

Translating Quality into Practice: Insights from South African Instructional Designers

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Abstract

The instructional design profession is on the rise in African higher education, but research on instructional designers' practices in Africa is limited compared to in the Global North. Contextual factors play a vital role in shaping instructional design approaches, and understanding how instructional designers perceive and ensure the quality of online learning materials is crucial. This study explores the perspectives of experienced South African instructional designers on quality, particularly in terms of pedagogy, during the creation of online learning content. Using the ADDIE model, and Margaryan, Bianco, and Littlejohn's 10-principle framework expanding the work of Merrill, the study conducted in-depth interviews with nine proficient instructional designers. While it was expected that instructional designers would rely on standardised quality assurance tools, the findings revealed a more eclectic approach, with designers drawing from various resources when crafting online learning materials. A key focus for these designers was establishing "human connectedness" through the intentional incorporation of teaching presence and collaborative learning activities. The quality principles mentioned align with the community-of-inquiry model, ensuring sound pedagogical practices in online education.

Keywords: Community of inquiry; curriculum design; instructional design; online learning material; quality guiding documents

UNISA 

Progressio

Volume 45 | 2024 | #16891 | 24 pages

<https://doi.org/10.25159/2663-5895/16891>

ISSN 2663-5895 (Online), ISSN 0256-8853 (Print)

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Introduction

Online learning (OL), both within South Africa and globally, has witnessed a substantial surge in growth over the past decade. This burgeoning trend is primarily driven by the mounting demand for diverse program offerings coupled with the geographically dispersed nature of student populations within higher education institutions (HEIs) (Sun and Chen 2016; Wolhuter and Jacobs 2021). HEIs have increasingly embraced OL, often denoted as open, distance, flexible, or E-learning, as a means to expand educational accessibility in response to the growing appetite for tertiary education beyond the confines of traditional campus-based learning cohorts (Ossiannilsson, Williams, Camilleri, and Brown 2015). OL encompasses a diverse array of platforms and instructional approaches, including web-based learning experiences that can be either synchronous, asynchronous or a blend of the two (Timonen and Ruakamo 2021). Within the scope of this paper, OL encompasses all digitally designed and mediated teaching and learning activities found within blended or distance-learning programs. This comprehensive interpretation acknowledges the various modalities and approaches embraced within the field of OL, encompassing both fully online and hybrid formats. In doing so, it recognises the diverse learning environments and experiences that students encounter throughout their academic pursuits.

The quality of learning material is vital for all programmes, but it holds greater significance in OL programmes, where online learning material (OLM) serves as the primary source for student learning (Prempeh and Appiah 2017; Sun and Chen 2016). In the case of 100% asynchronous delivery, in the absence of a lecturer or facilitator, OLM becomes even more significant since it must help the student to reconstruct all the interactions that would typically take place in a face-to-face classroom: student-instructor, student-content and student-student interactions (Morrison and Anglin 2012).

Masoumi and Lindström (2011, 31) refer to OLM as “the heart of any online learning programme” and highlight the importance of employing OLM “creatively and constructively”. As such, OLM translates into *how* teaching and learning are structured and crafted (Masoumi and Lindström 2011) to facilitate students’ cognitive structures and make learning effective (Merrill 2009). Delivering effective OLM “takes time, effort, and skill” (Morrison and Anglin 2012, 244), described by Karthik, Chandrasekhar, David and Kumar (2019, 1538) as an “art”. The focus should be on crafting learning activities that elicit ‘mental engagement’ and active participation from students (such as reflection activities, scenarios, and discussion forums) rather than on passive activities that merely require students to read or watch a video, PDF or text on-screen (Hosie, Schibeci and Backhaus 2005).

The paragraph, in essence, refers to pedagogical practices, which are concerned with the methods related to teaching and learning (Altuwairesh 2021) and, in OL, pivotal in creating effective and engaging OLM (Merrill 2009). Hosie *et al.* (2005) adopt a learner-centred approach in that they link pedagogy with learning activities, thus creating OLM,

which requires the learner to do actively rather than focus on teaching/instruction activities.

Academics and field specialists such as lecturers and subject matter experts (SMEs) are mostly not grounded in online pedagogy (Baldwin and Ching 2019). Subsequently, HEIs often employ instructional designers (IDs) who are considered “knowledge workers” to perform this function (Rabel and Stefaniak 2018, 48). IDs collaborate with SMEs, apply instructional design models, multimedia principles, and learning theories, and utilise relationship management skills to design and develop effective and engaging OLM (Rabel and Stefaniak 2018). This is often explained by referring to the widely accepted ADDIE model (Dick and Carey 1996), denoting Analysis, Design, Development, Implementation and Evaluation.

