

Demotivating Online Formative Assessment Strategies at an Open Distance Learning University

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Abstract

Online formative assessment strategies are an important element in the level of engagement needed for motivating students learning online in open distance learning (ODL) because they are key in offering large-scale interactive participation. While many studies have looked at the advantages of online formative assessment strategies, they have neglected demotivating online formative assessment strategies that students struggle with. To ensure the quality of the online assessment, it is also important to understand the nature of assessment practices that demotivate students from persisting with their studies. This is because the type of online assessment that students struggle with should guide the choice and design of the online formative assessment strategies. Therefore, this article identifies online formative assessment strategies that demotivate students from participating persistently in online formative assessment in ODL in order to improve the design and development of online learning. This study used a developmental research approach to carry out a descriptive quantitative case study survey involving 112 purposefully sampled students, of which 58 responded, who were registered for a master's in education in ODL course at an ODL university in South Africa. A thematic coding process was adopted during the analysis of students' responses to an online Google form. Though students differed in their choices of the online formative assessment strategies that demotivated them in their studies, there was consensus on seven significant themes. The socio-technological perspective and the self-determination theory were used as the theoretical frameworks to drive the investigation since they encompassed all relevant aspects of the design of online learning and motivation to learn online. Information regarding demotivating online formative assessment strategies provide insight to course leaders and instructional designers attempting to build successful online



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learning strategies that motivate students to participate persistently in online learning environments.

Keywords: demotivating online formative assessment strategies; online learning; open and distance learning (ODL); motivation; persistence

Introduction

More universities are seeing the potential of open distance learning (ODL) as a means to broaden their teaching portfolios because of, among others, the massive number of students entering university, the emergence of pandemics such as Covid-19, and the current high cost of education in face-to-face universities. Therefore, there has been an unavoidable movement towards online teaching and learning caused by these factors in open distance learning environments. Since most open distance learning universities moved towards online learning, traditional formative assessment strategies have been forced to adapt to online spaces. When online learning was introduced in the ODL universities, students were generally more at risk of dropping out, stopping out or taking more time to complete courses (Maringe and Sing 2014). This was because academics and students were generally less prepared for the rigours of online teaching, learning and assessment. For example, the Council on Higher Education (CHE) stated that students faced complex life circumstances with the competing demands of online learning and assessment and were therefore at risk of dropping out and stopping out (CHE 2014). With the increasing demand for online learning, educational institutions often face the challenge of finding the right balance between meeting student needs and implementing effective online formative assessment strategies. Extensive research has revealed that the assessment methods employed by online educators directly impact student outcomes such as connectedness, satisfaction, learning, and academic performance (Carrillo-de-la-Peña et al. 2009). It has been observed that student learning and retention suffer when assessment methods are not conducive to effective learning (Weurlander et al. 2012). While formative assessment has been linked to improved outcomes, its effectiveness may be diminished when the assessment strategies are not aligned with the instructional strategies employed (Wu and Jessop 2018). Unlike summative assessments, formative assessment encourages active student involvement and provides valuable insights into instructional adjustments that can enhance motivation to learn (Havnes et al. 2012).

Research has shown that when educators effectively employ formative assessment strategies, students can learn course material at an accelerated pace while increasing their motivation to learn and their ability to become self-regulated learners (Shute and Kim 2014). Utilising formative assessment as a learning tool has been found to positively impact student engagement, intrinsic motivation, peer interaction, and the depth of subject knowledge, ultimately leading to higher academic performance (Haugan, Lysebo, and Lauvas 2017). Effective formative assessment is characterised by keeping students actively engaged in assessment activities, preventing dropout, and

empowering students to take ownership of their own learning (Petrović, Pale, and Jeren 2017). Multiple studies have consistently demonstrated a direct correlation between formative assessment strategies and students' motivation, engagement, and academic achievement (Elezi and Bamber 2017; Wafubwa 2020). The effectiveness of these strategies heavily depends on the specific approaches employed (Simon 2019). However, a comprehensive analysis of 38 selected studies conducted by Wafubwa (2020) revealed that certain online formative assessment strategies, such as peer assessment and self-assessment, have not been thoroughly tested empirically. Additionally, doubts were raised regarding the use of classroom discussions as a means of eliciting evidence of student understanding. Students expressed frustration over the lack of discussion regarding these demotivating online formative assessment strategies (DOFAS), and even teachers raised concerns about their implementation (Simon 2019). Following this brief background, this article is a response to the call that was made to help shape professional development and the emerging learner support framework at ODL higher education institutions (Chamberlin 2010). Consequently, there is a clear need for teachers to receive training on how to effectively implement challenging online formative assessment strategies (Wafubwa 2020).

To address this gap, this article aims to identify demotivating online formative assessment strategies in postgraduate courses to enhance their design and implementation in a manner that aligns with student needs. The primary focus is on intrinsic motivation, as it is the inherent drive that compels students to independently complete tasks (Deci and Ryan 2012). This article draws upon the concepts of self-determination theory, which suggests that students can become self-regulated learners who develop academic skills such as goal setting, selecting and utilising learning strategies, and monitoring their own progress (Hornstra et al. 2018). By investigating the relationship between formative assessment strategies and intrinsic motivation, this study seeks to enhance the meaningful utilisation of these strategies in online educational settings. This article will provide lecturers and instructional designers with the opportunity to learn and identify the knowledge and skills that are required to design various online assessment strategies from the students' point of view. It will inspire its readers to address the question of aligning online formative assessment strategies with what motivates students to stay focused in online assessment.

Conceptualising Demotivating Online Formative Assessment Strategies

To understand DOFAS there should be a clear understanding of what we mean by formative assessment. There are various definitions of formative assessment, but for this article, formative assessment is referred to as a wide variety of methods that educators use to conduct in-process evaluations of student comprehension, learning needs, and academic progress during a course (Cowie and Moreland 2015; Filsecker and Kerres 2012). Online formative assessment is an electronic assessment tool that is an important element in the level of engagement needed for meaningful online assessment and is an encouragement for students to adopt good study approaches (Boud

2018). Online learning in ODL, viewed as a subcategory of distance education, is the method that is used to provide opportunities and meet the needs of a growing and increasingly diverse student population. Online learning has several potential benefits, which include the ability to overcome the temporal and spatial restrictions of traditional educational settings (Bates 2012). Succeeding in ODL environments can only result from an organised, well-designed and well-structured system of planning and guidance to the design of the assessment strategies (Zhang and Kenny 2010) that can result from the students' own perspectives in ODL environments. Therefore, the aim of this article is to identify DOFAS that demotivate students from participating persistently in online formative assessment in ODL.

