data was selected to illustrate the harmonies, contestations, contradictions, dilemmas, and challenges that educators face in the activity system.

The documentation analysed for this study includes the institution's assessment policy and a course outline for two courses offered in the Faculty of Accounting. Firstly, the assessment policy outlines the institution's view on the assessment process, how it is approached, what elements make up the process, the responsibilities and rights of the various parties involved with the process and indicates the reason for undertaking assessment at the institution. The course outlines are issued to students for each course they complete at the beginning of the semester, which contain information pertaining to the course's purpose, outcomes, how teaching, learning and assessment are approached by the institution, and what the student can expect from completing the course. While the information pertaining to the specific course is customised in the relevant course outline, generic information that explains the institution's expectations and undertakings is replicated in each course's outline. Therefore, it was deemed sufficient to consult only two course outlines that form part of the portfolio of courses taught by the interviewees.

The data from the interviews are compared with the results from the document analysis to highlight tensions and contradictions, connections, or contestations between and within the activity system.

5.3 Assessment Design as an Activity System

This section discusses the results obtained from the semi-structured interviews and document analysis, using activity theory to guide the analysis. Figure 5.1 indicates the activity system nodes relevant to assessment design as supporter or enabler of student learning, which guides the analysis of data.

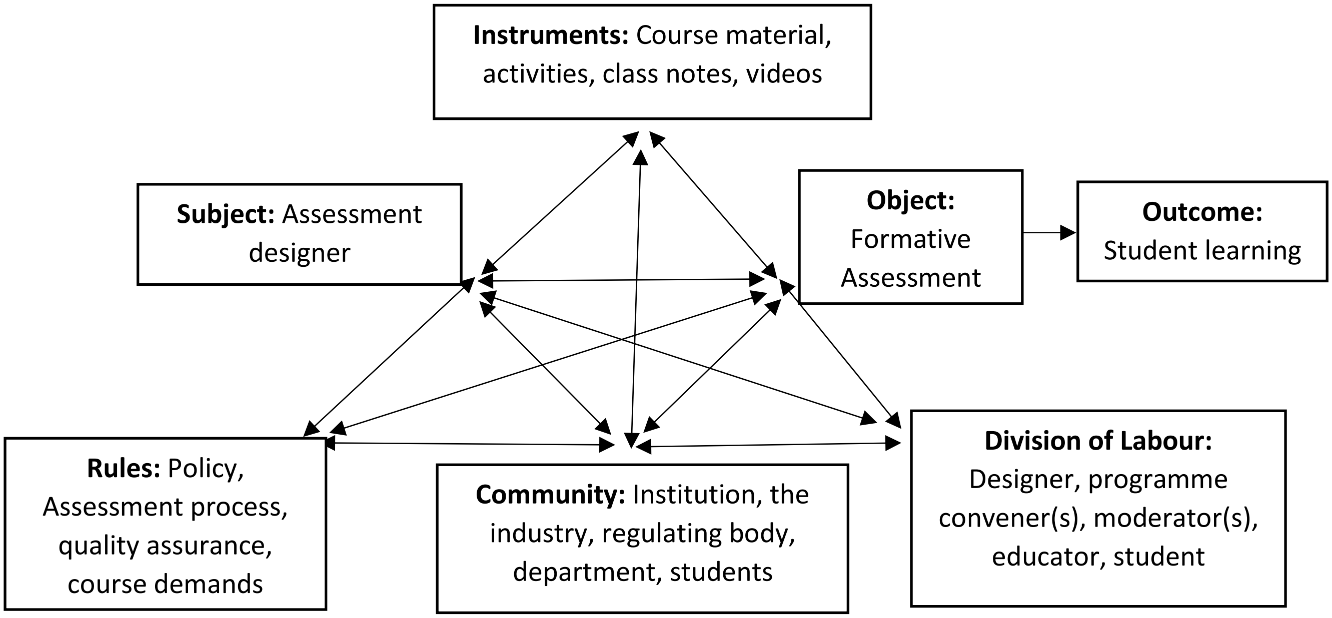

Figure 5.2 Assessment design's activity system

Source: adapted from Gedera & Williams (2016:56)

5.3.1 Subject

The subject gives meaning to the object and thus informs the outcome (Engeström, 2000:961). In this instance, the subject is the educator who designs the formative assessment.

> "…*I'm thinking of the way that I am or look at it, when setting up assessments, because that's what I'm doing currently, well what we're doing currently now." [Interviewee 2].*

When designing an assessment, certain factors make it easier for the educator to design a quality assessment. According to Izci (2016:2775) and Sims (2020:52), internal, external, and contextual factors will influence educators' assessment design practices. Firstly, the regulating body provides a competency framework according to which educators need to assess (this is an example of the interplay of rules, instruments, and community), which is an external influencing factor (Izci, 2016:2775). The power relation this indicates is discussed more in section 5.3.4. However, it breaks down the course content for educators. It makes it easier to identify what is important for students to be competent and skilled in, thus including this in the formative assessments.

> *"So the fact that we have to comply with the SAICA competency framework and the examinal pronouncements. So this narrows down already what I'm allowed to assess, so this makes it much easier for me because it gives me a bit of a scope." [Interviewee 1].*

Other factors that make the assessment design process easier are contextual and personal factors (Izci, 2016:2777; Sims, 2020:52), such as having enough time to set quality assessments and knowing and understanding the course content well. Having a personal understanding and experience with the course content makes it easier to assess the content in a practical and workplace-simulated manner, which will assist students in acquiring the necessary skills and competencies to be successful in the world of work.

> *"For me, personally, the time that I would take to set an assessment plays an important role. Uhm, I mean if one has a bit more time, it will definitely have an influence on the quality of the assessment that you put forth. Uhm, so that would definitely make it easier or harder for me personally, uhm, for how practical my assessments are." [Interviewee 2]*

> *"What makes it easier is probably if you… understand the, the content because yes, you may be a professional that as well. So it's not exactly the same. So it makes it a bit easier that you can navigate your way around the uhm, the content and that you understand because you've studied it yourself, as I say, but you obviously need to refresh, uhm, before setting up an assessment." [Interviewee3].*

Interviewees indicated unique challenges that each face when designing formative assessments. Factors that make it more difficult to design quality assessments for one interviewee include ensuring assessments are not influenced by plagiarism or improper sourcing, which is related to disciplinary factors, as understood by Van Lankveld *et al.* (2017:330). The distance mode of learning is particularly susceptible to this, as information pertaining to the assessments are published online, via the learner management system. This underscores the importance of maintaining academic integrity for educators within the distance mode of learning (see interviewee 1's comment below). Furthermore, the other interviewees indicated that time constraints make it difficult to design quality assessments. In contrast, another interviewee indicated the transition from a corporate environment to higher education made it difficult. These both indicate internal support as a constraining factor, as well as represents the interplay between rules and community within the activity system (Izci, 2016:2777). This shows a diversity in challenges that depend on the educator, their circumstances, and how they approach assessment design. The institution's policy, rules, and constraints have not been mentioned as having a constraining or enabling effect on educators' assessment design practices. Thus, while assumptions cannot be made in terms of the effect of the institution on enabling or constraining factors for assessment design, it can be assumed that educators are comfortable working within the institution's rules.