In the analysis phase, IDs collaborate with SMEs to assess the student profile, content, and institutional context for the planned OL, informing subsequent design and development phases, which are central to an ID's daily tasks. During the design phase, IDs align outcomes with content and assessments while strategising the conversion of paper-based text into interactive OLM. In the development phase, IDs use technology to craft these OLM based on their planning. The implementation phase involves launching the OLM, while the evaluation phase gathers feedback on the learning experience, guiding adjustments for future iterations. Although the phases may appear sequential, the ADDIE model allows IDs to engage iteratively and non-linearly with them (Brown and Green 2016) to create effective and engaging OLM.

As previously mentioned, OLM plays a pivotal role in shaping the quality of OL programmes (Karthik et al. 2019) and directly impacts students' learning experiences and success. Consequently, IDs should base their design practices on robust online pedagogical principles (Margaryan, Bianco and Littlejohn 2015) to facilitate students in achieving program outcomes, ultimately contributing to quality-endorsed OL.

Numerous studies have explored the promotion of quality in OLM design and development, resulting in the creation of guides, principles and checklists (collectively referred to as quality guiding documents or QGSs in this paper) such as the Blackboard Rubric™, Quality Matters Rubric™, and Open SUNY Course Quality Review Rubric (Masoumi and Lindström, 2011; Martin, Polly, Jokiahio and May 2017). However, QGDs typically cover basic criteria which an OL programme should adhere to (Debattista 2018). This could include technology, infrastructure, student support, financial health, legal and regulatory requirements, and programme delivery (Masoumi and Lindström 2012; Ossiannilsson et al. 2015; Seel et al. 2017). Yet, they mostly do not account for key principles such as pedagogy (Margaryan et al. 2015). As a result, programmes might lack this important element of quality (Mahdavinassab, Sadipour, and Moradi 2019).

Furthermore, debates persist regarding the practical application of these QGDs by IDs. While some argue that QGDs are essential for excellence in instructional design (Galyen, Culbertson and Chuchran-Davis 2020), critics contend they may be overly structured, linear, or procedural (Silber 2007; Jonassen 2008). Despite their existence, there is limited evidence of widespread adoption of QGDs in instructional design practice, causing uncertainty about how, when, and if they are used (Thompson-Sellers and Calandra 2012; Sugar 2014). Martin et al. (2017) subsequently called for research on specifically how IDs implement and apply QGDs and proposed focus groups and interviews to do so.

Recent studies have started to explore how IDs implement QGDs into their design practices, with none conducted in developing world contexts (Rowley 2005; Thompson-Sellers and Calandra 2012). This gap in knowledge is especially relevant in South African HEIs, where the ID profession is emerging and faces unique challenges (Pallitt, Carr, Pedersen, Gunness and Dooga, 2018). The literature also fails to provide insights into the specific approaches used by IDs in the context of developing countries like South Africa, characterised by distinctive contextual factors, including demographics, geography, and socio-economic status (Steyn 2021). Therefore, it falls upon IDs to design OLM that are responsive to these contextual factors and the needs of their target audience within the South African educational system.

In order to address this gap, this study aims to gain insight into what South African HE IDs view as quality principles and how they translate quality into their practices when they design and develop OLM for their target audience. Therefore, the questions posed to a selection of experienced SA HEI IDs were as follows:

Q1: What do you regard as important pedagogical quality principles when you design and develop online learning material?

Q2: How do you go about translating these quality principles in your daily job?

The study not only contributes to the body of knowledge regarding quality in instructional design practices but also provides a roadmap to ensure and promote quality when these professionals design and develop OLM.

Analytical Framework

IDs employ specific online pedagogical principles in the OLM they design and create to elicit student performance (Kilgore and Weaver 2020; Al-Hosni 2016). A myriad of pedagogical principles for OL exist, the main ones being student-oriented, centred on constructivist theories, adult learning theories and cognitive theories (Al-Hosni 2016;). It is, however, David Merrill's First Principles of Instruction (FPI), which is regarded by scholars as a solid pedagogical framework for designing and developing OLM to facilitate active learning and engagement, which enhances the learning experience

(Badali, Hatami, Fardanesh and Noroozi 2018; Margaryan et al. 2015; Moallem and Cai 2021).

FPI comprises five principles: problem-centeredness, activation, demonstration, application, and integration. These principles postulate that learning is promoted when:

- students are engaged in solving real-world problems;
- prior knowledge is activated;
- new knowledge is demonstrated to the student;
- new knowledge is applied by the student; and
- new knowledge is integrated into the student's perceptions and experiences (Merrill, 2002).

Margaryan et al. (2015) have recently added five principles that focus on learning resources and learning support to Merrill's first five, which form a 10-principle FPI framework. This framework is used to evaluate the instructional design quality of online programs and includes the following:

- collective knowledge,
- collaboration,
- differentiation,
- authentic resources, and
- feedback.

These principles indicate that learning is promoted when learners contribute to the collective knowledge; learners collaborate with others; different learners are provided with different avenues of learning according to their needs; learning resources are drawn from real-world settings, and learners are given expert feedback on their performance (Margaryan et al. 2015).

