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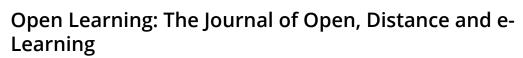
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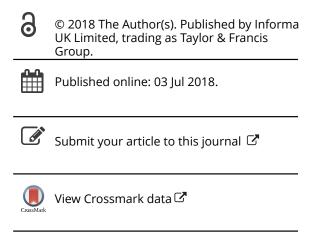
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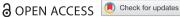
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Learning design in diverse institutional and cultural contexts: suggestions from a participatory workshop with higher education professionals in Africa

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ABSTRACT

Learning design approaches, such as those adopted by the Open University, provide a set of tools and resources for purposefullydesigning modules with a focus on student experiences. However, many of the current learning design strategies have been situated within specific institutions in Europe and North America. This means that there are several issues worth considering around if and how established learning design approaches make sense in diverse institutional and cultural contexts. To critically assess the relevance and appropriateness of learning design strategies in new contexts, this article describes an in-depth participatory workshop with 34 education professionals from five African countries. Altogether, 10 suggestions for learning design practices were derived from the consensus of workshop participants, which provide a foundation for the development of learning design practices moving forward.

KEYWORDS

Learning design; learning analytics; higher education; Africa

Introduction

As an increasing number of university modules incorporate online and blended learning elements (Ringtved, Milligan, & Corrin, 2016), learning design techniques offer unique insights into learning processes (MacLean & Scott, 2011). One prominent example is the learning design process developed by The Open University (OU), which provides a practical take on supporting teachers in designing and implementing modules, whereby learning design uses a set of tools and resources that put student experience at the heart of collaborative, consensus-driven module design processes between educators (Conole, 2012; Cross, Galley, Brasher, & Weller, 2012). In the last 10 years, the OU's learning design approach has been systematically developed and implemented on a large scale (Rienties, Nguyen, Holmes, & Reedy, 2017; Rienties & Toetenel, 2016; Toetenel & Rienties, 2016a). Research has also indicated that collaborative learning design workshops, which are integral to the OU's learning design approach, can substantially

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improve and impact the design choices undertaken by individual module developers (Toetenel & Rienties, 2016b). However, the OU's approach to learning design was created in its own specific (and, arguably, unique) institutional setting, which is embedded within the cultural context of the United Kingdom. This means that several issues need to be taken into consideration when evaluating the suitability of the OU's learning design approach in other contexts, such as culturally-rooted models of learning activities and lack of access to data about student behaviours and characteristics. Important considerations, then, are if and how this established learning design approach makes sense in diverse institutional and cultural contexts.

In this article, we describe an in-depth participatory workshop that took place in Nairobi, Kenya with the participation of 34 education professionals from five African countries, who collaboratively and critically evaluated the OU's approach to learning design. In doing so, the relevance and appropriateness of learning design strategies when applied in new institutional and cultural settings were collectively assessed. Altogether, we contribute in this article 10 suggestions for learning design practices derived from the consensus of workshop participants, which provide a foundation for moving forward the development of learning design practices in diverse contexts.

Learning design and the Open University approach

Learning design can be defined as 'a methodology for enabling teachers/designers to make more informed decisions in how they go about designing learning activities and interventions, which is pedagogically informed and makes effective use of appropriate resources and technologies' (Conole, 2012, p. 121). It is a collaborative approach to creating purposeful designs of module curricula, with an eye towards student experiences and the module's learning goals (MacLean & Scott, 2011). Tools typically used in the learning design process include design visualisations (Crespo García et al., 2012; Nguyen, Rienties, & Toetenel, 2017) and learning analytics data (Lockyer, Heathcote, & Dawson, 2013; Nguyen et al., 2017; Rienties, Cross, Marsh, & Ullmann, 2017; Rienties & Toetenel, 2016; Verbert, Duval, Klerkx, Govaerts, & Santos, 2013), combined with collaborative workshops among module developers and stakeholders (Toetenel & Rienties, 2016b). Similar approaches have been increasingly adopted at higher education institutions, particularly in Europe and North America, as a method for improving the decision-making process of module design and gaining new insights into students' learning experiences (Armellini & Aiyegbayo, 2010; Koedinger, Booth, & Klahr, 2013; MacLean & Scott, 2011).

