Enabling Design: Creating an Equity-Focused Framework for Blended Learning

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Abstract

Equity issues in higher education, which reflect South Africa's oppressive past, have been highlighted since the student protests of 2015–2016 and were made more visible during the pandemic-response pivot to online teaching. Post-COVID, blended learning has become an accepted part of mainstream university education. This paper describes a new framework that builds on Universal Design for Learning (UDL) and learning design approaches but foregrounding equity considerations aimed at creating inclusive learning environments for diverse students. Drawing from existing learning theories and cases in practice, the Enabling Accessible Blended Learning for Equity (ENABLE) framework offers support materials with theoretical references and practical tools to prompt lecturers to think about their approaches to curriculum design with a new mindset. This paper further reflects on the framework's role in both providing a stronger theoretical grounding to the academic development field and reiterating its social justice concerns.

Keywords: Universal Design for Learning (UDL); equity; blended learning; accessibility; higher education; Enabling Accessible Blended Learning for Equity (ENABLE)

Introduction and Context

The global concern of higher education (HE) massification is heightened in South Africa due to the imperative to address colonial and apartheid injustices, which marginalised the majority of South Africans from accessing HE (Nomdo 2017; McArthur and Ashwin 2020). Since the 1990s there has been significant progress in opening up formal university access (Van Schalkwyk et al. 2022), yet this does not necessarily equate to student retention or success (Sibiya and Mahlanze 2018). Participation in South African HE is still racially skewed and characterised by high attrition and low graduation rates, particularly among black students (Luckett and Shay 2020; DHET 2023), although this varies across HE institutions (Branson and Whitelaw 2024). There is great diversity among student cohorts in terms of language, age, home and schooling background, social and cultural capital, and other factors, and universities have struggled to prepare and adapt to this diversity and adequately support students in this transition (DHET 2023). Long-standing inequalities in schooling result in most students entering university ill-equipped to meet the academic demands of their programmes (Mathebula and Calitz 2018). It is crucial to steer clear of a "deficit discourse" regarding students, which focuses on supposed individual shortcomings instead of examining broader exclusionary institutional structures (Coleman 2016). Many historically white universities privilege certain ways of being in their academic and institutional culture - middle-class, white, English-speaking, western, masculinist (Bozalek and Boughey 2012; Cornell et al. 2022) and "non-disabled" (Gore 2023). Students from privileged backgrounds often transition smoothly into university, as the environment aligns closely with their upbringing and schooling, making it easier for them to grasp the nuances of the 'hidden curriculum' - the unstated norms, values, and beliefs as opposed to the explicit or official curriculum (Morrow 2009). This dynamic further exacerbates inequalities and marginalises many students, including those living with disabilities. Not only is transformation necessary for the redress imperative, but universities can benefit from the rich cultural, linguistic, and other resources that a diverse cohort of students contributes (Marshall and Case 2010).

Equity issues surfaced prominently during the Fallist movement in 2015 and 2016—a student activist movement emerging at the University of Cape Town (UCT) and inspiring similar activism in other South African and international universities, highlighting racial and educational inequalities (Ndelu, 2020). The ensuing student protests and campus shutdowns often led to a transition to remote learning. Thus, while many universities globally experienced emergency remote teaching and learning (ERTL) for the first time in 2020 due to the COVID-19 pandemic and subsequent lockdowns, South African universities had been grappling with campus disruptions for years prior. Online learning thus became politicised given its perceived role in countering the intentions of the protestors to disrupt normal academic operations and, indeed, further exacerbated existing inequalities (the subject of the protests) by contributing an additional layer of disadvantage—i.e. severe digital inequalities (Czerniewicz et al. 2019; Czerniewicz et al. 2020).