This 10-principle FPI framework was applied and tested to evaluate the quality of instructional design of over 100 online programmes within a university setting (Margaryan et al. 2015). It was thus used as a point of departure for this study. Figure 1 below illustrates how ADDIE and the 10-principle framework were employed as frameworks for analysis for this study.

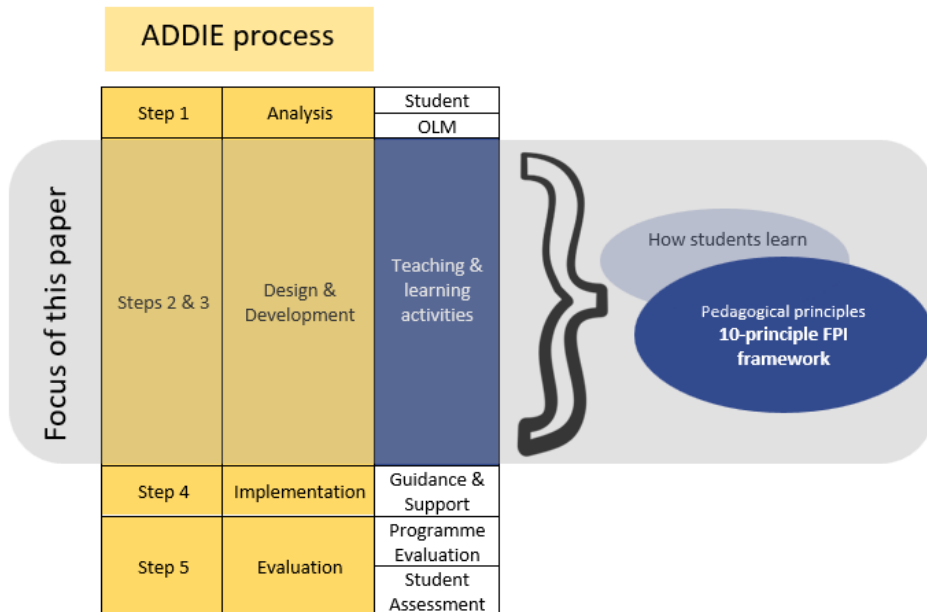


Figure 1: The framework for analysis is based on a combination of the ADDIE model and the 10-principle framework by Merrill and Margaryan, among others.

Methodology

We worked from the assumption that different interpretations regarding the quality of OLM exist, and IDs make sense of their realities based on their own experiences (Merriam and Tisdell 2016). Using qualitative research, we conducted semi-structured virtual interviews via MS Teams to explore how IDs define and apply quality in their design and development processes (Adams 2015). Initially, we used purposive sampling to select experienced IDs at HEIs with a minimum of three years of experience in OLM design, reaching out to 25 potential participants, of whom nine agreed to participate after follow-ups.

Following Turner's guidelines (2010) and the 10-principle framework by Merrill and Margaryan, we formulated research questions for the interviews. Ethical approval and gatekeeper permissions were obtained from relevant HEIs, and informed consent was secured from all participants, ensuring their anonymity (Merriam and Tisdell 2016). Participants received preparatory materials and interviews, lasting 30–40 minutes each, which were recorded and transcribed using Microsoft Teams.

To enhance trustworthiness, member checking was employed, and thematic analysis was performed inductively (Merriam and Tisdell 2016). Significant statements related to quality principles were extracted from transcripts and organised on sticky notes. The

findings, presented with participant quotations, reflect our interpretation of these themes, rooted in real data (Merriam and Tisdell 2016).

Findings

The focus of the interviews was on pedagogical quality principles as well as translating quality into practice. All these are discussed below.

Pedagogical Quality Principles

With regard to important pedagogical quality principles when designing and developing online learning material, three themes emerged from the data, namely, specific pedagogical principles, curriculum design principles and building in human connectedness.

Specific Pedagogical Principles

Participants clearly distinguished between online and face-to-face pedagogy. Participant#G, for instance, explained that “*pedagogy plays a huge role, but online pedagogy is a whole sort of new ball game*”. They identified and described seven specific pedagogical principles to establish quality in OLM, and they were as follows:

Problem-Based Learning

The interviews revealed that quite a few participants used problem-based learning to “make learning stick” (Participant#A) instead of relying on rote learning. Participant#E expressed her aversion to courses emphasising rote learning, stating that she preferred “learning activities that make students think – apply their minds and apply the knowledge in a real-world context.” Participant#D also shared, “You should not throw abstract information at students that comes out of the blue to them and has no relevance to their daily lives.”

In support of these perspectives, Kassymova, Axmetoba and Mazhinov (2020) explain that problem-based learning should challenge students to “apply their knowledge to real-world problems” in order to foster the development of cognitive processes.