In this article, we specifically evaluate OU Learning Design (OULD), which is a leading learning design approach (Nguyen et al., 2017; Rienties & Toetenel, 2016; Toetenel & Rienties, 2016a, 2016b) that was launched as a mandatory approach to module design at the OU in 2014. OULD is based on a system for learning design (outlined by Conole, 2012) that has been developed since 2007 and fine-tuned over 5 years in collaboration with Jisc (a UK-based non-profit for technology-enhanced learning) and eight higher education institutions across the UK by Cross et al. (2012). The learning design process was initially adopted for new modules but is now being applied across the OU to reevaluate and update existing modules. The approach is especially concerned with students' actions in their learning environment and how design choices impact upon learning behaviours and experiences. At the core of the OULD approach is a learning

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Activity type	Description
Assimilative	Attending to information: reading, watching, listening, thinking about, etc.
Finding and handling information	Searching for and processing information: listing, collating, accessing, gathering, etc.
Communication	Discussing concepts with a peer or peers: Debating, discussing, sharing, collaborating, etc.
Productive	Generating an 'artefact': Creating, building, designing, writing, etc.
Experiential	Applying learning in a real-world setting: Practicing, investigating, performing, etc.
Interactive/adaptive	Applying learning in a simulated setting: Exploring, trialling, simulating, etc.
Assessment	All forms of assessing understanding: Presenting, testing, peer-reviewing, etc.

taxonomy, whereby learning activities and assignments are designated into one of seven categories, as outlined in Table 1.

Modules are individually profiled using an online learning design tool at the OU, which 'quantifies' the assigned workload in each activity category. An in-depth summary of this process is outlined by Toetenel and Rienties (2016b). The data, in combination with learning analytics data related to student behaviours, can then generate insight through 'activity planner' visualisations. The visualisations outline the typical student workload pattern within each module across the seven activity types, as demonstrated in Figure 1.

An essential step at the beginning of the OULD process is a collaborative workshop with the module development team to discuss and collectively create a vision for the module purposes and goals (Conole, 2012). Participants at the workshops include the full design team, along with relevant support staff (librarians, careers and employability advisers, etc.). The workshop is facilitated by the learning design team, which takes the module development team through a series of workshop activities related to student profiling, module design mapping and quality enhancement. These workshop activities are supported by visualisations (as in Figure 1), student demographic data and learning analytics data related to student learning behaviours. As described by Toetenel and Rienties (2016b, p. 237):

This Learning Design approach contrasts with traditional course design approaches (MacLean & Scott, 2011) whereby content decisions normally are decided based on the topic to be delivered. This new Learning Design process supports teams in asking questions such as: What will students do on this course? How much will they be reading? Will they do any practical activities?

The overall aim is to encourage and guide a more purposeful module design process, particularly as previous research has indicated that collaborative design is more effective than modules designed by individuals (Hoogveld, Paas, & Jochems, 2003).



Figure 1. Example OULD visualisation.

Empirical evaluation of the OULD approach has provided evidence for its rigour and value. For instance, Rienties and Toetenel (2016) found in an analysis across 151 OU modules that learning design choices strongly impacted student behaviours in their virtual learning environment. Nguyen et al. (2017) similarly outlined in a longitudinal analysis of 38 OU modules that learning design choices could account for up to 60% of variations in students' online behaviours. In an analysis of 157 OU modules, Toetenel and Rienties (2016a) highlighted that, although module designers heavily favoured assimilative activities, there was a negative relationship between this approach and student outcomes. Building on this work, Toetenel and Rienties (2016b) further found that learning design workshops which incorporated data visualisations changed module development strategies, with teachers choosing less assimilative tasks and incorporating a wider range of activity types.

When contemplating the appropriateness of the OULD approach for module design in other contexts, it is important to note that current supporting research has strongly focused on the institutional context at the OU and that it was developed between institutions within the cultural context of the UK. More recently, the OULD team has worked with other institutions in the UK and abroad, such as in South Africa and China, to expand the use of its learning design practices and principles. As such, it is necessary to reflect upon the approaches embedded within the OULD process in order to critically evaluate *if* and *how* this model translates to diverse institutional and cultural contexts. An explanation of three possible barriers is outlined next, with a particular focus on the contexts of our workshop participants (East and South Africa).