Due to the rapid transition to online teaching and learning in volatile conditions, individuals often harbour negative and traumatic associations with educational technology in general (Czerniewicz et al. 2020; Mavutha and Mabotja 2024). Many young South Africans' technology use in their home and schooling environments is constrained in various ways. The country's internet penetration is relatively low, with high mobile data costs (Vurayai 2024), yet access to technology does not guarantee the development of the necessary digital literacies for successful online or blended learning (Czerniewicz et al. 2020; Lubisi and Mwapwele 2024). In addition, the COVID-19 lockdown periods highlighted the complex environments within which technology is used. Many students did not have quiet or dedicated workspaces in their homes, nor autonomy over their working space and time, were carrying child and homecare responsibilities, and even faced abuse and violence in the home (Czerniewicz et al. 2020; Pallitt et al. 2022; Pallitt and Kramm 2022).

Despite limited time for pedagogical considerations during the initial lockdowns, academic staff attempted to address inequities by creating online content that was data-light, mobile-optimized, and low-tech when feasible (Pallitt and Kramm 2022). With time, staff transitioned from a reactive and suboptimal ERTL approach to a more considered and intentional blended learning design, often with support from learning designers, technologists, and academic development staff (Czerniewicz et al. 2020). This process of redesigning allowed academics to rethink curricula and pedagogical approaches and to interrogate some of the unspoken assumptions and expectations of their courses (Czerniewicz et al. 2020; Mabasa et al. 2024). The affordances and benefits provided by technology were also considered, not only for pedagogical richness and diversity but for the accessibility and flexibility that could be used to support the social justice imperatives discussed above (Czerniewicz et al. 2020; Fobosi and Mkuzo 2024), such as enabling differentials in pace of progression among students and alternative and flexible modes of delivery as advanced long before either the Fallist protests or COVID-19 ERTL (Scott et al. 2007). The imperative now is to take a critical approach to blended teaching and learning, considering ways to enhance pedagogy with social justice in mind without contributing to digital exclusion (Czerniewicz et al. 2020; Mulaudzi 2024).

Recent years have illustrated the intersection of academic development and educational technology work, and many professionals in this space straddle both fields.

> Historically, questions of access to and success in education were the purview of 'academic development', while the digital divide and digital inequalities fell in the parallel realm of 'educational technology'. These separations have been shown to be impossible (Czerniewicz et al. 2020, 964)

Academic development considerations must be extended into the online space, in as much as educational technology must incorporate social justice concerns. The crucial role of professionals across these spaces during lockdowns increased recognition and highlighted their importance within universities. This mirrors a broader recent

movement to legitimise academic development, moving it from a marginalised space focusing solely on staff development to a well-theorised field capable of addressing broader issues of transformation and social justice at institutional and national levels (Ashwin 2022; Clegg 2009; Shay 2012). The ENABLE framework, discussed herein, exemplifies such contributions. Rooted in universal design for learning and other teaching and learning theories yet providing practical applications, the framework provides a means of navigating the contemporary landscape of blended learning while ensuring a strong academic development focus informed by equity and social justice.

Literature Review

Universal Design for Learning (UDL)

The ENABLE framework discussed in this article draws strongly on universal design for learning (UDL) as a theoretical grounding. UDL, introduced by Anne Meyer and David Rose, is an educational design approach that incorporates flexibility in content, learning, and assessment (Dell et al. 2015). The aim is to cater to the broadest range of diversity in student populations, thus seeking to eliminate the need to retrofit teaching practices with specialised accommodations (Dalton et al. 2019; Dell et al. 2015; McKenzie and Karisa 2021). Borne out of the universal design movement, which focuses on the design of architecture, public spaces, and products for the greatest diversity of people without the need for adaptation or accommodations, UDL positions diversity as the norm in educational contexts, advocating for equity in access to education for all students (Dalton et al. 2019; Dell et al. 2015; McKenzie and Karisa 2021). While UDL was initially applied to K-12 education, recent years have seen applications in the HE space (Fornauf and Erickson 2020), and, indeed, the ENABLE framework applies UDL in this space while recognising the nuances of the South African HE context.