Activation Principle

A number of participants commented on how they used the activation principle (Merrill, 2002) to build a link between what the student knows and new knowledge. Participant#D always considered this principle, reflecting “*something that will truly stimulate the student and hook into their own experience in terms of activity*”. Participant#F stressed the importance of using the activation principle, particularly for first-year students, “*lecturers forget that students come into a first-year module and don’t know the terminology, but you just blabber on and they don’t know what the hell*

you're talking about. There is no scaffolding [between new and prior knowledge] so you lose your students within the first week".

Applying Knowledge

Opportunities to apply knowledge was another pedagogical mechanism mentioned by Participant#F to happen at the end of a learning experience (*you do eventually get to the point where they have to apply all of that information that you've given to them after the module*). Participant#D advocated *"multiple opportunities for students to practice what they have learnt"*. Application of knowledge was recently identified by the Association for Educational Communications and Technology (AECT) (Piña 2017) as one of ten quality principles that make an online programme effective. Students should have *"integral opportunities to apply new learning"* (Piña 2017,12), both independently and collaboratively.

Critical Thinking and Deep Learning

There was a strong voice towards opportunities for students to develop higher-order thinking skills, or *"deeper learning"*, as both Participants#D and #E noted. Higher-order thinking is interchangeably linked with critical thinking, where students are expected to make decisions and judgements (Tathahira 2020) - an important skill required in the world of work and employment but very challenging to develop among online students (Tathahira 2020). Participants indeed employ various ways to foster critical thinking in students: Participant#E included a research component where appropriate, while Participant#B built opportunities for students to *"create something collaboratively"*.

Interactivity

The majority of participants mentioned interactivity as yet another pedagogical mechanism and quality indicator when they design learning activities. Participant#D explained, *"there needs to be a lot of student engagement – things for the students to do themselves – rather than just passive information dumps"*. She emphasised that *"there should be critical thinking, mental engagement, not merely the clicking of a mouse"*. Participant#H also referred to *"engagement"*, advocating the need to *"create different ways of engaging with materials so that it's not just a huge, long list of videos and readings"*. Their views align with those of Dunlap, Sobel and Sands (2007), expressing that it is not enough for students to merely access information; rather, there should be cognitive processes and mental engagement by which the student deals with that information. The role and importance of interaction have been well documented in learning theory and research; it is the standard for deep and meaningful learning and is critical in OL (Husna and Fajar 2022; Davis and Frederick 2020; Piña 2017).

Variety of Activities

In addition to the importance of learning activities being interactive, participants rate variety thereof as a quality indicator. Participant#D said, *"there should be a good mix*

of video, graphics, activities and text”, implying a balanced combination between passive (reading, listening, viewing) and active (rehearsing, trying) learning activities. The AECT takes a more comprehensive approach by endorsing a blend of passive and active learning activities and emphasising the importance of tailoring these activities to students' varying levels of knowledge, experience, and abilities while ensuring alignment with the content (Piña 2017).

Checkpoints

The last pedagogic quality indicator identified by participants is to have certain checkpoints, which could be interpreted as informal mini-self-assessments. Participant#A thought it was important to build in small “*checkpoints*” to see if a student had worked through the content. These are not elaborated activities such as assignments, but merely a “*short activity such as multiple choice or one sentence answers; something to check how they are doing ?; small things like that*”, explained Participant#E. Participant#F also felt that “*you should make sure that you give them an opportunity to show you or to prove to you that they have interacted with the content, even if it’s a short quiz*”, and echoed Participant#G, who posed the question for consideration, “*Are you building an opportunity for those checks in the online realm?*”.

From the results, it is evident that participants employ and rate pedagogy critical in the design and development of OLM. They use specific pedagogical principles to elicit mental engagement among students, which mostly roll out as learning activities. Authors such as Karthik et al. (2019) and Heiser and Ralston-Berg (2019) are of the opinion that the quality of instructional design directly depends on learning theory and pedagogy; hence, OLM should be structured and crafted in such a way to facilitate students' cognitive structures to make learning effective.

In addition to the specific pedagogical principles they employ, participants also consider certain curriculum design principles to establish quality.

Curriculum Design Principles

Curriculum design refers to *what* students learn in their programme, while instructional design is focused more on *how* they learn (Chugh, Ledger and Shields 2017). Curriculum design takes a broader view towards key factors, such as educational standards and content selection, whereas instructional design has a narrower scope and looks at specific teaching and learning methods (McDonald and West 2021). Yet many of the participants viewed curriculum design as a quality indicator for their instructional design practice. The interviews revealed three key focus areas in curriculum design, which will now be explored in further detail.

Alignment

When asked about the quality of OL, participants emphasised the importance of alignment, a well-established curriculum design principle. Alignment signifies a

coherent connection between outcomes, content, learning activities, and assessment (Biggs 1996). Its appeal lies in its simplicity (Kandlbinder 2014), and its impact on the success of both face-to-face and online learning experiences cannot be overstated (Reeves 2006).