> *"Uhm, what makes it difficult for me? We have to be so careful about which sources we use to develop our assessments, and how we develop them, because students… Not that we copy and paste, but you do use sources to set your assessment, and that will spread like a fire. I have to say that for me, this is something that is at the back of my mind the*

whole time. I have to really think outside the box to ensure that those types of things, and plagiarism don't take place, to ensure that the students are really tested." [Interviewee 1].

"And then what makes it difficult? I will say is… To be honest with you, coming from corporate. So, to be honest with you, you need to orientate yourself." [Interviewee 3].

5.3.2 Object

The designed formative assessment becomes the object within the activity system. As the object influences the outcome, educators (subject) give meaning to the formative assessment by designing it to allow students to actively learn and apply their knowledge. This prepares students for future assessments and professional success. Formative assessment is further perceived as scaffolding students' knowledge and guiding their learning. This aligns well with the statement made by Robinson and Udall (2006:93) that formative assessment is supposed to improve student's learning. Formative assessments allow educators to present students with more in-depth engagement with the theoretical constructs, which motivates students to engage with the course content while also applying their knowledge in a simulated manner (which is an example of the interplay of tools, object, and outcome within the activity system).

"… to motivate students to really understand the theoretical principles from the syllabus." [Interviewee 1].

"…the formative assessments I think is for them to gain a, like a solid base of the actual principles that is taught, like, in the content. I also see it as, half, a learning moment towards the exams… to gain a, like a solid base of the actual principles that are taught…" [interviewee 2].

The formative assessment formats are mainly open-book assignments, essay-type and discussion-based questions, scenario-based questions, and calculations. These formats are chosen as they allow the educator to build simulated contexts where students must critically engage with the theory to apply the relevant principles to the scenario. This aligns well with Rowntree (2007), who states that formative assessment should highlight the most important constructs in the course, thereby reminding students of the theoretical principles they will need to apply in the workplace. Miller and Parlett (1974) allude to the systemic power of assessment and the power of key role players, such as the educator, that can shape what students pay attention to. Cue-conscious students will make a reasonable response to the system by seeking cues as to what is important for assessments (Miller & Parlett, 1974).

"…it is those scenarios that they will receive in paper-based format, the questions, in scenario format that they should be able to apply, uhm, the principles that they must be able to do. So, it's a lot like, I try to stay away from them only writing theory from the textbook. I want to see if they know how to apply it to a scenario in the text and so on." [Interviewee 2].

The types of formative assessments used allow for the benefit of a more focused and in-depth examination of specific content (again, the interplay between tools, object and outcome is supported here). Educators can provide more information and detailed scenarios in the assessment to further guide and situate the student. This approach supports a targeted and strategic learning experience, and students' efforts are equally directed towards the key aspects of the course content (Rowntree, 2007).

"…let's say it was a multi-choice; it would not have allowed them to apply the principle well enough, that they wouldn't be able to sit with it and come up with their answer to the question." [Interviewee 2].

When consideration is given to the assessment format two key thoughts are evident. Firstly, the impact of the assessment format on learning outcomes is considered. Students can be stimulated to grapple with the content on a deeper level. This enhances the ability to meet the learning outcomes, and thus develop competencies and skills. The formative assessment allows for easier application of principles and theories. Educators can set the assessment with the intention of developing competencies and skills through the application of core principles through opinion-based questions (this is an example of the interplay of subject, tools, object, and outcome within the activity system). Secondly, consideration is given to incorporating technical skills into the assessment design, such as critical thinking, ethicality, and reflection. By integrating technical and soft skills into the assessment design, the educator acknowledges that professional competence extends beyond technical knowledge.

"So, that makes it, not like the final exam where all the topics are covered, so it's great that the FA1 only focusses on [certain] units. So I can make sure that all these things are covered at a sufficiently deep level into the assessment." [Interviewee1].

"But the softer skill type of things you don't always have, so you will throw in like a four-mark ethics or three marks… And then I ask the student to give their opinion, but also just like a three or four mark question." [Interviewee 3].

The institution, nature of the programme and its requirements drive the types of formats used for formative assessments (which portray the interplay of rules, subject, and object). The above-mentioned types of formats are used for two reasons. Firstly, these formats, especially the calculation-based questions, provide educators with additional learning opportunities. The student's answer will still be assessed, despite any errors that might have occurred, and the assessor is able to provide feedback on the error. This offers a learning opportunity for the student to see where the mistake occurred and how to rectify it (thus closing the loop between rules, subject, object, and outcome).

> "*With the calculation even if they make a calculation error their method can still be correct. So in the case of the multiple choice question they would have received zero, but we mark with errors because it is essay-type questions. So even if the student made a calculation error we can see but the principles are applied correctly throughout and the student can still achieve 25 out 30." [Interviewee 2].*

Secondly, the formats prepare students for further studies towards becoming professional or chartered accountants (CAs). The educators acknowledge that students' goals are to become CA's, which will require further post-graduate studying, and these formats are most suited to preparing students for further studies towards reaching this goal (which represents the interplay of rules, community, object, and outcome).

> *"…because the program is SAICA accredited and in the bigger scheme of things, yes, everyone's not going to become CA in the end, but that is what you're working towards." [Interviewee 3].*

A clear distinction is drawn between formative assessments and summative assessments. Educators can focus in more depth on certain constructs, as the formative assessments do not assess students' knowledge of the entire course, but rather focus on certain topics. Summative assessments, on the other hand, seem to be perceived as assessments of learning rather than assessments for learning. Due to the nature of summative assessments, which are meant to test students' knowledge at the end of the course, more questions are asked, and students have a limited time frame in which to answer. For this reason, deeper thought-provoking and application-type questions are included in the formative assessments, where more information and readings can be included, without the risk of taking up too much time, as would be the case of summative assessments. Therefore, educators find it easier to assess competencies and skills in the formative assessments.

> *"Well, the great thing about formative assessments are, it only covers a certain number of units [from the prescribed courseware]. So, that makes it, not like the final exam where all the topics are covered, so it's great that the FA1 only focusses on units 1-4. So I can make*

sure that all these things are covered at a sufficiently deep level into the assessment." [Interviewee 1].

"So, in that way the assessment format helps, but, uhm, I would bring in a bit more reading, for example, for formative assessment they have a bit more time." [Interviewee 2].

5.3.3 Outcome

In assessment design as supporter or enabler of student learning, whether student learning has occurred becomes the outcome. The educator designs a formative assessment to influence student learning, and whether this has occurred because of the formative assessment is the outcome of the activity system. Educators believe that student learning indeed takes place because of formative assessments. However, emphasis is placed on the role of the supporting tools and services offered in response to the formative assessment, such as additional notes and contact with the educator (representing the interplay of tools, object, and outcome). While the formative assessment itself encourages the students to engage with the principles and theories taught in the course, educators believe that the questions students ask when they want to understand more about a topic or further engagement with other sources of information on the topic are what influence student learning.