The term “demotivating online formative assessment strategy” is understood to be a strategy that falls into several categories that disturb the normal excitement of learning. The strategy can be technically difficult to use due to online challenges or issues. It can also be a strategy that does not achieve its desired objective. There may be no clear directions for the use of the strategy or it may not be easy to access the tool of use from the internet. In addition, there are some strategies that enable unfairness in the recognition of achievement or that make student advisers unable to follow up on the student's progress. The identification of DOFAS became the critical issue to investigate in this study.

DOFAS are one of the key contributing factors to poor student motivation in open distance learning universities (Soumana and Uddin 2017). This is because online formative assessment strategies are central to online student learning since they are mostly what teaching and learning encompass in face-to-face universities and are therefore a critical issue in need of serious attention (Lindsay 2015). New demands on open distance learning university education have had a disruptive effect on the trusted conventional assessment strategies and plans. Student satisfaction with online assessment results from an online environment that enables student motivation to participate in all online activities. In the light of this, tasks need to be carefully planned and designed so that there is a clear sense of what kind of learning will yield the outcomes that are envisaged. Successful online assessment and learning require that lecturers identify the exact source of the challenges with assessment in order to acquire new competences that enable the students to be motivated to do assessment online.

Open Distance Learning and Online Formative Assessment

Open distance learning as a preferred delivery model in South Africa is aligned to several stated goals such as the flexibility of learning provision, student-centredness, supporting students and constructing learning programmes that are associated with change towards online learning (Moore and Kearsley 2012). The defining purpose of ODL is to overcome barriers to learning by provisioning excellent, well-designed learning materials, appropriate use of technology and various student support and communication systems (Muyinda and Mayende 2013). Since ODL is unique in that,

among others, students and teachers as well as students and students are separated by transactional distance, course leaders need effective instructional strategies that best support students. Because ODL institutions are known for their high dropout rates (UNISA 2018), discussions about how to motivate the students to participate better online have motivated this study. ODL universities need to take advantage of technological advancements and findings from relevant research studies to make informed decisions about improving DOFAS.

Because ODL offers learning environments that are challenging due to new and different expectations brought about by digital technology, the learning outcomes of higher education have become more complex (Makhanya 2016). For example, the challenges of student retention, completion dates and joining and re-joining courses continue to beset higher education institutions (CHE 2014). The results of the National 5-Year Graduation, Retention and Attrition rates for the 2000 cohort at an open distance learning institution indicated that 14% of students in the 2000 cohort had graduated within five years; 27% were still registered after five years, and 59% had dropped out without graduating (UNISA 2018). This is because students face complex circumstances with the competing demands of online learning and are generally less prepared for the rigours of new online formative assessment strategies. To support students adequately, planning and managing efficient and effective online formative assessment become key to propel the desired state of agility that is necessary for ODL. Therefore, the purpose of this article was to identify DOFAS that demotivate students from participating persistently in online assessment in an ODL environment from the students' point of view.

Student Retention, Dropout and Success

The challenges of student retention, delays in completion and students joining and re-joining courses continue to beset higher education institutions (CHE 2014). The extent of the problem was also highlighted in a study commissioned by the Council on Higher Education in South Africa (CHE 2014). Student retention and success have become a major focus of concern among local and international higher education systems. The reasons given for these challenges are that students face more complex life circumstances with the competing demands of online learning and are generally less prepared for the rigours of online learning (Vambe 2005). Studies have been carried out to determine the reasons for the high dropout rate of students at ODL institutions (Maringe and Sing 2014). Ill-prepared online formative assessment strategies have often come out as one of the contributing factors that drive low retention rates (Prinsloo 2016). Since DOFAS were identified as one of the main problems associated with high dropout rates, the purpose of this article is to identify DOFAS from the students' point of view.

There are several reasons why ODL institutions should address student success, retention and satisfaction in a strategic and resolute manner. First, ODL institutions have a moral obligation to ensure that student access and success in the ODL environment

are inextricably linked by providing appropriate, high-quality teaching and student support and efficient administrative service. Second, persistent failure and dropout have significant financial implications for students at national level. This is particularly so in the light of the government's current outcomes-oriented funding framework in the most recent ministerial statement on higher education funding (CHE 2014). The CHE statement signalled the intention to base the distribution of future teaching and research development grants only on approved plans to improve success and throughput. Third, ongoing poor success, retention and graduation rates diminish institutional reputation as well as student and staff morale. The findings of this article are intended to help shape the emerging learner support framework at higher education institutions. Finally, the interactions between student and institution are mutually constitutive; that is, the way one engages with the other shapes the way the other engages in the interaction (Ahmed, Kloot, and Collier-Reed 2015). Furthermore, it is self-evident that the more effectively one engages with the other, the more effective the interaction will be. It is against this background that this article investigated DOFAS that distract students from participating persistently in online assessment in an ODL environment.

Motivation and the Design of Online Formative Assessment

A lot has been written about technology and its potential, but not much has been said about what motivates students to respond positively to assessment online (Salmon 2013). A student's attitude and motivation have often been reported to be the critical factors for success within online learning (Brandl 2002). Motivation has been found to be both a condition for and a result of effective instruction (Bekele 2010). Poor motivation has been identified in most ODL environments as a decisive factor in contributing to the high dropout rates from online courses (Brophy 2010; Muilenburg and Berge 2005). The concepts of motivation and the quality of support and training are key factors in online learning success (Chamberlin 2010). Schunk, Meece and Pintrich (2013, 4) define motivation as "the process whereby goal-directed activity is instigated and sustained." Motivation can influence what we learn, how we learn, and when we choose to learn. Research shows that motivated learners are more likely to undertake challenging activities, to be actively engaged, to enjoy and adopt a deep approach to learning, and to exhibit enhanced performance, persistence, and creativity (Schunk, Meece, and Pintrich 2013). Though research into designing and motivating learning environments in face-to-face environments has received more attention, the factors that influence motivation in online environments are complex (Brophy 2010) and must be attended to urgently. This article pursues DOFAS that distract students from persistent motivation to participate in online formative assessment.