Considerations for the appropriateness of the OULD approach in diverse contexts

First, the OULD approach is perceived to be pedagogically neutral by allowing teachers to design any module they want with their preferred teaching method and pedagogical approach, practical experience and research. Thus far, it has been found that teachers at the OU prefer to design particular types of modules (Rienties, Toetenel, & Bryan, 2015; Toetenel & Rienties, 2016a). For example, many teachers prefer to design teachercentred modules with many assimilative materials and assessments, while others prefer to design more student-focused modules with lots of interaction and communication between students and teachers. Perhaps an implicit assumption is that the latter, more student-focused designs, might be favoured in European and North American contexts (Beets & Le Grange, 2005; Higgs, Van Niekerk, & Van Wyk, 2010; Kaputa, 2011). Therefore, it is worth examining whether such an approach towards developing activity structures and types makes sense for diverse educational values and practices.

The second aspect worth considering is culturally-rooted models of learning activities, particularly as there is a growing discomfort with continuing legacies of Eurocentric ontologies and epistemologies within higher education across some African countries (Mbembe, 2015; Shiza, 2010). These discomforts concerns have resulted in, among other things, a re-appraisal of indigenous knowledge systems and knowledge production, and a dissemination around the various forms or strategies to decolonise the curriculum (see, for example, Higgs et al., 2010; Lebakeng, 2014; Mngomezulu, 2013). One of the drivers for decolonisation is to move away from using colonial canons in curriculum design and move towards incorporating local knowledge and experiences in a bid to make modules

and assignments more context-specific and locally relevant (Nyamnjoh, 2012). In addition to challenging the canon of knowledge, scholars in Africa are looking to incorporate local teaching styles based on cultural values of community learning into their curricula design (Chitumba, 2013; Higgs et al., 2010; Msila, 2014). This is in contrast to the established, highly individualised system of learning that often persists today in higher education in Africa as a result of colonial legacies (Adebisi, 2016). Therefore, it is worth critically evaluating the significance of the context and cultural settings in which learning design tools such as OULD will be used. For instance, it may be that the activity type taxonomy (see Table 1) requires additions, changes or complete restructuring to make it applicable in diverse other cultural contexts.

Thirdly, learning design has been frequently implicitly linked with learning analytics data (Mor, Ferguson, & Wasson, 2015; Nguyen et al., 2017; Rienties & Toetenel, 2016). In considering its transferability to different contexts, there may be assumptions that other universities have well established mechanisms and infrastructure (e.g. human resources, data literacy, data storage facilities, dashboards, computer programmes, etc.) to collect data, make meaningful inferences and create the visualisations key to the OULD process. At the OU, for example, the Analytics4Action programme provides module leaders with nearly real-time data and visualisations related to student performance, which can be combined with learning design mapping for insights into student journeys (Rienties et al., 2016, 2017). However, it is questionable whether such tools are available or in use at all institutions wishing to follow such a data-driven learning design process, as outlined by Beetham (2012) in a Jisc report of learning design barriers in the UK. Other barriers to the adoption of learning analytics practices around the world include capacity building and training staff members to read and understand data and visualisations (Sclater, 2017; Verbert et al., 2013). In institutions in Africa, previous work has similarly outlined ambivalence towards the use of virtual learning environments (Unwin et al., 2010). Therefore, it is also worth considering whether institutions that are less data-driven (in Africa and beyond) face barriers when incorporating the OULD approach, which relies on access to student data and analytical findings.

Altogether, there are a number of considerations surrounding the applicability of the OULD approach in diverse institutional and cultural settings, as the context in which learning design approaches are utilised may influence the principles and processes adopted. To investigate these notions, we designed a participatory workshop with education professionals from five countries in Africa in order to unpack and critically evaluate the OULD module design approach. In doing so, we have acknowledged that the context in which learning design approaches are utilised may influence the principles and processes adopted. In the next section, we outline the workshop methods that were adopted to evaluate these notions.