UDL rests on three principles for effective course design, namely, multiple and flexible modes of presentation, expression, and engagement. The first principle relates to presentation and recommends designing learning environments where students have various ways of acquiring knowledge. The second relates to action and expression and argues for designing various opportunities for students to demonstrate their acquisition of knowledge. The third relates to engagement and interaction and recommends that the lecturer taps into students' interests and motivations to challenge them and encourage their self-regulation (Dell et al. 2015; McKenzie and Karisa 2021).

The goal of UDL is to support learner agency - the capacity to actively participate in making choices in service of learning goals (CAST, 2024b). UDL provides a framework for designing accessible, inclusive, and equitable learning environments that support manifestations of learner agency that are purposeful and reflective, resourceful and authentic, and strategic and action-oriented (CAST, 2024a; 2024b).

Leibowitz and Bozalek (2015), McKenzie and Karisa (2021), and Moodley (2024) make explicit the relevance of UDL to a South African higher education context characterised by diversity. While UDL has often been applied in cases of students with disabilities or special educational needs, it is evident that contexts with diverse student cohorts, particularly regarding educational inequalities, language, and other factors (like those found in South African universities), can benefit greatly from these approaches. UDL's focus on inclusion and equity (CAST 2020) aligns well with current transformative social justice work in South African HE that counters a student deficit model and acknowledges the role of curriculum, institutions, and academic staff in supporting diversity and promoting equity (Dalton et al. 2019; Leibowitz and Bozalek 2015; McKenzie and Karisa 2021).

The ENABLE framework aims to foreground principles of equity and inclusivity in a digitally-enabled learning environment through a shift in course design practices where inclusivity and accessibility are intentionally accounted for and not retrofitted. It thus synergises several key concepts, including accessibility, blended learning, and equity, which shall be discussed in the following sections.

Accessibility

'Accessibility' is a term that is used quite broadly to describe a range of 'access' issues that make it possible for all students to participate in their educational experience (CILT 2024) fully. For example, physical access (e.g. wheelchair access); sensory access (e.g. ensuring screen reader compatibility, high colour contrast for colour-blindness, visual supports for auditory materials, tactile/kinaesthetic prompts); economic access (e.g. optimising content for low-cost mobile phone use); epistemological access (e.g. ability to understand the content and examples in the curriculum) (Morrow 2009; Xulu-Gama and Hadebe 2022); as well as pedagogical access (e.g., offering alternative learning and assessment activities that support various modes of representation and engagement, additional time on task) may be addressed to afford students the best possible opportunity to display their competence. Accessibility considerations include students' (and staff members') educational engagement amidst unique temporary and permanent physical, sensory, cognitive, communication challenges, and/or neurodiverse profiles, commonly referred to as 'disabilities'.

Blended Learning

There is no one universal definition of blended learning, but the working definition for the ENABLE framework discussed in this article is:

> An educational approach that combines in-person class interaction with online engagement through digital platforms and tools allowing for increased access, flexibility, participation and customisation of the learning experience (CILT 2024)

In the past, online and in-person learning have been juxtaposed as opposites, with online being seen as suitable only for distance education. Until COVID-19's ERTL crisis,

South African HE regulatory environments reinforced this dichotomy through funding models (with less subsidy provided for online or distance modes). However, there is growing recognition that the crude representation of online vs in-person is no longer valid as all university education today includes some digital components. Instead, it might be more accurate to speak of 'digitally-enabled' learning (https://uct.ac.za/transformation/vision-2030) that uses both in-person class interaction with online engagement to varying degrees at various times during the academic year.

With blended learning, there are many variants where digital technology is used in the classroom (e.g. interactive whiteboards, online polls) to enhance student engagement, digital learning platforms, video conferencing platforms (e.g. *MSTeams*), and other technologies (e.g. *Padlet*) to support teaching and learning. More recent variants include hybrid or 'hyflex', which enables one single learning event to have in-person students alongside remote students (participating through live stream video conferencing) (Greyling and Wolhuter 2023).

When designing inclusive blended learning, various course design choices will affect students' engagement and success. Offering students options in course design, as promoted by UDL, will allow students the agency to adjust and select based on their circumstances. Choices about using technology are not independent of the other educational considerations, being seen as 'entangled' with context, purposes, and values (Fawns 2022).