"Yes, definitely. I think it slots in with the support that we give along with the assessment, I want to say. So for example, the fact that we encourage students to first work through their theory, it is the ultimate goal of the FAs." [Interviewee 1].

"Ja, I think definitely so. Like, I think it motivates them a bit to do it. I think for many of them, like, when they have to sit down and answer the question, and so on, then they will make effort to go and look at past papers that we release…" [Interviewee 2].

While educators believe that student learning takes place because of formative assessment, its motivational role in the student's learning journey should also be acknowledged. The formative assessment motivates students in different ways, which includes motivating them to see the assessment not just as something that needs to be done to graduate but as a moment to gain additional knowledge on a topic. The assessment communicates certain aspects to the student that also enhance the opportunity to learn, such as including the learning outcomes that guide students on the skills and competencies they achieved. Rowntree (2007) states that formative assessment plays several vital roles in the student's learning experience, including directing efforts towards key aspects of the course content (i.e. tools within the activity system) and engaging students in learning activities focussed on the course content.

"So after each question, it is very clear to the student which competencies have been met, and in the memo of the assessments, we also show them which learning outcomes are met and where in the textbook, in which unit, we deal with these topics. So, I think this motivates and guides students, 'cos it's not just a quick 3-hour test you do. It motivates them to focus on which areas I found challenging, and where can I get this theory in the book to ensure I understand it." [Interviewee 1].

Schildkamp *et al.* (2020:2) and Bennett (2011) state that educators should have the necessary skills to identify whether student learning has taken place and use it to enhance or improve student learning. The outcome of the formative assessment (object), which is whether student learning has taken place, is perceived by educators as whether students have studied and can apply their knowledge in the given simulated context (the interplay of tools, community, division of labour, object and outcome is highlighted here). Therefore, if students can practically apply their knowledge and conduct discussions or explanations in a detailed manner, it is believed that student learning has occurred. This correlates well with Khan's (2012:580) findings, which state that an effective assessment positively influences students' information attainment and achievement.

"*So just how the student is able to apply the theory. We focus on that quite a lot. So, even if it's a theoretical module with theoretical principles, the student should be able to apply and that is what we test. So, the manner in which the student applies the theory makes it easy to see whether the student understood the principle." [Interviewee 1].*

Feedback is an important component of the assessment process (Robinson & Udall, 2006:93; Biggs, 2003a; Knight, 1996). Through feedback, students can identify their strengths and weaknesses and learn how to address any skill shortages (Rowntree, 2007; Robinson & Udall, 2006:93). This is an important learning opportunity. However, how the student engages with the feedback becomes critical for whether student learning takes place. Feedback opportunities are provided to serve as a moment of reflection. The educator reflects on the assessment, highlighting strengths and weaknesses, while the student self-reflects (the interplay of division of labour, object, and outcome is highlighted here). However, learning cannot take place if the student does not engage with the feedback provided at the required level. This is indicative of Boud and Molloy's (2013:698) second model of feedback, where the student becomes a driver of learning by generating and soliciting their own feedback, thereby equipping them with the ability to judge their own learning.

"Something we saw that has a big and positive influence on student learning was the feedback. So, it wasn't necessarily the assessment itself, but rather the supporting

components we put in place so that students can learn. We show them what they found challenging, what was required and how it should be answered… [we] encourage students to look at the memo with insight and to go further than just checking for marks." [Interviewee 1].

"Ja for some of them. I realise for not all of them this happens. But especially for students, which is quite nice, when we take the memo that is released and take the assessment and work through it, there are students who really want to understand, ok but why did this happen, for them it definitely helps." [Interviewee 2].

5.3.4 Rules

The institution is the first stakeholder that should be acknowledged as dictating the rules of assessment design as an activity system. Discourse analysis of the assessment policy shows that while the institution's policy aims to ensure the integrity of the assessment process, its influence on assessment design is focused on guiding the structure and layout of assessments, emphasising the importance of adhering to institutional expectations and professional frameworks. The language used in the policy is technical and formal and establishes guidelines and procedures for assessment within the institution. According to interviewees, the policy also encourages educators to communicate effectively with students and guides the development of formative assessments that align with the curriculum.

"The second thing is, that the policy that we have, we encourage educators to communicate to students in terms of their FA1 and FA2s, and that motivates the students to first if they have questions about the FA2…. So we motivate them, [the institution's] policy is to motivate the students to first make sure that they have the theoretical principles in place, you watched the videos, they consulted all their materials, the textbook, to really understand the principles and then to attempt the formative assessment." [Interviewee 1].

"So, from the beginning they lead me in terms of what they want in terms of the structure, and, uhm, and how to do it, even just with the layout." [Interviewee 2].

However, the influence of the institution's policy on assessment design is not direct. The discourse analysis highlights the policy, stating that all stakeholders are required to follow the procedures and processes provided in the policy, suggesting that the policy is a top-down approach and that the institution exerts control over the assessment process rather than the design of assessments itself. The Chief Executive Officer (CEO) of the institution is identified as the authorising figure, which indicates meaning is constructed by establishing the policy as a formal and official document that all stakeholders should follow. This indicates that power over the assessment process lies with the institution. However, while the institution dictates the assessment process, educators have freedom within these rules to use the prescribed material for assessment purposes in a uniquely and academically relevant manner (see section 5.4 for more on this contestation). The responsibilities outlined in the policy dictate that various stakeholders hold various responsibilities within the assessment process. Educators are responsible for facilitating learning, providing inputs towards, and adhering to the assessment plan, executing assessment activities, managing assessments, reaching competence judgements, providing support in assessments where needed, and providing feedback, which supports the sense of freedom educators experience.

> *"Well, the great thing about formative assessments are, it only covers a certain number of units [from the prescribed courseware]." [Interviewee 1].*

> *"If we think about the memo, where you say afterwards where in the textbook you found the information, which learning outcomes you used and so on. So, that is their role for me, how to get that structure on paper and to help me to know how to lay out my thoughts*." [Interviewee 2].

The institution is accredited by the regulating body, the South African Institute of Chartered Accountants (SAICA). Therefore, interviewees strongly emphasise the need to adhere to the regulations set by the regulating body and implement them in assessment design. For example, simulation-type projects are required to sufficiently assess certain competencies and skills, in which case shorter essay-type questions will not contribute to achieving this goal. This suggests a commitment from educators to ensuring that students are assessed on skills and competencies deemed essential by the regulating body.

> *"Ok, in our case, we also include in the assessments… [the institution] is SAICA accredited so we have to comply with the SAICA 2025 competency framework and show how we comply with that." [Interviewee 1].*

> *"…our department has to ensure that our assessments cover the SAICA competency framework, uhm, so that is the first driving force that I use. I can't… for example some topics in the textbook are excluded from the SAICA syllabus. So, I can't assess students on those topics because it is not relevant to SAICA. So that is a big driving force…" [Interviewee 1].*

> *"As I said, uhm… in the first [is] what [the institution] would want is naturally important, what they would expect. And then also, for us specifically, we also work with SAICA's stuff*

to see if students adhere to competencies. So I always have to keep that in mind as well, so how will I set up my scenarios and questions to achieve those as well.' [Interviewee 2].