Methods

The workshop described in this article was designed as an impact activity for the International Distance Education and African Students (IDEAS) project (http://ideaspart nership.org/), which is a collaborative research effort between the University of South Africa (UNISA) and the OU. The research collaboration is connected to the United Nations' Sustainable Development Goals, particularly Goal 4, which is to 'ensure inclusive

and quality education for all and promote lifelong learning' (United Nations, 2016). As such, the IDEAS project seeks to identify the potential for using high-quality international distance education to promote equitable access to higher education across Africa. Among the research goals of the project, those related to learning design are most pertinent to this article and the outlined workshop; one key aim of the project is an evaluation of whether the learning design approach developed at the OU can be adapted for particular STEM (science, technology, engineering and mathematics) modules in the South African higher education context. By doing so, the project adds an understanding of how diverse institutional and cultural contexts can influence the mechanisms and approaches to learning design.

This article describes one piece of this wider goal by outlining the outputs from a learning design workshop that took place in Nairobi, Kenya in collaboration with the African Network for Internationalization of Education (ANIE). The workshop, hosted by the Kenyan Institute of Curriculum Development, was facilitated by two researchers from UNISA and three researchers from the OU. The workshop participants were recruited by ANIE via email to members and member institutions. The workshop was free of charge but required participants to fund their own travel and accommodation. Altogether, the workshop was attended by 34 participants from five countries: Kenya, Uganda, Ghana, Mozambique and South Africa. Eight of the participants were professors; twenty were lecturers or senior lecturers; one was a research associate and five were university administrative staff. One of the professors was a vice-chancellor and another was a deputy vice-chancellor of a Kenyan university. Altogether, the workshop reached a wide range of scholars, practitioners and administrators working at various levels in higher education institutions.

The workshop lasted one full day, and the schedule was modelled after the method used by OULD for module teams, which is described in detail by Toetenel and Rienties (2016b). The workshop schedule was slightly altered from the OU model to account for the fact that participants came from different institutions and not – as is the case for OU module teams - from the same institution. In order to prompt critical discussion around the OULD approach, discussion elements and prompts were added to each activity to encourage debates on the merits and drawbacks of the approach for participants' own contexts. As such, the workshop was supported by a set of tools and resources that enabled an activity-based, consensus-driven approach to discuss aspects of learning design and the OULD approach. The activities included discussions related to student experiences and profiles, design challenges and 'ideal' module designs. Table 2 describes the workshop schedule adopted.

In this regard, we used the OULD workshop approach as a methodological tool to initiate a dialogue and deliberation among participants. Each activity outlined in Table 2 was highly participatory and attendees had opportunities throughout the workshop to take part in both small and large group activities and discussions. This meant that the roles of the facilitators were mostly limited to describing the activities and moderating the flow of conversation, thereby allowing participants to drive the direction of the discussions. The aim was to offer an intercultural and cross-institutional collaborative experience, providing opportunities for attendees to share their teaching practices, including the students, modules and challenges faced at their institutions. Our aim was not only to share the OULD approach as one potential model for learning design

Table 2. Workshop schedule outline.

Activity	Duration	Description
Describing learning design	30 min	In-depth outline of learning design and the OULD approach
Student experiences with learning design	45 min	Discussion activity related to how learning design affects students 'learning experiences
Student profiling	60 min	Activity which created profiles of diverse types of students and their circumstances within participants' own universities
Learning design challenges	60 min	Activity that outlined and categorised common learning design challenges at participants' own institutions
Ideal module profiles	50 min	Small group activity in which participants designed their own 'ideal' module using the OULD activity types
Re-evaluating learning design	60 min	Group activity and discussion about if and how learning design principles are applicable across multiple institutional and cultural contexts

but also to create a vibrant environment that fostered participants to be critical about its embedded assumptions and applicability.