Because motivation towards students' participation in online assessment plays an important role in successful online teaching and learning, it is important that lecturers become champions who make online assessment come alive by exploiting several potential strategies and research so that the student can be motivated to work online. Lecturers in online teaching environments need new attitudes, knowledge and skills and

ways of operating that will create a successful and happy online environment (Shemansky and Seignior 2020). To this end, this article, through students' analytics, sought to identify demotivating online formative assessment strategies. Therefore, the aim of this article was to identify the DOFAS that demotivate students from participating persistently in online assessment in an ODL environment.

The Lecturer in the Online Formative Assessment Environment

The approach to learning adopted by an individual student is not an attribute of the student but is their response to the perceived demands of the learning task (Acquaro 2020). Therefore, lecturers in online teaching environments need new attitudes, knowledge, skills and ways of operating that will motivate students to learn in online environments (Shemansky and Seignior 2020). In an ODL environment, the student numbers are big and motivating a big audience to work online is not easy. ODL students working in online environments are often not motivated to work online. They often do not respond to discussion forums, refuse or hate working in groups, and are unwilling to find help or ask assessment questions from the lecturers (Salmon 2013). Although the premise of an ODL institution is to enable the learner to be unlocked from the shackles of distance learning, the reality is implementing most of the requirements for online learning that include online formative assessment is a challenge. Online teaching in higher education requires a new way of thinking for the lecturer and hence a new way of motivating participation in assessment and learning. The territories or boundaries that define lecturers' roles in traditional settings in higher education have shifted in ODL contexts. The support that is required for the lecturers to be able to work successfully and effortlessly online is not easily available. Furthermore, in South Africa, given the persistent problems with staff development for online and institutional remedial initiatives, higher education retention and success rates continue to be notoriously poor (UNISA 2016).

Students' Involvement in Online Formative Assessment

Though online formative assessment strategies are the main drivers of learning in ODL, there is evidence of a dearth of available literature about students' involvement in their design and development in higher education (Cavanagh et al. 2005). Students have always indicated their wish to contribute to the way they learn and yet studies on the development of online formative assessment strategies with students' involvement are sparse (Salmon 2013). An improvement committee was formed at one ODL university to find out the problems with online formative assessment that caused negative retention and pass rates at that university. In the results, DOFAS were identified as one of the main contributing factors that drove high dropout and low retention rates and demotivated students from persisting with their studies (Prinsloo 2016).

Problem Statement

Available evidence suggests that non-academic or cognitive factors such as online formative assessment strategies are more likely to impact students' motivation to succeed in ODL settings than in residential settings. It is against this background that this article investigated DOFAS that demotivate students from participating persistently in online formative assessment in an ODL environment.

The Research Purposes

Emanating from the context of the problem, the question was, What are the online formative assessment strategies that demotivate students from persisting with the completion of postgraduate courses at an ODL institution? The purpose of this article was to identify online formative assessment strategies that demotivated students from persisting with online learning in postgraduate ODL courses. The assumption was that the structure and nature of online formative assessment strategies influence how students are motivated or demotivated to participate in online assessment.

Methodology

The course that provided the context for the case study was situated within the context of an ODL university. Students in a fully online course were registered for a postgraduate course and received only digital resources at the beginning of their course. Students typically took this course in two to five years that led to either a certificate or a master's degree.

During an online Google survey, 112 questionnaires were sent out to a purposefully selected population of 112 participants who were also lecturers at a South African ODL university. A total of 58 participants who had completed or were in the process of completing their master of education (MEd) degrees in ODL responded to the online survey. Data collection was carried out in two phases. Initially, the researcher analysed the learner management system known as myUNISA in order to identify all the online formative assessment strategies that were being employed for the MEd in ODL course. Within these strategies, students identified those demotivating them from persisting with online learning. Using quantitative data created in Google forms from an open-ended questionnaire, a thematic analysis was conducted to identify the emergent themes or patterns related to the research question. These themes focused mainly on issues related to those elements that demotivated students from persisting with online formative assessment strategies. E-mails were used as a mode of delivery for the questionnaire because of the open distance education environment. Data obtained from an open-ended questionnaire responded to issues that related to online formative assessment strategies either motivating or demotivating a student from persisting with online assessment activities. A clear description of what is meant by a demotivating online formative assessment strategy was given before the students started with the survey questions. Responses were developed in a "Yes" and "No" format. The online

formative assessment strategies were then cumulatively rated. Descriptive statistics (frequencies and relative frequencies) were used to summarise students' responses to demotivating online formative assessment strategies in the MEd in ODL course. A thematic analysis was conducted to identify the emerging themes or patterns using the percentages generated in Table 3. Demotivation is considered as the opposite of motivation in this study.

The Theoretical Frameworks

To investigate online formative assessment strategies that demotivate students from persisting with learning to the completion of their postgraduate courses, theories about what primarily motivates a student and its relationship to the social technical environment must guide the process. It is against this background that insights from the socio-technological perspective (STP) (Baxter and Sommerville 2011) and the self-determination theory (SDT) (Deci and Ryan 2012) guided the investigation of online formative assessment strategies, as these two theories encompassed all the aspects of online educational settings. The socio-technical perspective is a systems approach to design that considers human, social and organisational factors in the design of organisational systems (Baxter and Sommerville 2011; Shin 2014). This idea clarifies the notion that higher education systems do not design technology but, rather, they design socio-technical systems that understand how people and technologies interact (Silver and Markus 2013). To design online formative assessment strategies that motivate students to work in online platforms, it is vital to address all three interrelated aspects: people, process and technology, as addressing just one or two aspects will defuse the potential benefits of the other aspects.