This indicates that the regulating body is a secondary power holder within the assessment design process. While the institution stipulates the assessment process, such as the assessment format, content to be assessed, weighting, and mark allocation, the regulating body requires students to showcase that they have gained certain skills and competencies necessary for professional practice in the workplace. Again, educators have the freedom to assess these competencies and skills within the rules of the institution and where they see fit. However, the need to adhere to the competency framework established by the regulating body indicates a form of power over assessment design.

> *"So the fact that we have to comply with the SAICA competency framework and the examinal pronouncements. So this narrows down already what I'm allowed to assess, so this makes it much easier for me because it gives me a bit of a scope." [Interviewee 1].*
>
> *"…the SAICA thing I mentioned earlier, for financial management that I work with a lot, and the business management and strategy that goes hand-in-hand with that… and that is always in the rough draft, like the framework of, uhm, things I will take into consideration.' [Interviewee 2].*

The purpose of the course dictates course demands and, therefore, the learning outcomes that students should meet throughout the course. This is indicated in the course document of each course. The course document, written in formal language, dictates the rules and guidelines for engaging with the course material, completing assessments, and the requirements for passing the course successfully. These rules and guidelines offer additional support to students and explain various important terms and conditions. Educators, as per the assessment policy, assist in finalising the course documents. Included in the course documentation is an outline of the learning outcomes and the study plan. When considering the nature of the institution as being in the distance mode of learning, the course documentation contains all the information students will require for the course to assist them in an asynchronous teaching environment.

The prescribed textbook outlines a set of learning outcomes that should be achieved in that chapter, which hints at a certain sense of power held by the textbook. The learning outcomes dictate, to a certain degree, what students need to learn in that course, along with the required competencies and skills outlined by the regulating body. Educators, therefore, need to work within the specified learning outcomes, competencies, and skills to ensure that what students learn is relevant to the course, the programme, and the working world.

> *"They have a big role… each chapter has its own learning outcomes, so those outcomes and the SAICA competencies fit together nicely. So again the textbook and SAICA's framework slots in well and comes together nicely." [Interviewee 2].*

5.3.5 Community

The community consists of different stakeholders, including the institution itself, the industry, the regulating body, as well as the students. The community exercises a certain influence over the activity system. In terms of assessment design, the community largely influences the learning intentions set for the formative assessments.

The regulating body plays a large role in the design of formative assessments by stipulating competencies and skills that need to be achieved throughout the student's learning journey. Educators use this framework to determine what is important from the course content and what students should be assessed on.

> *"So that is a big driving force, the SAICA 2025 competency framework and the examiner pronouncements. I make sure that I remain within that framework. And then I go and see, from student queries and assessment analysis, I go and see which areas students found challenging, which areas sufficiently test students, and that." [Interviewee 1].*

> *"I keep in mind, like the competencies I will always have to keep in the back of my mind, uhm, you know, this question I just asked, how will it help me achieve the learning outcomes that we have and that is always in the rough draft, like the framework of, uhm, things I will take into consideration." [Interviewee 2].*

Students as influential stakeholders from the community direct learning intentions through their engagement with educators throughout the semester. If students are struggling with a topic or constructs, educators will use this as an intention for formative assessments. With students having to grapple with these difficult constructs, it should motivate them to engage with the educator if they do not understand it and to consult additional sources of information. Through this, self-learning opportunities are created, along with the course content and additional tools, hinting at students becoming co-producers of knowledge while also guiding future assessment design (Zhang & Zheng, 2018, p. 1128). This reflects a student-centric approach and demonstrates a commitment to improving the learning experience by identifying challenging areas and assessing effectiveness.

"And then I go and see, from student queries and assessment analysis, I go and see which areas students found challenging, which areas sufficiently test students, and that." [Interviewee 1].

"I would, like, check what are the queries that I received this past semester. What do students generally not understand? So yeah, so I go on what a student struggling with…" [Interviewee 3].

The industry further plays an important role, as it guides the scenarios and case studies used in the assessments. Current trends and important happenings in the industry are used to design an assessment that aligns with the industry's current approach. This is particularly useful for creating simulations that place the student in a situation that is as realistic as possible. This reflects an awareness of the importance of real-world relevance in assessments and indicates a commitment to contextualising learning within the broader socio-economic and professional landscape.

"*I also think about what happens in the world out there, like what is happening now or has come to light." [Interviewee 2].*

Educators further intend for formative assessments to be a holistic approach to learning. Rather than just focussing on the competencies and skills as outlined by the regulating body, consideration is given to the learning outcomes as a fundamental part of assessment design, along with developing softer skills through assessment, such as ethicality and computer skills. This broadens the scope of assessment beyond the course content and aligns with a more comprehensive view of professional competence.

"*But then there are also the enabling competencies, such as the computer skills, the integrity, although the soft skills essentially, if you can call it that, that you need to bring into your assessment." [Interviewee 3].*

The institution's role in assessment design is both systemic and directional. The institution outlines the assessment process and guides assessment structures, including the layout and structure of the memorandum. This institutional support helps maintain consistency in assessment practices and ensures that educators are aligned with the institution's expectations. The focus on procedural aspects of assessment design, such as structuring, reflects the importance placed on adhering to specific guidelines and formats set by the institution. The institution's role in assessment design therefore relates to maintaining consistency across the different faculties. With the Accounting faculty's focus being on producing graduates capable of becoming chartered accountants, the structuring role of the institution toward assessment design seems counterintuitive. However, the institution’s policies seem to play a more important role in setting expectations and providing a framework for educators.

> *“So, from the beginning they lead me in terms of what they want in terms of the structure, and, uhm, and how to do it, even just with the layout. If we think about the memo, where you say afterwards where in the textbook you found the information, which learning outcomes you used and so on. So, that is their role for me, how to get that structure on paper and to help me to know how to lay out my thoughts*.” *[Interviewee 2].*

Educators also bring their own experience and practical considerations into the assessment design process. The balance between institutional guidance and the autonomy of educators in responding to student needs appears to be a key aspect of the overall approach to formative assessment.

> *“I'm thinking of the way that I am or look at it, when setting up assessments, because that's what I'm doing currently, well what we're doing currently now. Umm, so you would go through a semester and see, OK, this is what students really don't know.” [Interviewee 3].*

5.3.6 Division of labour

There is a clear division of labour in assessment design as an activity system between the institution, regulating body, educators as assessment designers, and students as co-producers of knowledge. While the institution provides structure and guidance on the assessment process and the regulating body dictates the required competencies and skills to be assessed, educators and students also have an important role to play in the division of labour for assessment design as an activity system. Educators design the assessments and lead students on their learning journey. This is accomplished through regular interaction with students, ensuring they approach the course material correctly, and providing feedback on assessments.