Equity

Nancy Fraser (2005), a prominent feminist and political philosopher, understands equity as a concept that goes beyond formal equality, which is concerned with treating everyone the same regardless of their differences. For Fraser, equity requires considering the systemic and historical inequalities that exist within societies and taking steps to address them. In the context of education, Fraser's concept of equity implies that all students should have equal access to and outcomes from quality education, regardless of their background or identity (Shay 2017).

In the ENABLE framework (CILT 2024), the concept of 'equity' is seen as involving all students, especially those whose histories, traditions, worldviews, voices, and perspectives have been marginalised, stigmatised or excluded due to different racial, cultural, ethnic, linguistic, gender, ability, and other such groupings directly in the learning process. Achieving equity is, therefore, an ongoing aim throughout the ENABLE process. Importantly, equity does not require that everyone is treated the same but rather that they have equal access to the curriculum.

This paper aims to describe how and why the ENABLE framework was developed in the context of a pressing need for an equity-focused framework to guide blended learning design in South African HE. Specifically, the objectives of the paper are to articulate the principles underpinning the ENABLE framework, which synthesises

Universal Design for Learning (UDL) with equity-focused pedagogical approaches and to contribute to ongoing conversations around transformation and social justice in HE by proposing actionable recommendations for inclusive curriculum design. These objectives aim to promote teaching and learning practices that are responsive to the diverse needs and contexts of South African students, ultimately enhancing student success and retention.

ENABLE Methodology

The ENABLE framework emerged from the Redesigning for Blended Courses (RBC) project (2021 - 2023) aimed at increasing student learning and success in blended courses. Aligned with UCT Vision 2030 objectives, the RBC responded to imperatives posed by the South African Fallist movements and the COVID-19 pandemic, which emphasised the necessity for flexible and inclusive approaches to support teaching staff in the shift to digitally-enabled education.

As part of the re-imagining of teaching and learning post-ERTL, UCT's Centre for Innovation in Learning and Teaching (CILT) supported teaching staff in revising courses on the institutional digital learning platform to incorporate UDL principles. Concurrently, UCT embarked on a digital learning platform migration to align with UCT's teaching and learning needs for the next five to ten years. This migration coincided with the RBC project, offering a pivotal juncture to assist CILT learning designers and teaching staff in (re)evaluating blended and inclusive teaching practices during course migration.
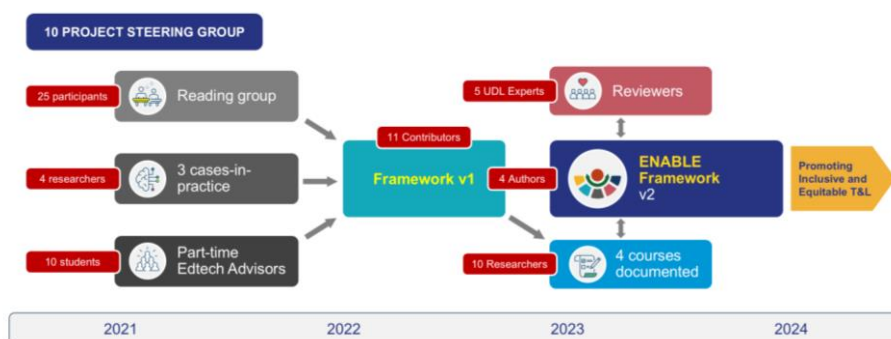

Figure 1: Collaboration on the RBC project

The team internally developed capacity by engaging staff through an open reading group, comprising approximately 25 colleagues working loosely in support of the project, to review literature on the themes of UDL, social justice and blended learning.

Led by an academic development expert, this group facilitated dialogue between scholars and practitioners over the period of a year, laying the groundwork for the Framework's development.

At the outset of the RBC project, selected UCT courses were examined as case studies to document existing inclusive practices at UCT and identify inclusive pedagogies. These studies served as a basis for creating design-focused resources that contextualised UDL framing in HE practice and related this to curriculum, learning, pedagogic, assessment, and evaluation theories.