Among the theories of motivation, the self-determination theory offers a broad framework for understanding the factors that promote human motivation. It focuses on the degree to which an individual's behaviour is intrinsically self-motivated and self-determined, and it considers the extrinsic factors that influence students' persistence to learn (Ryan and Deci 2012). Self-determination theory is a contemporary theory of situated motivation that is built on the fundamental premise of learner autonomy. SDT argues that all humans have an intrinsic need to be self-determining or autonomous (i.e., experience a sense of agency and control), as well as to feel competent (i.e., capable) and connected (i.e., included and linked to others) in relation to their environment (Ryan and Deci 2017). If environmental conditions are such that they support an individual's autonomy, then more autonomous forms of motivation will be promoted (Ryan and Deci 2017). Intrinsically motivated students do not need outside incentives, and these may even be counterproductive as the reward lies in the doing of the activity (Deci, Koestner, and Ryan 2001). In contrast, students who are extrinsically motivated undertake activities for reasons separate from the activity itself, for example, to gain good grades, to avoid negative consequences, or because the task has utility value, such as passing a course in order to earn a degree (Ryan and Deci 2017).

Assumption

This article asserts that to make informed decisions about the best online formative assessment strategies, policymakers should be guided by meaningful assessment data in designing them. There was therefore a need to collect data on the demotivating online formative assessment strategies that could provide information that is necessary to improve the online assessment environment.

Results

The quantitative data analysis consisted of some simple biographic data indicated in Table 1, followed by the results from an open-ended questionnaire. The results revealed the way students perceived demotivating online formative assessment strategies as guided by the survey questions. Through statistical calculations based on Google forms, the demotivating online formative assessment strategies were identified and put into categories. A sample of 58 participants responded to the open-ended questionnaire prepared through Google forms, a response rate of more than 50%.

Table 1: Biographic data of the participants

Biographic Data			
		Sample	Rate
1.	Gender		
	Male	28	48.28%
	Female	30	51.72%
2.	Ethnicity/Race		
	Black African	23	39.6%
	White	17	29.3%
	Indian	11	19%
	Coloured	7	12.1%
3.	Age Groups		
	22–30 years	6	10.3%
	31–40 years	12	20.69%
	41–50years	21	36.21%
	51–60 years	15	25.9%
	61–65 years	4	6.9%

The first stage carried out an analysis of all online formative assessment strategies used at an ODL university and accessed from the learner management system (LMS). Permission to access the learner management system was given by the institutional research committee. The findings derived from data analysis identified 46 online formative assessment strategies that were used in the MEd in ODL course (Table 2).

Table 2: List of all assessment strategies in the MEd in ODL course

Main Strategies and Sub-Strategies			
1.	Essay writing	2.	Assignment writing
3.	Group research activity	4.	Individual research activity
5.	Article writing	6.	Google docs
7.	Flow charts	8.	Twitter
9.	Mind maps	10.	Wikis
11.	PowerPoint	12.	Weebly
13.	Group-based activities	14.	Blogs
15.	Discussion forums	16.	Skype
17.	Grid contribution	18.	Emails
19.	Skill builders	20.	Telegraphs
21.	Weebly	22.	WhatsApp
23.	Quizzes	24.	Instagram
25.	Audios	26.	Awarding of marks
27.	Podcasts	28.	Writing coach assistance
29.	Multiple choice	30.	Self-assessment
31.	Professors' videos	32.	Peer assessment
33.	Summative tests	34.	Rubrics
35.	Turnitin	36.	Learning journal
37.	E-portfolio	38.	Debating
39.	Group-based assessments	40.	Audiovisual
41.	Class feedback	42.	Social media (other)
43.	PowerPoint	44.	Diigo annotation
45.	Annotated bibliography	46.	Continuous tests

In the second stage, participants were asked to complete an open-ended questionnaire built from the results of original data collection (Table 2). The questions in the survey originated from the ideas of motivation and demotivation derived from self-determination theory. From the pool of 46 online formative assessment strategies accessed from the LMS (Table 2), students identified the demotivating online formative assessment strategies in the MEd in ODL course. Students differed in their choices of the online formative assessment strategies that demotivated them in their studies. This is highlighted in self-determination theory, which explains that people are motivated by different intrinsic or extrinsic strategies or methods of learning. However, through simple descriptive statistical analysis using Google forms, the highest percentage indicated the online assessment strategy as being either motivating or demotivating (Table 3).

Table 3: Quantitative rating of online formative assessment strategies

Online Formative Assessment Strategies		Nature of Strategy	
Main Themes	Sub-Themes	Motivating	Demotivating
1. Individual assignment projects	Essay/assignment writing	83%	8%
	Learning journal	12%	81%
	Focused research activity	87%	17%
	Article writing	52%	48%
	Flow charts	33%	67%
	Mind maps	37%	63%
	PowerPoint	83%	27%
2. Group based activities/projects *	Group-based activities	22%	78%
3. Communication and interactive opportunities	Discussion forums	21%	73%
	Grid contribution	10%	90%
	Skill builders	19%	67%
	Annotated bibliography	50%	50%
4. Assessment types	Self-assessment	32%	68%
	Peer assessment	28%	60%
	Quizzes	59%	41%
	Multiple choice	70%	30%
	Summative tests	68%	32%
	E-portfolio	13%	92%
5. Communication, discussion or information-sharing websites	Audios	87%	12%
	Podcasts	71%	29%
	Professors' videos	82%	18%
	Diigo annotation	33%	67%
	Tweets	40%	60%
	Wikis	12%	88%
	Weebly	10%	90%
	Blogs	17%	83%

6. Social media platforms*	Skype	60%	30%
	Emails	90%	10%
	Telegraph	52%	48%
	WhatsApp	68%	32%
	Instagram	16%	84%
7. Feedback*	Awarding scores	28%	65%
	Class/writing coach feedback	39%	63%
	Rubrics	60%	30%
	Turnitin	91%	9%

The quantitative ratings of all online formative assessment strategies were recorded as shown in Table 3. Though the rating was done for all identified online formative assessment strategies, only those that were identified by the students as having demotivating aspects in the course through the very high percentages were highlighted for building up the main themes of demotivating online formative assessment strategies. From the 46 online formative assessment strategies identified in the LMS, 35 demotivating assessment strategies were identified from the institutional LMS (Table 3). The percentages were indicators of the online formative assessment strategies that demotivated students. The strategies identified with a remarkably high percentage of demotivation gave rise to seven main themes and their sub-categories, which are summarised in Figure 1. From the pool of online formative assessment strategies identified from the LMS, the main demotivating online formative assessment strategies were identified through quantitative data analysis, namely, individual assignment projects, group work, interactive opportunities, type of assessment, social media, communication strategies and feedback (Table 3). The eight main categories were identified and presented with their sub-themes of demotivating online formative assessment strategies (Figure 1).