Participant#F aptly illustrated the significance of alignment with an analogy, “You can't expect me to show that I can bake a cake if your outcome asks me to list the ingredients.” Participant#A stressed the need to consider, “What is the key thing that students need to understand, and how do we ensure they achieve it?” Meanwhile, Participant#G found value in the backward design approach, where “you start with *your learning outcomes and build your programme from that*”, following Ralph Tyler's seminal model (1949).

Alignment holds immense sway in the minds of IDs during their practice, influencing their perception of quality. Khumalo (2018, 32) labels alignment as “powerful,” and Boyd and Ralston-Berg (2020, 64) assert that it is “essential for success” in ID's design and development of OLM. Clearly, alignment is a central consideration for IDs and a pivotal factor in defining quality.

Time Allocation

A second curriculum design principle that was emphasised by several participants as an important quality indicator was *time allocation*. The importance of time on a micro-level was, for instance, explained by Participant#D (*looking at things that give students an idea of the amount of time it will take to complete*), while Participant#B mentioned time allocation on a macro-level (*components I look at in terms of quality is determining whether the stated notional hours actually coincide*). The link between time allocated as per notional hours that again links with the credit value of modules in the South African context (NADEOSA 2021) and the estimated real-time required for activities clearly is regarded as a quality matter.

Appropriate Qualification Level

A third curriculum design principle mentioned by participants relates to the adherence of online programmes to appropriate and specific qualification levels and standards. Participant#D noted that “*the degree of alignment to standards*” was “*a big, big thing*”, while Participant#B reiterated the importance thereof (*Quality components that we always look at is the NQF level ... whether the module adheres to that level*). Each country has its own qualification levels, standards, and/or frameworks, which are usually promulgated by a governing body. In South Africa, The Higher Education Qualifications Sub-Framework (CHE 2013) details different levels of higher education qualifications.

Chugh et al. (2017, 7) argue that “good curriculum design, for distance education, is imperative for success” and that it is expected of IDs to “carefully” consider and apply basic curriculum design principles. From the interviews, it seems as if participants drew

from both instructional design as well as curriculum design models, suggesting that IDs follow a varied and “eclectic approach”, which is often the case (Brown and Green 2016, 8).

A third theme that emerged from the interviews was *human connectedness*, which we will now delve into.

Building in Human Connectedness

Connectedness is defined as the perception of belonging (Lee and Robbins 1995) and is realised when a person experiences a sense of social relationship and integration (Kuwabara, Watanabe, Ohguro, Itoh and Maeda 2002). Feeling connected is regarded as an essential component of the student experience (Hehir et al. 2021) in that it contributes to academic success (Wilson 2018). It is believed to increase the likelihood of student health and well-being (Arslan 2021).

Feeling connected becomes critical in OL since interaction in this environment is mostly via text on-screen, which is often without affordances such as visual, body language, and tone-of-voice cues (Dzubinski 2014). Arslan (2021) points out that students in an OL space can easily feel isolated and lonely and that a lack of connectedness can affect psychological health and well-being negatively. Without any physical interaction, it becomes challenging to establish a feeling of connection in the online classroom (Purwandari, Junus and Santoso 2022). Participants reported that they focused on two main concepts to foster human connectedness in the OLM they designed and developed, namely establishing teaching presence (TP) and incorporating collaborative activities.

Teaching Presence

In synchronous OL, Teaching presence (TP) pertains to active facilitation by encouraging and guiding students, largely dependent on the facilitator (Richardson, Koehler, Besser, Caskurlu, Lim and Mueller 2015). Establishing TP in asynchronous settings is more challenging but equally, if not more, vital in the absence of a real-time facilitator (Dzubinski 2014; Purwandari et al. 2022). Participants echoed this sentiment when discussing the significance of TP in OL. Participant#F emphasised the need to “bring the lecturer's presence into the online space,” while Participant#I raised the question of how instructional designers (IDs) can establish a teaching presence.

Many participants stressed that effective communication is pivotal in establishing TP. They utilised various communication platforms and tools, provided clear instructions, and employed “bridging text” (Participant#I) to “infuse the lecturer's voice” (Participant#A) into the online environment. Participant#F highlighted the importance of having “communication channels in place” to inform students about their tasks and expectations. Participant#H emphasised the need for instructional text to scaffold resources effectively, stating that materials should be introduced rather than presented

as mere PDFs. He underlined the importance of maintaining “quality” communication by being upfront and consistent.

Another crucial communication principle for establishing TP is adopting “the voice of the lecturer” (Participant#C) by using a conversational tone. Participant#C underscored the significance of tone, language, and communication style. Dunlap and Lowenthal (2018, 84) recommend an informal and personal communication approach and emphasise providing clear and explicit instructions for all activities.