The workshop was run by five facilitators. Three of the workshop facilitators were from the OU (situated in the UK) from three different cultural backgrounds; the remaining two facilitators from UNISA were South African. Given their backgrounds, it was important for the project to take on board an explicit and honest consideration of the power dynamics involved in the context of this workshop. To counter this, the workshop schedule was designed in a way that did not simply 'impart' wisdom or deliver learning design approaches as facts. This sentiment was explicitly expressed to participants at the start and throughout the workshop, both by the facilitators and ANIE, representatives. In this way, the participatory element of this workshop was important for critical group and self-reflection about learning design practices in diverse contexts in a space where individual and collective norms were scrutinised from cultural and historical realities (Walker & Loots, 2017). The workshop design further allowed participants to draw upon their individual institutional needs, including what their universities share in common with the design challenges experienced by institutions in the UK, as well as what is unique about their own contexts. As a result of the discussions, participants raised interesting macro-level questions related to aspects such as:

- What are the basic principles we should consider in forming a learning design approach that addresses the needs of our own students and contexts?
- What is missing from current OULD practices that should be added to address our own contexts and concerns?
- How can we create new epistemologies and ontologies if our learning design does not respond to our own local cultures?

Although the workshop focused specifically on the experiences at institutions from five countries in Africa, these are relevant questions worth pondering more broadly when considering the applicability of learning design principles and practices between faculties, institutions, countries or cultures.

As part of the final activity of the workshop (described in Table 2), participants summarised small and large group discussions throughout the day related to suggested improvements or changes to the OULD approach. To begin the activity, participants established a master list of 23 issues that one may need to consider when developing learning design practices in diverse institutional and cultural contexts, with a specific focus on experiences at institutions in East and South Africa. This list could be added to or embellished on by any of the workshop participants throughout the activity. Among this list, we then secured a participant-led consensus around 10 identifiable themes as a result of group discussion and voting measures. The results described in this article then used this list of 10 items as an overarching framework for analysis of the workshop outputs. The list was supplemented by in-depth notes and post-workshop reflections from all five facilitators, as well as participant notes and workshop materials that were collected throughout the activities. Collectively, these notes and reflections have informed and embellished the context of the participant-secured list of 10 suggestions. Altogether, the workshop outputs, outlined in the following section, offer a way forward for thinking about what accounts for learning design in diverse institutional and cultural contexts.

Results

A post-workshop evaluation was administered to all participants, which included questions related to the relevancy of the workshop content to their own practices and overall organisation. Each question was presented as a 1–5 agree/disagree scale (1 = strongly disagree, 5 = strongly agree). Table 3 outlines the questions included and the average score for all participants. These high scores indicate that participants were overall very positive about the OULD approach and appreciated the purposeful, student-focused method for module design, with 100% of participants rating each question at a 4 or higher.

In many cases, participants found the workshop activities and materials applicable to their own contexts and left with intentions of implementing similar workshops within their departments or universities. However, there was a collective consensus around the 10 suggestions for context-sensitive adaptations to the OULD approach that should be considered to enhance its suitability when applying it to their own diverse institutional and cultural contexts, which are highlighted below.

Suggestion 1: Collect information about student demographics

An important aspect of the OULD approach is that it is student-focused and designed with students' life circumstances and experiences in mind. In the workshops with module teams, discussions are based around displays of demographic data about students enrolled in previous or upcoming cycles of the module, including how diverse life circumstances and experiences impact upon issues such as students' study habits, preferences and needs. However, this approach requires an in-depth understanding of

Table 3. Average scores of post-workshop evaluation guestionnaire (out of 5).

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I learned something of value today.	4.70
The workshop was applicable to my job.	4.83
I would recommend this workshop to my peers.	4.78
The programme was well-paced within the allotted time.	4.48
The material was presented in an organised manner.	4.65
I was able to learn from the experiences of other attendees.	4.65

who students are, including data about their demographic and personal circumstances (gender, age, cultural background, ethnicity, socioeconomic status, disability status, employment status, etc.). At the OU, this is captured during the registration and enrolment processes. However, many workshop participants noted that this kind of data was not currently being collected by their institutions, making it difficult to plan modules with unknown student demographics in mind. Therefore, it was evident that universities which aim to incorporate elements of the OULD approach should build up mechanisms for collecting and sharing knowledge about the profiles of the students they teach.