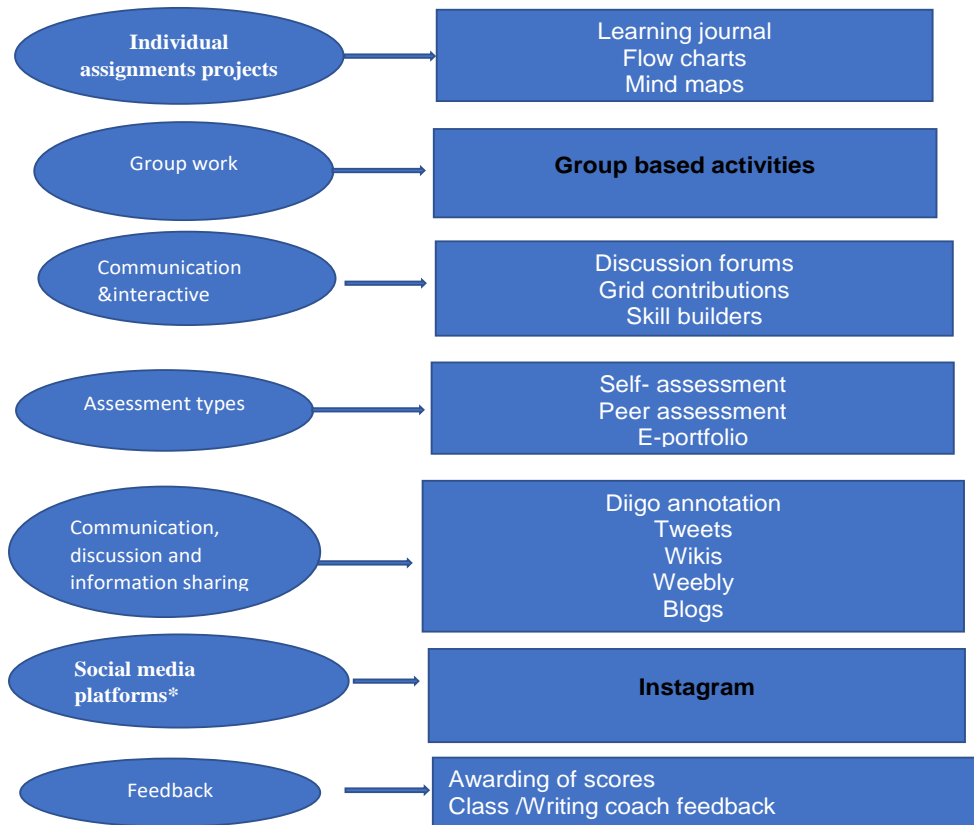


Figure 1: Main themes and sub-themes of demotivating online formative assessment strategies

Students responded to an online Google forms survey on what they considered to be demotivating online formative assessment strategies. A quantitative thematic coding process was adopted during the analysis and was followed by a qualitative descriptive analysis of the results. In the first category, “Individual assignment projects,” the sub-categories of learning journal, flow charts and mind maps had the highest percentages of demotivation, with 81%, 67% and 63%, respectively. This was followed by the second main theme, “Group work,” with a demotivating percentage of 78%. Most students did not like all forms of group work activities, which seemed to imply that group work needed to be improved in all their aspects. The third category was “Communication and interactive opportunities.” It was also very unpopular with respect to discussion forums, grid contributions and skill builders, with very high demotivating percentages of 73%, 90% and 67%, respectively. In terms of the main theme, “Assessment types,” self-assessment (68%) and peer assessment (60%) were not favoured assessment types by the students. “Communication, discussion and information-sharing websites” as a main category had five unpopular sub-themes: Diigo

annotation (67%), tweets (60%), Wikis (88%), Weebly (90%), and blogs (83%). The sixth main theme was “Social media platforms,” with only Instagram (84%) as a sub-theme that was demotivating to the students. However, the last main theme, “Feedback,” was rated very highly for demotivation with respect to awarding of scores (63%), class or writing coach feedback (63%) and Turnitin (91%). The above results are very useful for course leaders and instructional designers to reflect on their choice and use of online formative assessment strategies. These results call for further qualitative research to find out and document the reasons why students considered these assessment strategies as demotivating. How lecturers communicate the expectations about assessment tasks determines how students approach the tasks. The identification of demotivating online formative assessment strategies should provide the instructors with evidence of how to improve their formative assessment spaces and should therefore guide the choice and design of the online formative assessment strategies. This is because instructors tend to focus on assessment strategies that are easy to measure and work with, rather than on those that are challenging (Shepard 2000). In these results, it was not important that students had different views about online formative assessment strategies. Rather, what was important was finding out the possibility of improving the online formative assessment strategies for the MED in ODL course. The results showed good indications from the students themselves that some current practices of online formative assessment provided limited motivation for their learning.

Discussion and Recommendations

Students’ Involvement in Developing Online Assessment Strategies

Students should be afforded a chance to have a say in the type and design of online formative assessment strategies that they use. Online assessment is moving away from the notion that the student is a passive recipient of information and moving towards the concept of the learning process as active and learner-centred (Zhang and Kenny 2002). Students who feel that they are in control of their learning actively participate and take advantages of learning opportunities and resources. The lack of involvement of students in the issues of online assessment increases the gap of trust between the teachers and students. This is in line with the socio-technological perspective that says a good online pedagogy requires an awareness of the opportunities and limitations of the mode of education delivery, while considering all aspects of its implementation. Relevant studies, especially in higher education institutions, advise that students must be included in the process of developing online assessment strategies/tools (Fisher, Waldrup, and Dorman 2005; Sewell, Frith, and Colvin 2010). Although little evidence exists that students should be involved in decision-making about assessment tasks and strategies, this study assumes that there are many advantages in doing so. Cavanagh et al. (2005) suggest two strategies that can be applied to improve online formative assessment strategies: 1) examine the research on assessment forms/approaches that other teachers use; 2) inquire into students’ perceptions about assessment. Little evidence exists to prove that lecturers use their students to inform and guide the design of formative

assessment strategies. For this article, this implies that it is important to study the characteristics of online formative assessment strategies in order to utilise the results to influence the way students proceed with learning. This is in line with the socio-technical perspective, which is geared towards a distributed pedagogy.