> *“I'm thinking of the way that I am or look at it, when setting up assessments, because that's what I'm doing currently, well what we're doing currently now.” [Interviewee 3].*

> “*Like, for example when we do the feedback videos or when a student sends you a query, you tell them you're not going to be awarded marks for just stating the textbook because then anyone can do that. You need to apply the principle to that scenario.” [Interviewee 3].*

The educator is also responsible for assessing students’ responses on the formative assessments. Certain factors indicate to educators that student learning took place in a particular assessment. These factors are dependent on the course demands and the assessment format. The most prevalent factor that indicates whether student learning took place includes how the student answered the particular question. For essay-type questions application and the integration of theory with the scenario or case study is a clear indication. For calculations, the use of the correct formula and values indicate that student learning took place.

> *"But then also, uhm, in our case with many of our [courses] that are calculation-oriented, or discussion-driven. So just how the student is able to apply the theory. We focus on that quite a lot. So, even if it's a theoretical module with theoretical principles, the student should be able to apply and that is what we test. So, the manner in which the student applies the theory makes it easy to see whether the student understood the principle." [Interviewee 1].*

> *"So for my specific modules it is quite easy, like, because, if I test scenarios and so on, it's not concepts that they have had contact with in the past or applied the principles and theories to already. So, for example, with my financial modules, if they are able to do the correct calculations it indicates to me. And where the work is more discussions, how do I explain this now, you can see when someone thumb sucks, but when a student thinks off all directions of the answer and if they really engaged with the work in their discussion questions." [Interviewee 2].*

> *"Like obviously we have lots of calculation marks or you know you carry over. So if you made a mistake in number one, you will lose the mark in number one, but if you carry that incorrect amount to number two, then, you know. Or… and you know you need to do that, then you will get the marks. So, if students get those carry-over marks, if they show their workings, if they reference their workings in discussion questions, for example, if they apply the knowledge and not just theory dump, then you can see, OK, this student actually studied." [Interviewee 3].*

As co-producers of knowledge, students firstly assist educators in determining what constructs students need to be assessed on through student queries. Regular student queries indicate the constructs in the course material that require additional attention or more focus. Therefore, educators use student queries to guide their design intentions.

> *"Umm, so you would go through a semester and see, OK, this is what students really don't know. Or this is the the student queries and there is kind of a trend in terms of student queries or what students don't understand or so those are the types of things that you would concentrate on in your development." [Interviewee 3].*

Educators encourage students to first work through the course material in an attempt to understand the theoretical principles before attempting the questions. They are also encouraged to first attempt the question they are struggling with before seeking assistance. This helps the student make some sense of why they might be struggling with the construct assessed in the question (Robinson & Udall, 2006:93).

> *"Yes, definitely. I think it slots in with the support that we give along with the assessment, I want to say. So for example, the fact that we encourage students to first work through their theory, it is the ultimate goal of the FAs." [Interviewee 1].*

> *"But I also think that from a current assessment, they can also learn a lot about specifically what work they just did and they really start to think about it and even if they only understand how the information can practically be implemented." [Interviewee 2].*

> *"If you are that studious student that genuinely studies your work and uses the [Formative Assessment 1] and [Formative Assessment 2] as an opportunity to practice for your [Summative Assessment 1], then it positively affects your learning because you can also learn from your mistakes…they must apply the theory and that is also what we teach them. …so the assessment is a, is a perfect opportunity to actually identify my weaknesses. See, ok, what I don't understand. Do I need to go back to the textbook? Do I need to ask the educator so assessments in general I think can be a positive tool, in your learning." [Interviewee 3].*

Educators seem content in their roles within the assessment design activity system, and no contestations or tensions were identified from the interviews. If we consider the assessment policy and the clarity regarding responsibilities it outlines, we can conclude that educators are aware of their role within the system and the institution.

5.3.7 Tools

The tools that influence assessment design as an activity system include the textbooks prescribed for the courses, additional notes and videos, additional non-graded activities, and past assessments. Textbooks are acknowledged as foundational for understanding the principles and theories related to the courses. Diverse materials, such as videos and additional activities, are seen as valuable for offering varied perspectives and implications. Regarding student learning, it is acknowledged that different students would learn in different ways, aided by using different perspectives. This hints at how the affordances and limitations of the tools are viewed. Together with this, videos are important resources within the distance mode of learning to bridge the gap between asynchronous and synchronous moments of learning. The various tools used in the courses further supplement the information from the prescribed textbook and are used to provide students with learning opportunities and sources of information. Thus, the tools are used together throughout the assessment process, rather than an overreliance being exercised on one tool only.

> *"Uhm, if we start with the textbook, you can't test something that does not come from the textbook, so definitely the book, or we use textbook examples and incorporate that into our assessments." [Interviewee 1].*

> *"Uhm, ja… So, I think, so, Ok again, with my specific [courses], the textbook is important for my [courses] 'cos it gives the principles. And at the end of the day, you have to understand the principles. And I know for some [courses'] videos it is also half, for the [course] videos, it is the same principle that is explained but it is explained a bit differently as in the textbook. Not because they want to be different, but if the student hears it explained in a bit of a different way it helps a lot." [Interviewee 2].*

> *"The textbook I use a lot..." [Interviewee 3].*

The above excerpts further indicate a clear distribution or mediation of power between the textbook as a tool and the subject (assessment designer) in the activity system, as mentioned in section 5.2.4. The textbook presents guidance in terms of what content and learning outcomes are to be assessed in the formative assessment. Educators use the textbook, along with the power exercised by the regulating body and the institution, to set assessments in which students can be successful.

There is, however, a risk of assessments being too closely tied to the textbook, potentially limiting the breadth of topics covered. If too much reliance is placed on the textbook, creativity is limited in assessment design and will result in a restriction of the content included in the assessments. Along with this, the effectiveness of additional activities in preparing for assessment may vary, and there might be a challenge in balancing alignment with creativity in assessment design. The additional activities should supplement student learning that results from the formative assessments, rather than become the main learning component.

> *"Uh, yes, I actually also go and look at the [additional activities] because you don't want to, uh, set up an assessment that also looks so, so, uhm, different. So, you actually go and see. OK, firstly, also besides the way that it looks the cosmetics of it, the, uhm, what, like, the principles that they are asked in the [additional activities]. So you actually also go and check, OK, did they do this in the [additional activity]? Because then it's a, I mean you can then ask that principle. Umm yeah, so it does affect your, my assessment development." [Interviewee 3].*

5.4 Contestations and tensions

Two important contestations and one tension are evident from the interview data. Firstly, interviewees mention freedom within assessment design. An important question arises here; who determines or mitigates this sense of freedom? While educators indicate a sense of freedom in designing assessments suited to students' needs and the institution's requirements, educators still need to adhere to the framework provided by the regulating body and show that certain competencies and skills have successfully been developed. The rules and guidelines on the institution's side should also be adhered to.

"We have freedom to set questions. We are encouraged, it is not a policy, but a framework or guidance. And I must say the framework encourages innovative assessment, which is how I experience it. So, it motivates you and you have to think creatively, because how do you test integrity in a scenario-based question? So the framework encourages that type of creative and innovative assessment development. I experience it not as limiting but guides and encourages innovative assessment design." [Interviewee 1].