The ENABLE framework was developed out of an iterative process which involved a collaborative literature review, the documenting of cases of explicitly designed inclusive practices (cases-in-practice), and research describing the pedagogy of a selection of undergraduate courses (see Figure 2 below). The extended reading group met weekly to explore the scholarly writings around UDL, equity, social justice, and blended learning.
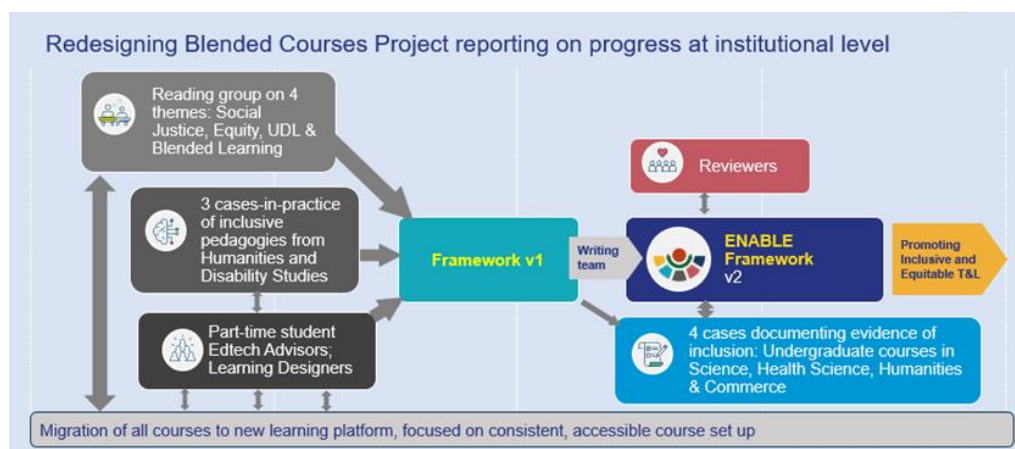

Figure 2: ENABLE methodology

In late 2023, four additional cases from different faculty contexts were compiled by learning designers who collaborated with academics to document existing inclusive practices using aspects of ENABLE, allowing the practices to inform the framework. The emerging framework (i.e. Version 1) was changed as new evidence of practice was encountered (for example, the essential binding role of communication, which resulted in it being included as its own overarching element in the framework).

ENABLE was produced by multiple authors, improved through various reviews, and formally evaluated by local and international experts[1]. The evolving ENABLE framework encourages continuous improvement and invites ongoing engagement from stakeholders. Future framework iterations will integrate pedagogical insights and new technological innovations.

ENABLE Framework

Drawing on existing work which critiqued the narrow definitions of inclusion (see Rose 2021), the ENABLE framework responds to the educational challenge to develop a more expansive understanding of the barriers to learning located in "intersections of ability, identity, institutions, and community" (Rose 2021, 12). The resulting ENABLE framework considers equity to be a core part of the design of learning.

This framework begins with the assumption that blended learning will be the norm for regular teaching and learning. Using the high-level framings described above, ENABLE offers support materials with theoretical references and practical tools to prompt lecturers to think about their approaches to curriculum and learning design. The framework is organised through seven processes with a guiding question foregrounding equity to help teaching staff navigate the materials:

1. Deliberative course planning invites lecturers to consider how responsive the course is to the needs of the students and society.

2. Student-centred learning challenges lecturers to focus on how best students might learn to engage with the course given their interests, strengths, and constraints.

3. Responsive teaching and online learning engagement design pose teaching staff with a question about how to build and support student participation in the course.

4. Flexible assessment and feedback consider both the form of assessments (how best can students demonstrate their learning?) and the teacher's role in feedback (how can lecturers provide relevant, constructive and timely feedback?).

5. Inclusive evaluation and reflection emphasise how lecturers can solicit evaluations of the course from various stakeholders, as well as closing the loop on evaluation by optimising the insights for current and future student cohorts.