A distributed pedagogy refers to shared or distributed ownership of different elements of the learning journey by different stakeholders in the process of constructing knowledge, and it is intrinsically linked to teaching practice and strategies for course design, delivery and assessment (Gordon 2014). The distributed pedagogy encourages the involvement of students in the construction of their learning spaces. Students are making new demands with respect to their learning in order to contribute to how they want to be taught, assessed and supported. They want their ideas to be built into course structures to facilitate effective online learning (Bates and Sangrà 2011). For the successful implementation of this pedagogy, the identification of demotivating online formative strategies can be a part of this strategy.

Transforming the Roles for the University Course Leaders

Students have different learning styles, cognitive styles, self-efficacy, persistence, self-regulation, and affective skills that contribute towards assessment strategies of their preference (Kauffman 2015). It is important to identify characteristics that contribute to success with online formative assessment strategies for most students in order to motivate students to persist with their studies. Lecturers in online teaching environments need new attitudes, knowledge, skills and ways of operating that will motivate students to learn in online environments (Gikandi, Morrow, and Davis 2011). This article will provide lecturers and instructional designers with the opportunity to learn about and identify the knowledge and skills that are required to improve in the design of various demotivating online formative assessment strategies from the students' point of view. It will inspire its readers to address the question of aligning online formative assessment strategies with what motivates students to stay focused in online assessment. The leadership focus, skills and competences in ODL environments must be geared towards assessment literacy. Assessment literacy concerns lecturers possessing the intellectual ability to select and apply appropriate approaches and techniques to assess tasks (Price et al. 2011). An improvement in the design of online formative assessment strategies can be the beginning of the needed change to improve the way assessment is handled online. This is in line with the socio-technological perspective, which suggests that a good online pedagogy requires an awareness of the opportunities and limitations of the mode of education delivery, while considering all aspects of its implementation.

Evaluating the Quality of Online Formative Assessment Strategies

The results of this article point to the need to evaluate the quality of online formative assessment strategies that are used in postgraduate courses in ODL, so as to provide designers and course leaders with information on improving them. "Evaluation is the process of determining the merit, worth and value of things, and evaluations are the

products of that process” (Vargo et al. 2003, 1). Evaluating online formative assessment strategies as learning objects is one of the most important quality assurance measures in teaching and learning online (Nesbit, Belfer, and Vargo 2002). As learning objects in the educational fraternity, online formative assessment strategies can provide pedagogically and digitally rich reusable learning environments. Evaluation must be an ongoing process during any stage in the design or the implementation of online formative assessment strategies, since it focuses on the usability and the pedagogical design of the learning object (Vonderwell, Liang, and Alderman 2007). Course leaders need to create their own identity of practice by understanding students’ learning culture through well-managed evaluation processes.

Conclusion

In conclusion, the linkage between online formative assessment and motivation lies in the affordances provided by the design of online formative assessment strategies. Through the socio-technological perspective (Baxter and Sommerville 2011) and the self-determination theory (Deci and Ryan 2012), online formative assessment strategies need to be designed effectively and efficiently by nurturing the social technical environment in order to motivate students to learn online. The identification of demotivating online formative assessment strategies enables those responsible for the design of relevant online formative assessment strategies to better manage online assessment by either reconstructing, replacing or discarding the learning environment. The course leaders hold the key to the successful integration of online formative assessment strategies into teaching and learning because they control their use and create opportunities for students to successfully learn online. Therefore, there is a need for course leaders to identify and reflect on student needs in order to construct assessment strategies that motivate a positive disposition towards online learning and assessment. Student retention and success rates can be improved if course leaders are aware of the online strategies and spaces that improve students’ motivation.

References

- Acquaro, P. 2020. “Structuring and Scaffolding the Online Course.” *International Journal of Online Graduate Education* 3 (1): 1–16.
- Ahmed, N., B. Kloot, and B. I. Collier-Reed. 2015. “Why Students Leave Engineering and Built Environment Programmes When They Are Academically Eligible to Continue.” *European Journal of Engineering Education* 40 (2): 128–44.
<https://doi.org/10.1080/03043797.2014.928670>.
- Bates, A., and A. Sangrà. 2011. *Managing Technology in Higher Education: Strategies for Transforming Teaching and Learning*. San Francisco, CA: Jossey-Bass/John Wiley and Co.