Considering the power exercised by the institution, the prescribed textbook, and the regulating body, the freedom mentioned by interviewees lies within the creative design elements of the assessment, such as the types of scenarios and case studies used in the assessment and how questions are structured. True freedom in terms of assessment design is not evident from the power held by the institution, the regulating body, and the textbook. Here, power is regulated by the institution, the regulating body and the textbook in terms of what, in which manner, and where to assess certain competencies and skills. Rather, educators must ensure to assess certain competencies and skills, which are aligned with certain learning outcomes in the textbook, and in a certain manner as dictated by the institution.

Secondly, the distinction between formative and summative assessments is not always clear for educators. The institution makes use of both formative and summative assessments to ensure fair and consistent assessment practices, as stipulated by the institution's policy on assessment practice. However, the distinction between assessment for learning (formative assessment) and assessment of learning (summative assessment) seems to be understood by educators as being similar to one another.

"I don't see it much different to how I would set up my exams. Except that, for example, the student has a bit more time to… where in the exam they only have that time to answer, they have a bit more time to answer in formative assessments. Uhm, and some things, uhm, I will expect a bit more reading and even with the mark allocation, I will, uhm let me put it this way. For the exams

I will make sure that there is enough time, versus formative assessments. I will still do it, but not as strictly as for the exams." [Interviewee 2].

This highlights the fact that educators simulate the working environment in all assessments to ensure that students receive practical and hands-on learning opportunities. However, this also gives rise to another question. Can the summative assessment opportunity then be considered as assessment of learning, and should it not perhaps also be considered as assessment for learning (formative assessment)? The literature indicates that a key component of assessment for learning (formative assessment) is ongoing interaction between the educator and student, as well as the provision of feedback (Robinson & Udall, 2006, p. 93; Schildkamp *et al*., 2020, p.2). While a practical approach to summative assessments can reinforce the competencies and skills students learned throughout the course, no interaction or feedback is often prevalent in examination circumstances. Therefore, this contestation further illuminates the power held by the institution and the regulating body in terms of assessment design components, such as the assessment format and structure.

Thirdly, educators experience tension in terms of sources used to design assessments. While the institution provides access for both educators and students to a wealth of sources, such as journals and e-books, educators need to constantly utilise new sources in their assessments to avoid creating opportunities for students to plagiarise from previous assessments. While this relates to the nature of the distance learning space, where assessments and feedback are posted online for students to access, it creates a challenge for educators when designing assessments.

"We have to be so careful about which sources we use to develop our assessments, and how we develop them, because students… Not that we copy and paste, but you do use sources to set your assessment, and that will spread like a fire. I have to say that for me, this is something that is at the back of my mind the whole time. I have to really think outside the box to ensure that those types of things, and plagiarism don't take place, to ensure that the students are really tested." [Interviewee 1].

5.5 Conclusion

This chapter aimed to present an analysis of the findings yielded from the data as a means of establishing how assessment design can support or enable student learning. Activity theory was used as a means of critically analysing the data, and to present a clear picture on the activity nodes of assessment design as an activity system.

Educators play an important role as the subject of the activity, while formative assessment becomes the object and student learning becomes the outcome. The activity system is ruled and dictated by the institution, the regulating body, and course demands. The community, such as the institution itself, the industry, the regulating body, as well as the students, have an influence on assessment design as an activity system, while tools, such as textbooks, additional material, and video material, further influence design practices and the content assessed in the formative assessment. The division of labour between the educator and the student is further discussed.

Chapter 6: Conclusions

6.1 Introduction

The study aimed to determine how assessment design can enable or support student learning in higher education. In previous chapters, the relevant literature on assessment design and student learning was discussed, the study's theoretical framework was clarified, the methodological framework was discussed, and the interviews and document analysis results were presented.

The aim of this chapter is, therefore, to present conclusions and to answer the questions that guided this study, namely what assessment practice means for the institution, the types of assessments set and why, the learning intention and learning outcome of the different assessments, and the aspects that constrain or enable assessment design. Recommendations that arose from the results and conclusions are made for consideration towards assessment design practices and for further study on the topic.

6.2 Conclusions from the literature review

The literature review highlighted valuable aspects that contribute to the conclusions of this study. Firstly, assessment plays different roles in student learning, including identifying students' strengths and weaknesses. This was evident from the data, which revealed that assessments often show whether a student understands the theory and is able to apply it. This illuminates the importance of assessment for student learning (c.f. 2.2). A clear distinction is made between assessment for learning (formative assessment) and assessment of learning (summative assessment). With formative assessment, feedback and continuous student-educator interaction are essential to encourage student learning (C.f. 2.3). While participants in this study realise the value and importance of feedback, they cannot clearly distinguish between formative and summative assessments. Furthermore, contextual and professional factors play a role in educators' assessment design practices (c.f. 2.4). Contextual factors, such as the discipline, realities, internal support and social and cultural preferences, as well as personal factors, such as beliefs, values, conceptions, emotions, perceptions, assessment literacy, and professional identity, will influence assessment design in different manners. For example, contextual factors will influence the assessment method used, while personal factors will influence the type of case study used in the assessment. These factors can enable or constrain assessment design along with factors such as time, workload, and assessment cost.

6.3 Conclusions from the empirical study

The following conclusions can be drawn from the empirical analysis. The conclusions are drawn based on the guiding questions that informed this study.

Question 1: What does assessment practice mean for the institution? (c.f. 5.2.1)

Assessment practice refers to the process during which students are guided through their learning journey and includes educator-student engagement, assessing competencies and skills, and providing feedback. While the institution's policy situates the assessment process, clarifies the role it plays within the institution, and directs the assessment design process, interviewees indicated little direct influence on the assessment design itself. This can be understood as the institution providing direction on assessment practice, clarifying its role in the student learning journey, and as a teaching and learning tool, thereby indirectly influencing assessment design. However, the institution understands that other stakeholders have a direct influence on assessment design, such as instruments (course material, notes, videos, activities), the community (regulating body, students, industry), and the subject (assessment designer). This suggests that the institution distributes power within the activity system to stakeholders who play an essential role in students' learning journeys but will also contribute to the assessment process for assessment design and feedback purposes.

Formative assessment plays an essential role at the institution. This role is complicated and uneven, depending on other stakeholders, the discipline, the regulators, the formal requirements, and uneven understandings of what formative assessment means. However, it creates a space for students to engage with the theoretical foundations in various ways to simulate the world of work. How educators design formative assessment scaffolds students' knowledge, enhances student engagement with the syllabus, motivates students to explore the concepts in a simulated manner, and refines the knowledge and understanding students gain.

Question 2: What types of assessments are set and why? (c.f. 5.2.2)

The syllabus drives the selection of assessment modalities, which includes open-book assignments, essay-type and discussion-based modalities, scenario-based modalities, and calculations, as students should be able to develop specific skills and competencies. Significant influence is exercised by the professional body on the syllabus, competencies, and skills and, therefore, on the assessment modalities used. Educators have freedom regarding how competencies and skills are developed through assessment design. However, the professional body regulating the discipline influences the selection of assessment modalities through the prescribed competencies and skills to ensure students are effectively prepared for the industry.

This implies that the regulating body primarily shapes formative assessment and that assessment that facilitates learning adheres to the regulating body's competency and skills framework.