Suggestion 2: Develop a student needs assessment

In this workshop, as in OULD workshops, student needs were identified when participants were asked to create profiles of 'typical' students in their modules (see Table 2). In subsequent discussions, participants agreed that students' diverse needs substantially impacted their learning behaviours and experiences, and, therefore, must be considered in learning design, which is in line with previous research (Rienties & Toetenel, 2016; Toetenel & Rienties, 2016a, 2016b). At the same time, participants noted that there are locally-specific requirements that may impact upon learning designs, which are valuable considerations in all contexts. For example, the experiences of rural nomadic students were recognised, including the need for additional assistance to meet their needs in relation to social integration, attendance and group assignments. Participants also highlighted that a larger percentage of their students study while parenting, meaning there is an increased need for additional support and more flexibility. Other participants noted that access to computers and the Internet were challenges that limited module design choices. For instance, some lecturers were concerned that incorporating writing-based assignments or assessments may prove challenging for students without regular access to a computer. Additionally, an unreliable supply of electricity to students' homes may limit study to daylight hours for some. What these various examples from the workshop illustrated is that there are a number of variables that will vary contextually, and that simply profiling demographic backgrounds may not fully address the overarching circumstantial experiences of students. In this regard, participants called for a more systematic assessment of these needs at the university level to corroborate the anecdotal evidence of teacher reflections on student profiles.

Suggestion 3: Provide design flexibility for diverse student working patterns

Participants noted that learning design approaches should take into account that their students may drastically differ in their work and study patterns due to the social, familial and financial responsibilities they have outside of their educational lives. As mentioned in Suggestion 2, challenges were discussed in relation to student mobility and those who require additional flexibility for accessing materials and submitting assignments, such as refugee students and those from nomadic cultures. Similarly, variations in access to resources were noted, with some students relying on mobile phones or public computers to complete assignments, which impacted the way resources could be posted (for example, file type and size). Some students might lack electricity and work primarily by daylight hours, while others might hold full-time jobs during the day and only study at night. A further challenge highlighted was the differing needs of young and mature students. For instance, older students with years of work experience might not necessarily wish to engage with academic jargon and, instead, feel the need to learn practical skills that they can take into their current workplace.

Altogether, almost all workshop participants expressed concerns related to problems underlying low attendance rates, as well as students not being able to keep up with their coursework or not being fully engaged with the required academic work. Therefore, the workshop participants acknowledged that their current module designs and teaching patterns do not necessarily or always incorporate the needs of student circumstances or provide flexibility in terms of hours of teaching and assessment or mode of delivery, which impacts upon achievement and progression. These issues highlighted that, rather than developing a single learning design for modules, there is a need for flexibility and adaptability of assignments and resources for students to apply to their own specific circumstances and this requirement should to be addressed in the learning design process.

Suggestion 4: Create teacher profiles in addition to student profiles

In addition to creating profiles of student demographics and circumstances, identifying teacher profiles during the learning design process was equally important to workshop participants in order to provide quality higher education, maximise student learning and enhance module content. Due to participants' experiences of high student numbers in conjunction with low staffing levels, lecturers noted that they are frequently asked to teach modules that are not in their area of expertise. Adding an activity to the learning design workshop approach that creates lecturer profiles (in addition to student profiles), could, therefore, help universities identify the subject areas in which more teachers are needed and allow them to more easily be allocated to the best candidate suited to teach the content. Further benefits of this can be seen in professional development by mapping what lecturers need most in terms professional abilities, knowledge, skills and values. This has been raised as an important issue within the South African context by Walker and McLean (2013), who noted that developing professional capabilities can contribute not only to quality higher education but also to public-good professionalism, where the issues of generic inequalities shaped by historical socio-economic and political contexts can be addressed and critical knowledge can be integrated into modules.

In addition to training and skills, workshop participants noted that the demographics and life circumstances of lecturers would most certainly impact upon their abilities to deliver diverse types of activities and should, therefore, be taken into consideration in the learning design process. For example, there were suggestions related to whether teachers themselves had reliable electricity or internet at home and on campus. Similarly, life circumstances or preferences may limit their ability to make contact with students during certain hours or be mobile in order to reach students, e.g. in rural locations. Altogether, it was noted that the OULD approach would benefit from incorporating more explicit discussions concerning teacher experiences in addition to its student-focused approach.