- Bates, T. 2012. "What's Right and What's Wrong with Coursera-Style MOOCs." *Online Learning and Distance Education Resources* (blog), August 5, 2012. Accessed October 3, 2023. <https://www.tonybates.ca/2012/08/05/whats-right-and-whats-wrong-about-coursera-style-moocs/>.
- Baxter, G., and I. Sommerville. 2011. "Socio-Technical Systems: From Design Methods to Systems Engineering." *Interacting with Computers* 23 (1): 4–17. <https://doi.org/10.1016/j.intcom.2010.07.003>.
- Bekele, T. A. 2010. "Motivation and Satisfaction in Internet-Supported Learning Environments: A Review." *Educational Technology and Society* 13 (2): 116–27.
- Boud, D. 2018. "Assessment Could Demonstrate Learning Gains, But What Is Required for It to Do So?" *Higher Education Pedagogies* 3 (1): 54–56. <https://doi.org/10.1080/23752696.2017.1413671>.
- Brandl, K. 2002. "Students' Attitudes and Perceptions of Learning: A Comparative Study of a Classroom-Based and Web-Based Language Course. Taking Language Instruction Online: Progress or Demise?" Paper presented at CALICO 2002, Revolutionizing Language Instruction, University of California, Davis, CA.
- Brophy, J. 2010. *Motivating Students to Learn*. 3rd ed. New York, NY: Routledge. <https://doi.org/10.1016/B978-0-08-044894-7.00613-8>.
- Carrillo-de-la-Peña, M. T., E. Baillès, X. Caseras, À. Martínez, G. Ortet, and J. Pérez. 2009. "Formative Assessment and Academic Achievement in Pre-Graduate Students of Health Sciences." *Advances in Health Sciences Education* 14 (1): 61–67. <https://doi.org/10.1007/s10459-007-9086-y>.
- Cavanagh, R., B. Waldrup, J. Romanoski, D. Fisher, and J. Dorman. 2005. "Measuring Student Perceptions of Classroom Assessment." Paper presented at the Australian Association for Research in Education (AARE) Annual Conference, Parramatta, New South Wales, Australia.
- Chamberlin, J. L. 2010. "The Cultural Reproduction of Architecture: Examining the Roles of Cultural Capital and Organizational Habitus in the Socialization of Architectural Education." PhD diss., University of Michigan. https://deepblue.lib.umich.edu/bitstream/handle/2027.42/78907/jcham_1.pdf?sequence=1.
- CHE (Council on Higher Education). 2014. *Distance Higher Education Programmes in a Digital Era: Good Practice Guide*. Pretoria: CHE. Accessed October 3, 2023. https://www.saide.org.za/documents/CHE_-_Distance_Higher_Education.pdf.
- Cowie, B., and J. Moreland. 2015. "Leveraging Disciplinary Practices to Support Students' Active Participation in Formative Assessment." *Assessment in Education: Principles, Policy and Practice* 22 (2): 247–64. <https://doi.org/10.1080/0969594X.2015.1015960>.

- Deci, E. L., R. Koestner, and R. M. Ryan. 2001. "Extrinsic Rewards and Intrinsic Motivation in Education: Reconsidered Once Again." *Review of Educational Research* 71 (1): 1–27. <https://doi.org/10.3102/00346543071001001>.
- Deci, E. L., and R. M. Ryan. 2012. "Motivation, Personality, and Development within Embedded Social Contexts: An Overview of Self-Determination Theory." In *The Oxford Handbook of Human Motivation*, edited by R. M. Ryan, 85–108. Oxford: Oxford Academic. <https://doi.org/10.1093/oxfordhb/9780195399820.013.0006>.
- Elezi, E., and C. Bamber. 2017. "Enhancing Students Learning Experience via In-Class Formative Assessments: A Business Studies UK Higher Education Example." *British Journal of Education* 5 (9): 69–88.
- Filsecker, M., and M. Kerres. 2012. "Repositioning Formative Assessment from an Educational Assessment Perspective: A Response to Dunn and Mulvenon (2009)." *PARE: Practical Assessment, Research and Evaluation* 17 (16). <https://scholarworks.umass.edu/cgi/viewcontent.cgi?article=1285&context=pare>.
- Fisher, D. L., B. G. Waldrup, and J. Dorman. 2005. "Student Perceptions of Assessment: Development and Validation of a Questionnaire." Paper presented at the Annual Meeting of the American Educational Research Association, Montreal, Canada.
- Gikandi, J. W., D. Morrow, and N. E. Davis. 2011. "Online Formative Assessment in Higher Education: A Review of the Literature." *Computers and Education* 57 (4): 2333–351. <https://doi.org/10.1016/j.compedu.2011.06.004>.
- Gordon, N. 2014. *Flexible Pedagogies: Technology-Enhanced Learning*. York: The Higher Education Academy (HEA).
- Haugan, J., M. Lysebo, and P. Lauvas. 2017. "Mandatory Coursework Assignments Can Be, and Should Be, Eliminated!" *European Journal of Engineering Education* 42 (6): 1408–421. <https://doi.org/10.1080/03043797.2017.1301383>.
- Havnes, A., K. Smith, O. Dysthe, and K. Ludvigsen. 2012. "Formative Assessment and Feedback: Making Learning Visible." *Studies in Educational Evaluation* 38 (1): 21–27. <https://doi.org/10.1016/j.stueduc.2012.04.001>.
- Hornstra, L., A. Kamsteeg, S. Pot, and L. Verheij. 2018. "A Dual Pathway of Student Motivation: Combining an Implicit and Explicit Measure of Student Motivation." *Frontline Learning Research* 6 (1): 1–18.
- Kauffman, H. 2015. "A Review of Predictive Factors of Student Success in and Satisfaction with Online Learning." *Research in Learning Technology* 23: 1–13. <https://doi.org/10.3402/rlt.v23.26507>.
- Lindsay, S. 2015. "What Works for Doctoral Students in Completing Their Thesis?" *Teaching in Higher Education* 20 (2): 183–96. <https://doi.org/10.1080/13562517.2014.974025>.

- Makhanya, M. S. 2016. "Reflections on Special Issue of *Distance Education*." In "Growing Capacities for Sustainable Distance E-Learning Provision," edited by P. Prinsloo, special issue, *Distance Education* 37 (2): 237–38.
<https://doi.org/10.1080/01587919.2016.1188444>.
- Maringe, F., and N. Sing. 2014. "Teaching Large Classes in an Increasingly Internationalising Higher Education Environment: Pedagogical, Quality and Equity Issues." *Higher Education* 67 (6): 761–82. <https://doi.org/10.1007/s10734-013-9710-0>.
- Moore, M. G., and G. Kearsley. 2012. *Distance Education: A Systems View of Online Learning*. 3rd ed. Belmont, CA: Wadsworth.
- Muilenburg, L. Y., and Z. L. Berge. 2005. "Student Barriers to Online Learning: A Factor Analytic Study." *Distance Education* 26 (1): 29–48.
<https://doi.org/10.1080/01587910500081269>.
- Muyinda, B. P., and G. Mayende. 2013. "Pedagogical Affordances of Social Networking Sites amongst Distance Learners in Uganda." A Paper Presented at eLearning Africa, the 8th International Conference on ICT for Development, Education and Training, Safari Court, Windhoek, Namibia, May 28–31, 2012.
- Nesbit, J. C., K. Belfer, and J. Vargo. 2002. "A Convergent Participation Model for Evaluation of Learning Objects." *Canadian Journal of Learning and Technology* 28 (3).
<https://doi.org/10.21432/T25C8C>.
- Petrović, J., P. Pale, and B. Jeren. 2017. "Online Formative Assessments in a Digital Signal Processing Course: Effects of Feedback Type and Content Difficulty on Students Learning Achievements." *Education and Information Technologies* 22 (6): 3047–61.
<https://doi.org/10.1007/s10639-016-9571-0>.
- Price, M., J. Carroll, B. O'Donovan, and C. Rust. 2011. "If I Was Going There I Wouldn't Start from Here: A Critical Commentary on Current Assessment Practice." In "Assessment of Vocational Competence in Higher Education," edited by L. Baartman and E. Braun, special issue, *Assessment and Evaluation in Higher Education* 36 (4): 479–92.
<https://doi.org/10.1080/02602930903512883>.
- Prinsloo, P. 2016. "(Re)Considering Distance Education: Exploring Its Relevance, Sustainability and Value Contribution." *Distance Education* 37 (2): 139–45.
<https://doi.org/10.1080/01587919.2016.1188445>.
- Ryan, R. M., and E. L. Deci. 2017. *Self-Determination Theory: Basic Psychological Needs in Motivation, Development, and Wellness*. New York, NY: The Guilford Press.
<https://doi.org/10.1521/978.14625/28806>.
- Salmon, G. 2013. *E-Moderating: The Key to Teaching and Learning Online*. London: Routledge Falmer.