Participants also believed that prompt and comprehensive feedback plays a pivotal role in TP. They emphasised the importance of having a system in place to address questions and provide detailed responses, as articulated by Participant#H. They also stressed the value of offering comprehensive feedback rather than simple “yes” or “no” responses, aligning with Dunlap and Lowenthal’s advice (2018, 85) that feedback should be specific and essential for effective TP.

Collaborative Activities

Participants identified collaborative activities as a way to foster human connectedness in OL. Participant#C believed that students should be “co-teachers”, suggesting that IDs should “*look for opportunities where students can share their views and learn together*”. Participant#H also emphasised the importance of opportunities “*where [students] will work in a group to constructively work towards a desired output*”. He stressed the importance of building knowledge in a collaborative manner and to consider “*can [students] contribute to resources? Can they [students] collaboratively build things, like on Google Docs?*”. However, Jung, Shin, and Zumbach (2021) suppose that students find it difficult to build accurate knowledge during collaborative knowledge construction and, therefore, call for adequate instructional design for collaborative activities.

From the above, it seems that IDs are intentional in creating a building in human connectedness when they design and develop OLM.

Using Established Standards and Principles to Ensure and Promote Quality

Most participants reported that their institutions had extensive QGDs derived and adopted from established standards and rubrics to assist them with designing and developing OLM. In some cases, these documents are in the form of checklists, used in a ‘tick-off’ manner. Participant#C, for instance, shared that “[*checklists*] allows us to make sure that our courses are quality assured”. Yet Masoumi and Lindström (2011, 28) warn against QGDs employed in a “mechanistic” way because when used in such a way, quality control then becomes a “top-down” approach with roots in “industrial mass production”. Similarly, Martin et al. (2017, 2). note that while checklists could be understood as “a tool to enhance quality”, a standards-automatically-lead-to-better-quality [own term] mentality should be avoided. Other participants indeed reported that

although their institutions had formal checklists available, they did not use them in a tick-off fashion when they were “*in the zone*” (Participant#G) of designing OLM. Rather, participants seemed to use QGDs more intuitively. Participant#A explained, “*I don’t always think about these things [QGDs]*” when working on OLM. This was echoed by Participant#I, “*We’ve got the QM checklist, but when I look at the course, I don’t use it. I look at it based on my own sort of framework.*”

Participants also reported that they followed a varied approach in that they drew from an assortment of sources. Participant#I, for instance, explained that he drew from various QGDs to distil the best-quality principle for that specific design situation. Participant#B even referred to his own “*cheat sheet*” when he designed and developed OLM.

Yet, some participants reported that their institutions did not have definite standards to guide them in their design practices. Participant#H shared that standards are only “*emergent*” at his institution, while Participant#D mentioned “*unspoken standards throughout the institution*” yet not captured formally. Participant#F remarked, “*we don’t have a set of fixed set of rules ... at our institution, we’ve got many hens that lay colourful eggs*”, suggesting that the checklist is compiled rather randomly and not always validated.

Literature suggests that IDs can benefit from using QGDs to ensure and promote quality when they design and develop OLM (Baldwin and Ching, 2019; Martin et al. 2017). This was echoed by some of the participants who acknowledged the usefulness of the QGDs they currently employ (e.g. Universal Design Principles,¹ Arena, Blended, Connected Learning Design,² Achieve³ and Quality Matters Rubric^{TM4}) both during and after their design practices. Participant#C clearly stated that QGDs are “*very useful*”, while Participant#A deemed her institutional checklist as “*essential*”.

Critique of Current Instruments

Even though participants confirmed that QGDs of different kinds could be useful, scholars warn that they should not be seen as a “one size fits all” (Ossiannilsson et al. 2015, 53) and should be adapted to a specific institution to be effective (Bari and Djouab 2014). Masoumi and Lindström (2011, 35) particularly note that Western-oriented QGDs cannot be employed “as is” and need to be “culturally enhanced” to suit the needs of developing countries. This is significant since the aforementioned QGDs all emanated from the Global North, and the applicability of these instruments for Africa, and especially South Africa, needs to be considered.

1 <https://universaldesign.ie/what-is-universal-design/the-7-principles/>

2 <https://jus.shef.ac.uk/jnldigitallearning/2020/07/12/abc-arena-blended-connected-learning-design/>

3 <https://www.achieve.org/who-we-are>

4 <https://www.qualitymatters.org/sites/default/files/PDFs/StandardsfromtheQMHigherEducationRubric.pdf>

Participants in our study indicated that they support the contextualisation of QGDs, although it seems mostly not to be happening at their institutions. Participant#D explained that although they used an instrument that had been developed in an “*inhouse*” fashion and derived from one of the above-mentioned instruments, it still “*lacks the [institution’s name] context*”. Participant#I similarly discussed using the QM Rubric™ at his institution:

QM you know, is useful because it’s an international, sort of recognised rubric and it gives a nice base to work from. But it comes from an American context and sometimes it may not necessarily be useful for what we need in our context and in our space.