Suggestion 5: Assess university infrastructure needs

The infrastructure availability at participants' universities was highlighted as a contextspecific concern which has direct implications on the kinds of teaching and learning activities that can be considered in the learning design process. Some of the highlighted infrastructural concerns included the availability of lecture space, recording equipment and (reliable) electricity, as well as limited access to the internet and computers for both staff and students. When designing modules within such contexts, the types of activities that can take place are very much confined to the infrastructure that is available. This further illustrates that module design teams must take practical limitations into consideration, which the current OULD workshop approach does not explicitly factor in. In this regard, participants pointed to the necessity of doing an infrastructure assessment when considering learning design in their contexts. In particular, the development of 'ideal' module mapping of activity types must be, first and foremost, sensible and achievable within the context of the institutional infrastructure. Therefore, it was suggested by participants that an infrastructure assessment be included explicitly in module design workshops.

Suggestion 6:Build human resources for module design and data literacy

Human resource challenges were common and urgent issues across the five countries represented. The participants were of the opinion that there were often too few lecturers at their universities, which in turn made it difficult to address the demand of increasing student numbers and modules. It was noted that lecturers in participants' respective countries were often required to take on extensive teaching loads, impinging on the time allocated for designing effective modules that address student needs, as required in the OULD method and the aforementioned suggestions. Even when such design steps were taken, it was noted by many participants that it can be difficult to find teaching staff who are experienced with collecting and analysing learning analytics data from students in order to develop learner-specific module designs, as is frequently also seen in European contexts (Beetham, 2012; Sclater, 2017). This is mainly because staff with data literacy are few within existing human resources for many universities and there is often little time, opportunity or funds allocated towards learning design and analytics. As such, these issues are infrequently given priority among the stakeholders or managers of higher education institutions in the face of more substantial concerns, along with limited funds and time. Yet, many participants expressed their desire to further develop learning analytics approaches at their institutions in order to understand student behaviours and further develop high-quality teaching approaches. To serve this aim, they highlighted that professional development and changes in institutional cultures towards more data-driven approaches are needed to move learning design initiatives forward.

Suggestion 7: Diversify learning methods and activity types

Given the aforementioned challenges, participants noted that the majority of their modules relied upon assimilative activities, which is in line with recent findings at the OU (Rienties & Toetenel, 2016). At the same time, there was a general consensus around



the need for more diverse activities to be incorporated into module designs. Participants also felt that, while the seven design taxonomies developed by the OU (described in Table 1) were sufficient for their needs, the specific activities within each category needed diversifying with context-specific educational philosophies and values in mind. To illustrate this, participants outlined words from their own languages and dialects that represented cultural values which should be purposefully embedded within their own learning designs. A few examples from Swahili include:

- Harambe working together, helping one another
- Chama shared (often financial) risk and mutual planning
- Ushrika Pulling the group or community together, acting as allies

Discussions centred on diversifying module activities in order to incorporate these values, rather than simply transplanting activities created by universities in Europe or North America. For example, modules might incorporate elements of harambe and chama with the addition of collaborative discussions in which each student must contribute ideas from a uniquely assigned reading. In this way, the OULD approach was sufficient as a foundation for discussing module design but required alterations at the specific activity level in order to make sense for local contexts.

Suggestion 8: Incorporate locally-relevant content

The significance of decolonisation of the curriculum was identified as an important consideration for using the OULD approach in the five countries represented. Participants noted that modules need to take into account the cultural sensitivities of a diverse student body and teach materials with which students in their prospective countries can identify. The importance of this is seen in the necessity for workshop participants to produce graduates who can be productive members of their own societies. Several challenges related to decolonisation in the learning design process were noted. Firstly, many of the teaching materials currently in use originated from European and North American sources and do not necessarily serve contexts in Africa. Secondly, the language of instruction must be matched with the teaching materials and, therefore, the dominance of English was identified as a learning design challenge, considering it is likely not the first language for many students. In conjunction with this, participants felt when designing modules they must take into consideration the vast array of cultures that exist within their societies and that there were challenges to designing modules applicable for all. Participants overall felt that the OULD student-focused approach and activities allowed a foundation for beginning to think of student needs in this regard, but that aspects of decolonisation should be built into the workshop approach as a more explicit step for learning design in many countries.