Assessments influence student learning by motivating students to explore the content from different perspectives and through the feedback given. Formative assessments create a space where students can interrogate the theoretical underpinnings of the module and explore how it is applied in the world of work, which, in turn, influences student learning. Factors such as formative assessments serving as motivation for students to consult the module content, providing an opportunity for feedback, and educators preparing studets for the examination are perceived to contribute to student learning.

The interrogation of information from various sources, such as the textbook, articles, and opinion pieces, and how students apply the information in their assessments clearly indicates the assessment designers' intention to promote student learning.

Changes in student learning can be observed when appropriate feedback is given to motivate and guide students to engage further with the curriculum, and students implement what they have learned from the feedback in further assessment opportunities. Feedback serves as a form of learning, but coupled with supporting components relevant to the formative assessments, students seem to develop the necessary skills and competencies tested in the examinations.

Question 3: What is the learning intention and learning outcome of the different assessments? (c.f. 5.2.3)

The learning intentions set for the assessments are largely based on a combination of course requirements, professional body requirements, and educators' observations of students' learning needs. Both competencies and skills can be tested in formative assessments to simulate the world of work, as students have more time to engage with the assessment. This effectively aids educators in achieving their learning intentions and increases the assessment's influence on student learning. What students should achieve in the assessments is determined by consulting the professional body requirements, additional sources, such as the textbook and learning outcomes, and components students struggle to comprehend.

Students engage with the assessments designed for the courses and the learning content at the required level, indicating a positive response and a reasonable participation rate in the learning experience. The alignment between student learning and learning expectations is determined by considering how students meet the learning outcomes assessed in the formative assessments.

Question 4: What aspects constrain or enable assessment design? (c.f. 5.2.4)

Aspects that typically enable assessment design include having adequate time to develop the assessments, having a good understanding of the module content and the regulating body's competency framework, and supportive course conveners and colleagues.

Aspects that typically constrain assessment design include time constraints, having to design assessments for modules that are new to the educator or which they have not engaged with before, having to think of new and innovative scenarios and questions to avoid duplication and thereby avoiding opportunities for plagiarism, and student's having trouble accessing specific sources. A further constraint is assessment designers' knowledge of formative assessment and its incorporation in assessment design. Aside from feedback, little distinction is acknowledged between formative and summative assessments, which implies that the design of formative assessments is similar to summative assessments.

Instruments, such as textbooks, notes, and videos, are used as a starting point for assessment design and guide the educator on which constructs should be included in the assessment. The regulating body significantly influences assessment design, as the body stipulates the competencies and skills that students should have achieved upon graduation to succeed in further studies or enter the world of work.

6.4 Conclusions on Assessment Design as an Activity System

This study has contributed to the body of knowledge on activity theory through its application to assessment design in higher education. Assessment design as supporter or enabler of student learning is perceived as a system comprising the interrelation of various nodes, including rules that govern or dictate the system, stakeholders that influence the subject, object, and outcome, and the division of labour from various stakeholders within the system. The educator is responsible for designing assessments that support or enable student learning. To do so, the educator should adhere to the policies and stipulations of the institution, the course demands, and the regulating body while exercising appropriate levels of thought and critical thinking to ensure that student learning is at the appropriate level. Assessment design as supporter or enabler of student learning is thus not a sole activity but one that requires thought, input, and consideration from and of various agents within the activity system.

The activity system indicates that the institution holds power, the regulating body, and the textbook used for the course. The institution holds power over the assessment design process, including the structure and format. In contrast, the regulating body holds power within the assessment design process as it dictates competencies and skills that are important for students to achieve.

The textbook holds a sense of power over the content that educators can assess in each assessment. Therefore, educators can design case studies and scenarios to assess the stipulated content, competencies, and skills.

Within this system, two contradictions and a tension surfaced. Firstly, while educators feel they have freedom within assessment design, power relations are enforced by the institution and regulating body. Textbooks indicate that this freedom is confined to certain elements within an assessment only, such as the use and development of case studies and scenarios and the selection of competencies and skills relevant to the course material assessed from the textbook. Secondly, educators do not seem to be clear on the distinction between formative and summative assessments and the different purposes of assessment for learning and assessment of learning. Thirdly, the need to constantly use new and different additional sources of information, rubric design, and grading approaches and mechanisms when designing assessments poses a challenge to educators. This challenge lies solely in the need to avoid the creation of opportunities for plagiarism among students.

6.5 Recommendations from the findings

The following recommendations can be made.

6.5.1 Development of Formative Assessment Literacy

Having adequate knowledge of formative assessment and its practices will aid educators in setting learning intentions that will effectively enable or support student learning and in setting clear measures for determining whether student learning has taken place due to the assessment. Through such practice, educators can conclusively determine whether their practice supports or enables student learning rather than simply relying on how students phrased their answers.

This goes hand in hand with understanding the difference between formative and summative assessments. Educators should be made aware of this difference by highlighting the feedback component. Formative assessment stipulates the need for clear feedback to assist students in their learning experience and to assist them in improving. In contrast, summative assessment focuses on whether students achieved the necessary competencies and skills throughout the course. By highlighting this distinction, educators can better plan their formative assessments and feedback sessions to improve students for the summative assessment rather than treating both assessment types in the same manner. This can quickly be done through in-house training, such as hosting workshops pitched at different NQF levels to ensure the integration of theory with practice.

6.5.2 Use of innovative assessment methods

Innovative assessment methods, such as gamification, can assist educators in overcoming the tension experienced within the assessment design process. This can also involve balancing the use of traditional, such as open-book assignments and modern assessment methods. Through innovative assessment methods, educators will be able to design assessments that emphasise learning, motivate students to engage more with the curriculum, and continuously use different additional sources of information, thereby guaranteeing a decrease in the possibility of plagiarism.

6.5.3 Consider the influence of various factors on assessment design

Educators should be aware of the factors influencing their design practice, such as beliefs, values, conceptions, attitudes and emotions, perceptions, assessment literacy, and professional identity. This includes being aware of contextual factors, such as the context of teaching and learning, and social and cultural preferences.

6.6 Study limits

The study was conducted within certain limits. The discipline studied was solely focused on the Accounting programme offered by a private, distance higher education institution. Therefore, a small number of educators serve within this discipline in the institution who were included in this study. Furthermore, student learning had to be inferred from the data collected.

6.7 Recommendations for future research

The following recommendations for future research can be made based on the findings and conclusions from this study.

- The role of quality assurance and management within the assessment process and its impact on assessment design as supporter or enabler of student learning should be explored. Through such an exploration, light can be shed on whether quality practice influences assessments as supporters or enablers of student learning and the extent of such an influence, if any.
- Students' role in the learning experience should be explored. Exploring the student's perspective of how he/she learns and whether formative assessment influences their learning experience. This change in perspective can illuminate any problem areas that may hinder students from engaging with the curriculum and participating in assessments.
- The influence of the private, distance mode of learning and its features on assessment design and student learning should be investigated. The results from this study yielded little evidence

of the features and influence of this specific mode of learning and, therefore, require further investigation.

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Appendices

Appendix A: Information and consent form for participants

Dear ________________

Request for participation in an interview: Assessment design as supporter or enabler of student learning.