A number of participants challenged the pedagogical effectivity specifically of the QM Rubric™. Participant#D indicated, “*I don’t think it’s a bad rubric, but it’s not as comprehensive as I would like it to be in terms of pedagogy*”. Her view resonates with Hosie et al. (2005) and Debattista (2018), who regard the lack of pedagogical underpinning in quality instruments as problematic. Participant#D then continued pointing out that “*it’s more of a technical type of thing, it’s a technical checkbox thing*”. Participant#I challenged the use of tick box rubrics because “*you can get your course to ‘pass’ the rubric, but it actually ends up not necessarily being a good course*”. These statements correspond with Masoumi and Lindström’s (2011, 28) concern that many QGDs are merely an “assemblage of benchmarks”, lacking “sound theoretical grounding”. OL programmes are often viewed at face value and rubberstamped as good quality when they simply adhere to basic, general criteria. However, when the programme and its OLM are scrutinised, they often lack solid online pedagogical principles.

Davis and Frederick (2020) point out that if OL programmes are not designed according to best practices, students are likely to perform less optimally. From the interviews, it was clear that all the participants were familiar with and used some form of QGDs to guide their design and development practices. How they use them, however, differs.

Discussion

This study was conducted to understand better what South African HEI IDs regard as quality indicators, specifically focusing on pedagogy and how they translate quality into their daily design and development practices,

When asked how they translated OLM quality, it was evident that most of them did it intuitively, not in a tick-off fashion. This corresponds with previous findings. For instance, Zhang, Schwier, and Campbell (2005) found that while IDs make use of models, they do not rigidly follow them, nor do they spend a lot of time on them. Thompson-Sellers and Calandra (2012) found that experienced IDs incorporate theory intuitively during their daily practices, and it “becomes second nature to you” (Thompson-Sellers and Calandra 2012, 25).

Although most participants reported their institutions to have formal QGDs to guide them in their practices, most of them went beyond these to draw from a variety of sources, thus following an “eclectic approach” (Brown and Green 2016,18). Following a varied approach aligns with what Dicks and Ives (2008,1) found, namely that experienced IDs “do not do their work by following established models” but rather “employ a set of cognitive tools that enable them to act as pedagogical conscience” when they perform design and development tasks.

While not all participants provided an explicit definition of OLM quality, they all provided insights into specific design mechanisms to establish quality in the OLM they craft. Participants’ answers strongly revolved around the idea of cultivating an online learning community and, as such, coincides with the community of inquiry (CoI) model (Garrison, Anderson and Archer 2000). The CoI model is an attempt to nurture knowledge construction through the cultivation of various forms of “presence”, namely teaching, social, and cognitive presence (Shea and Bidjerano 2009). Although these three presences are intertwined, each presence plays a distinctive role and is foundational to the development of deep and meaningful learning in online programmes (Dunlap and Lowenthal 2018). Figure 2 illustrates how participants’ answers relate to the CoI model.

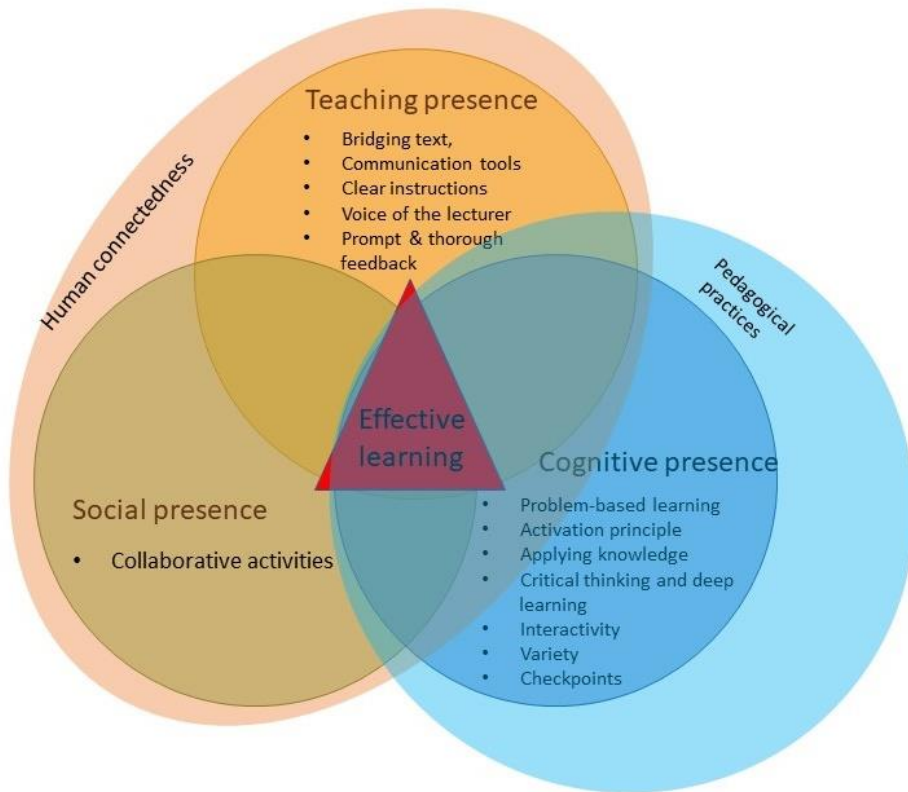


Figure 2: Community of inquiry model to explain participant responses in terms of human connectedness and pedagogical principles