- Schunk, D. H., J. L. Meece, and P. R. Pintrich. 2013. *Motivation in Education: Theory, Research, and Applications*. 4th ed. Englewood Cliffs, NJ: Prentice Hall Merrill.
- Sewell, J. P., K. H. Frith, and M. M. Colvin. 2010. "Online Assessment Strategies: A Primer." *MERLOT Journal of Online Learning and Teaching* 6 (1): 297–305.
https://jolt.merlot.org/vol6no1/sewell_0310.pdf.
- Shemansky, O., and D. Seignior. 2020. "The Value of Online Education: How Teachers Can Boost an Engaging Student Experience." Melbourne Graduate School of Education, June 10, 2020. Accessed September 30, 2023. <https://education.unimelb.edu.au/news-and-events/news/2020/the-value-of-online-education-and-how-teachers-can-boost-an-engaging-student-experience>.
- Shepard, L. A. 2000. "The Role of Assessment in a Learning Culture." *Educational Researcher* 29 (7): 4–14. <https://doi.org/10.3102/0013189X029007004>.
- Shin, D. 2014. "A Socio-Technical Framework for Internet-of-Things Design: A Human-Centered Design for the Internet-of-Things." *Telematics and Informatics* 31 (4): 519–31.
<https://doi.org/10.1016/j.tele.2014.02.003>.
- Shute, V. J., and Y. J. Kim. 2014. "Formative and Stealth Assessment." In *Handbook of Research on Educational Communications and Technology*, edited by J. Spector, M. Merrill, J. Elen, and M. Bishop, 311–21. New York, NY: Springer.
https://doi.org/10.1007/978-1-4614-3185-5_25.
- Silver, M. S., and M. L. Markus. 2013. "Conceptualizing the Sociotechnical (ST) Artifact." *Systems, Signs and Actions* 7 (1): 82–89.
- Simon, B. 2019. "The Effect of Formative Assessment on Student Motivation and Self-Regulation." MA diss., Concordia University, St. Paul.
https://digitalcommons.csp.edu/teacher-education_masters/2.
- Soumana, A. O., and M. R. Uddin. 2017. "Factors Influencing the Degree Progress of International PhD Students from Africa: An Exploratory Study." *Üniversitepark Bülten* 6 (1): 79–94. <https://doi.org/10.22521/unibulletin.2017.61.7>.
- UNISA (University of South Africa). 2016. "Unisa Department of Institutional Statistics and Analysis (DISA) 2012–2013." Requested statistics from DISA, University of South Africa.
- UNISA (University of South Africa). 2018. *Open Distance-Learning Policy*. Accessed October 5, 2023.
<https://www.unisa.ac.za/static/myunisa/Content/Student%20affairs%20&%20SRC/Documents/SRC%20Important%20Policy%20Documents/Policy%20-%20Open%20Distance%20e-Learning%20-%20rev%20appr%20Exco%20of%20Council%20-%202010.12.2018.pdf>.

- Vambe, M. T. 2005. "Opening and Transforming South African Education." *Open Learning: The Journal of Open, Distance and e-Learning* 20 (3): 285–93. <https://doi.org/10.1080/02680510500298816>.
- Vargo, J., J. C. Nesbit, K. Belfer, and A. Archambault. 2003. "Learning Object Evaluation: Computer-Mediated Collaboration and Inter-Rater Reliability." *International Journal of Computers and Applications* 25 (3): 198–205. <https://doi.org/10.1080/1206212X.2003.11441703>.
- Vonderwell, S., X. Liang, and K. Alderman. 2007. "Asynchronous Discussions and Assessment in Online Learning." *Journal of Research on Technology in Education* 39 (3): 309–28. <https://doi.org/10.1080/15391523.2007.10782485>.
- Wafubwa, R. 2020. "Role of Formative Assessment in Improving Students' Motivation, Engagement, and Achievement: A Systematic Review of Literature." *The International Journal of Assessment and Evaluation* 28 (1): 17–31. <https://doi.org/10.18848/2327-7920/CGP/v28i01/17-31>.
- Weurlander, M., M. Söderberg, M. Scheja, H. Hult, and A. Wernerson. 2012. "Exploring Formative Assessment as a Tool for Learning: Students' Experiences of Different Methods of Formative Assessment." *Assessment and Evaluation in Higher Education* 37 (6): 747–60. <https://doi.org/10.1080/02602938.2011.572153>.
- Wu, Q., and T. Jessop. 2018. "Formative Assessment: Missing in Action in Both Research-Intensive and Teaching Focused Universities?" *Assessment and Evaluation in Higher Education* 43 (7): 1019–31.
- Zhang, Z., and R. F. Kenny. 2010. "Learning in an Online Distance Education Course: Experiences of Three International Students." *International Review of Research in Open and Distance Learning* 11 (1): 17–36. <https://doi.org/10.19173/irrodl.v11i1.775>.