Suggestion 9: Collaborate with other universities

In light of regional and national development goals, participants highlighted the importance of collaboration between universities at both the national and regional level to address the common learning design challenges faced, including the aforementioned issues of infrastructure, human resources and reliance on colonial education systems. Participants argued that developing partnerships at a national level could improve the quality of teaching and research, by producing solutions to resource constraints (e.g. pooling resources for the use of multiple universities within the country) and developing national guidelines or approaches around decolonised and contextually-relevant curricula. Collaboration was also highlighted as useful in forming a uniform and standardised approach to teaching modules and for content-building at a national level in countries such as Mozambique, where the issue of varying teaching styles of staff trained abroad impacted module delivery. At the same time, collaboration at the regional level among universities in Africa was believed to lead to new research opportunities and new developments in technology and innovation, which could, in turn, promote sustainable and inclusive economic growth, and social development across the continent. In this way, it was agreed that learning design could have the potential to enhance engagement between and among universities, promote teaching excellence and provide supportive learning environments - all noted as significant aspects of quality higher education. Therefore, it was suggested that the OULD approach, which often focuses primarily on the specific module design team, should be opened up to a wider audience with learning design strategies developed at both macro (i.e. national, university, or programme) and micro (module) levels for cohesive planning across and between groups.

Suggestion 10: Evaluate learning designs after modules have run

A final suggestion from workshop participants was that learning design should take a 'full circle' approach by not only creating purposeful module designs but by also evaluating the effectiveness of the module after it has run. Participants were appreciative that the OULD model encouraged module design teams to collectively outline learning goals and intended student experiences, but were critical that it did not explicitly include a collaborative evaluation phase to assess whether the design actually met these intentions. This issue has also been raised in recent research (Nguyen et al., 2017; Rienties & Toetenel, 2016; Toetenel & Rienties, 2016a), which argues that learning design is not just a tool for the initial module design, but also for analysing student behaviours and results using learning analytics data. As such, it was noted by participants that it would be useful to incorporate both 'before' and 'after' workshops with module teams to address these concerns. Participants also gave further precedence for the 'marriage' of learning design and learning analytics (Nguyen et al., 2017) in order to add a critical evaluation element to the holistic module design process.

Conclusions

This collaborative workshop sought a critical reflection and evaluation of the OULD module design approach in new institutional and cultural contexts from 34 education professionals from five countries in East and South Africa. Altogether, the collective consensus demonstrated that the OULD method provides a valuable foundation for approaching module design in online and blended settings from a purposeful, studentfocused perspective. Of particular value to participants was the focus on profiling student needs and circumstances, developing visions for intended student experiences, and candid conversations around design challenges. This provides an initial foundation for understanding the applicability of the OU's learning design principles for blended and online modules in diverse contexts, which will be important to unpack further through additional research.

At the same time, the 10 suggestions described above have outlined that there are several assumptions and concerns embedded within the OULD approach to module design that must be further, and perhaps individually, developed to increase its applicability to blended and online modules outside of the OU and UK context. In the five countries represented in this workshop, issues surrounding infrastructure and resources were commonly discussed, as well as the need for collecting foundational data about who students are and what they need before moving forward with a student-focused approach to learning design. Similarly, a stronger and more explicit focus on the cultural context within which learning design operates was important to participants, including a more deliberate focus on aspects of localisation and decoloniality. Further, a stronger focus on teacher resources through explicit teacher profiling was encouraged. Although there was not an explicit focus on the UK context in this workshop (i.e. the location of the OU, where this learning design approach was developed), these suggestions are also important considerations for the continued re-evaluation of learning design outside of the contexts of the workshop participants. Altogether, this workshop has outlined that discussions around learning design should be open and collaborative, with consideration to the power dynamics between researchers or practitioners in different contexts and countries. Further, the outcomes of this workshop discussion have highlighted that learning design approaches should not be introduced without appropriate contextualisation, meaning adaptations must be made to meet the context-specific experiences, values and challenges that impact upon learning and learning design across diverse institutions and cultures.

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