Most participants discussed the need to establish human connectedness in the OLM design and development. One way of establishing human connectedness is to create TP. To establish TP, participants use a variety of methods, such as bridging text, using specific communication platforms, writing informally, and providing clear instructions. Additionally, timely responses and feedback, as reported by participants, are also seen as another way to foster TP within the CoI (Dzubinski 2014; Hodges and Cowan 2012). Establishing TP in OLM provides an opportunity for students to develop a feeling of connectedness and overcome issues of isolation (Hehir et al. 2021) and thus contribute to human connectedness. This calls for intentional design and is done with great care.

A second way to establish human connectedness is by incorporating collaborative learner activities to foster social presence (SP). When looking through the CoI lens, SP refers to the degree of connectedness to others felt by students in an online environment (Garrison et al. 2001). SP aims to minimise the physical distance by helping students to connect with one another and make them feel that they are part of a supportive learning

community (Lowenthal and Dunlap 2014) and, by doing so, reduce feelings of isolation (Altuwairesh 2021). SP can also reduce differences between students and lecturers, improve academic ability, and contribute to learning performance (Al-dheleai, Tasir, Al-Rahmi, Al-Sharafi, and Mydin 2020). Although there are a variety of ways to foster SP in OL (Dunlap and Lowenthal 2018; Al-dheleai et al. 2020), participants mentioned the incorporation of collaborative activities such as discussion forums, group work and icebreaker activities as their main method to do so. Participants were more focused on collaborative activities with the aim of building collective knowledge than with the aim of fostering a community of practice or “cohesivity”, as explained by (Pelz 2010,111). Both, however, are important in establishing SP in OL (Sun and Chen, 2016; Serdyukov, 2015).

The last concept of the CoI relates to CP. CP refers to how students interact with and process the content (encapsulated in OLM) of an OL experience (Dunlap and Lowenthal 2018) to construct and confirm new knowledge (Anderson and Dron 2011). CP could be seen as a space in which students engage with content in a deep and meaningful manner that leads to enhanced conceptual understanding (Dunlap et al. 2007). CP can be related to “the ways of representing and formulating the subject that make it comprehensible to others” and involves “teaching processes” (Shea and Bidjerano 2009, 544), which inherently link with online pedagogy. Participants in this study listed specific pedagogical principles they employ, namely problem-based learning, activation principles, applying knowledge, critical thinking, interactivity, variety and checkpoints. Online pedagogy serves as the theoretical basis for effective online classrooms (Akyol and Garrison 2008) and, if used effectively, increases both students’ cognitive processing and knowledge transfer (Serdyukov 2015).

Conclusion

This study provided a deep understanding of what SA HEIs IDs regard as pedagogical quality principles and how they translate quality into their design and development practices. Results showed that while a few IDs use standardised QGDs from their institution, most draw from various QGDs when they design and develop OLM. They also use these intuitively, not in a ‘tick-off’ manner, when they design and develop OLM.

The standout revelation was the deep-rooted connection between the practices of SA IDs and theoretical frameworks, evident in their alignment with the CoI principles. Also, IDs were very specific about the pedagogical principles they rate as quality indicators when they design and develop OLM. Remarkably, they demonstrate the ability to seamlessly transition between their roles as curriculum designers and instructional designers, displaying a high degree of proficiency in both capacities. Lastly, while being responsive to the student as the ‘consumer’ of OLM, they specifically aim to design and develop OLM with the deliberate intent of overcoming accessibility and inclusivity barriers.

Limitations

This study has certain limitations that warrant consideration. Firstly, the relatively small sample size restricts the generalizability of the findings. While the study provides valuable insights into quality in OLM, the results should be interpreted cautiously as they await confirmation through larger-scale investigations. Therefore, future research should focus on conducting comprehensive analyses of standards and their implementation.

Secondly, the study's perspective on OLM quality is limited to IDs, neglecting valuable input from other stakeholders, including students and academics. Their viewpoints are essential for a comprehensive assessment of OL quality (Badali et al. 2018).

Thirdly, this study's findings are influenced by the theoretical framework of David Merrill. Different theoretical lenses may yield distinct interpretations of the data. Researchers adopting alternative perspectives might identify different quality standards, underscoring the subjectivity inherent in research lens selection.

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