I, Linda-Louise Geldenhuys, am a master's student in the School of Education at the University of Cape Town. I am writing to request your participation in this study in the form of an interview. The aim of the study is to understand how assessment design supports or enables particular forms of learning at an open, private, distance learning institution.

Assessment practice is regarded as a key function for student learning and requires deeper analysis to understand how assessment design interprets the intended learning into the achievement of knowledge demands at various levels of learning. An interview with you will assist me in gaining a deeper understanding of assessment practice at the institution.

Your confidentiality will be ensured, and you may withdraw from the study at any time, as participation is voluntary. The data will not be used for any other purposes than for this study and will not be shared with third parties.

Please complete the form attached herewith to indicate your consent to be interviewed. You are welcome to ask any questions regarding the research via telephone or email. You can contact me on 081 270 6503 or linda90@live.co.za

Sincerely,

Linda-Louise Geldenhuys

Interviewee Consent Form

Assessment design as supporter or enabler of student learning at an open distance learning private higher education institution.

I, _______________, an Educator at the institution, understand that my participation is voluntary, and that confidentiality will be maintained. I can withdraw my participation at any time. I understand that my own confidentiality will be maintained in the reporting of the findings.

I hereby consent to the following:

Data Source	**Yes**	**No**
1. Participating in an interview.		
2. Being recorded during the interview.		

Name: ___________________

Signature: ___________________

Date: ___________________

Appendix B: Information and consent form for the institution

Dear ________________

Assessment design as supporter or enabler of student learning at an open distance learning private higher education institution.

I, Linda-Louise Geldenhuys, am a master's student in the School of Education at the University of Cape Town. I would like to ask permission to conduct research on the ability of assessment design to support or enable particular forms of learning at your private, open distance learning institution. The aim of the study is to understand how assessment design supports or enables particular forms of learning at an open, private, distance learning institution.

Assessment practice is regarded as a key function for student learning and requires deeper analysis to understand how assessment design interprets the intended learning into the achievement of knowledge demands at various levels of learning. One programme has been selected from which a sample of two courses will be selected for analysis. The selected programme is the Bachelor of Accounting. The below table represents the documentation required for the purpose of this study:

Table 1: Required data sources

Institutional Assessment Policy	
Bachelor of Accounting	1. Course outline for a course on NQF level 6. 2. Course Outline for a course on NQF level 7.

The confidentiality of the institution will be ensured, as well as all course convenors and educators. The data will not be used for any other purposes than for this study and will not be shared with third parties.

Please complete the form attached herewith to indicate your consent to the research. You are welcome to ask any questions regarding the research via telephone or email. You can contact me on 081 270 6503 or linda90@live.co.za

Sincerely,

Linda-Louise Geldenhuys

Institutional Consent Form

Assessment design as supporter or enabler of student learning at an open distance learning private higher education institution.

I, ____, on behalf of the institution, understand that the institution, including educators and course convenors, will be kept confidential, and that the data will not be shared with third parties, or used for purposes other than this study.

I consent to access to the following documents:

Data source		**Yes**	**No**
Institutional Assessment Policy			
Bachelor of Accounting	1. Course outline for a course on NQF level 6. 2. Course Outline for a course on NQF level 7.		

Name: ________________________________

Designation: ________________________________

Signature: ________________________________

Date: ________________________________

Appendix C: Interview questions

1. What influence does the institution's policy and stance on assessment, teaching and learning have on assessment design?
2. What is the purpose of formative assessment for your modules?
3. What types of formative assessments are used for your modules?
4. What factors would you say influence/impact the type of formative assessments used?
5. Do you think assessments have any influence on student learning?
6. How do you think it influences student learning? In what way does it influence student learning?
7. When developing a formative assessment, what are your intentions for the assessment? Any examples?
8. How does formative assessment help you achieve a particular kind of learning?
9. What factors influence your design and what constrains it?
10. How do you determine what students should achieve through the assessment?
11. What in a student's submission will show you that student learning has taken place?
12. How do instruments, such as textbooks, notes, and videos, influence/affect assessment design?
13. How do the industry and/or professional body expectations influence assessment design?
14. Do you observe any changes in student learning as a result of the formative assessments?
15. How do you think students respond to the assessments designed for the programme/modules?
16. Do you think that what students produce is aligned with the learning expectations you set for the assessments?
17. Anything else you would like to add?

Appendix D: Ethical clearance

SCHOOL OF EDUCATION

Dr Carolyn McKinney
Associate Professor

University of Cape Town, Private Bag X3, Rondebosch, 7701
Physical address: Neville Alexander Building, 6 Lover's Walk, Lower Campus
Tel: +27 (0) 21 650 2757 / 2772 Fax: +27 (0) 21 650 3489
E-mail: carolyn.mckinney@uct.ac.za http://www.education.uct.ac.za/edu/staff/academic/cmckinney

EDNREC20220807

29 August 2022

Linda-Louise Geldenhuys GLDLIN009

M.Ed

Dear Ms Geldenhuys,

Re: Ethical Clearance for Research Project

I am pleased to inform you that ethical clearance has been granted by the School of Education Research Ethics Committee of the Faculty of Humanities for your research project entitled: Assessment design as supporter or enabler of student learning at an open distance learning higher education institution. This approval is valid for one year ending 31 August 2023.

I wish you all the best with your study.

Yours sincerely,

Associate Professor Carolyn McKinney
Chair - School of Education Research Ethics Committee

Re: Ethical clearnace renewal

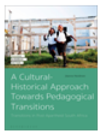
Joanne Hardman <joanne.hardman@uct.ac.za>
To Linda-Louise Nicholas
Cc Alan Cliff

If there are problems with how this message is displayed, click here to view it in a web browser.

Reply R

Hi Linda-Louise this is fine- you can have until September 2024
Jo

Associate Professor Joanne Hardman
Deputy Director
School of Education
Ethics Chair: School of Education
Neville Alexander Building, 6 Lover's Walk
Lower Campus
University of Cape Town/ Rondebosch/ Cape Town
+27 21 650 3920
Latest book: https://www.bloomsbury.com/us/culturalhistorical-approach-towards-pedagogical-transitions-9781350164703/



From: Linda-Louise Nicholas <Linda90@live.co.za>
Sent: Thursday, 24 August 2023 08:13
To: Joanne Hardman <joanne.hardman@uct.ac.za>
Cc: Alan Cliff <alan.cliff@uct.ac.za>
Subject: Ethical clearnace renewal

CAUTION: This email originated outside the UCT network. Do not click any links or open attachments unless you know and trust the source.

Good morning Prof Hardman

I trust this finds you well.

I received ethical clearance for my MEd in Higher Education Studies mini-dissertation for the year of August 2022 to 31 August 2023. As the clearance is coming to an end, I was wondering if it would be possible to extend the current clearance for another 12 months so that I can finalise the research and write-up under the same conditions that I applied for previously?

Attached is the ethical clearance letter, as well as Prof Alan Cliff, my Supervisor's ethics approval. Should you need any other information, I would be happy to supply that.

Kind regards
Linda-Louise Geldenhuys