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1 With grateful acknowledgement of the expert input on UDL from UCT lecturer Chiara Ronchetti, international experts Dr Elizabeth Dalton and Associate Professor Suzie Gronseth, IDEA director and scholar Professor Judith McKenzie and CILT senior learning designer Lauren Butler.

6. Accessible materials and tools promote the creation of learning materials in accessible formats and stress the importance of checking and adapting any learning tools that are deployed. (How can accessible materials and tools be used and adapted to best support students' learning and lecturers' teaching?)

In testing the framework with existing practices at UCT, a seventh element, Communication, was added based on evidence of practices documented in the case studies described earlier. The guiding question for this element relates to identifying strategies that might best optimise communication between students, lecturers, and other stakeholders to ensure that the messaging is explicit and precise.
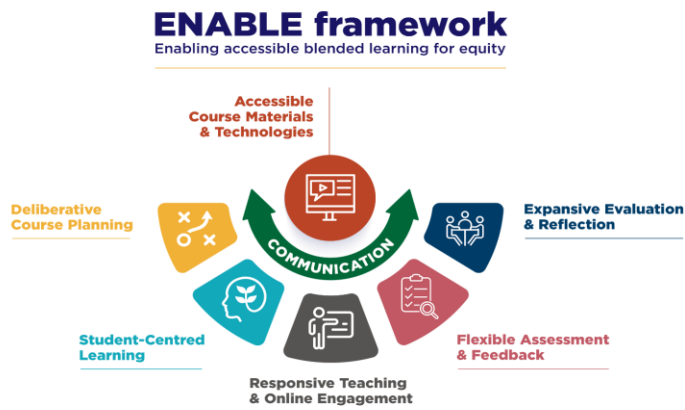
Figure 3: The ENABLE framework (CILT, 2024)

Each element of the framework offers a list of topics and their alignment with the relevant UDL Guidelines. Under each topic, there are resources on the concept, with scholarly references as well as practical advice on implementation. For example, under the element of **Deliberative Course Planning** (CILT 2024), there are five topics: Student profile, Critical curriculum alignment, Inclusive learning outcomes, Course mapping, and Learner agency. Elaborating upon the Inclusive Learning Outcomes topic, the resources begin with a definition of learning outcomes and then explain how to make learning outcomes more 'inclusive' (CILT 2024). The key distinction identified for greater inclusion is to provide 'optimal flexibility' for students. The resource describes how offering students greater flexibility maps to the UDL guideline to 'design multiple means of engagement' (CAST 2024), which urges any educational process to take account of the very different ways in which students may be motivated and engaged by learning, promoting inclusivity.

The ENABLE resources offer strategies to apply when making learning outcomes more inclusive by (1) offering multiple opportunities for students to meet the core outcomes in a variety of ways, (2) separating the tools or technology used from the outcome to allow students to use different formats/ tools (e.g. audio, video, text; or using different applications); and (3) making the acquisition of personal attributes (e.g. perseverance, determination) more visible. It further provides several applied examples of how to make a learning outcome more inclusive. Aside from integrating the UDL design guidelines (including linking to CAST's detailed 'guidelines'), the ENABLE framework deploys, adapts, and expands various familiar learning design tools and approaches throughout.

The ENABLE framework builds upon the widely used Bloom's Taxonomy (Krathwohl 2002), which has previously been applied to digital environments (Sneed 2016). Bloom's Taxonomy visualises learning objectives as a hierarchy of increasing complexity. In ENABLE's adaptation, the taxonomy is extended to include three more layers, "namely, **engage**, **contribute,** and **advocate**, to deliberately foreground the collaborative and situative, connectivist, and liberationist learning and/or education theories needed to frame outcomes that focus on the social and emancipative nature of learning" (CILT 2024).

This illustrates how the ENABLE framework builds upon and enhances existing theories to provide more practically relevant approaches to designing inclusive learning experiences for the South African context. ENABLE can be applied to concrete course development but is conceptualised more as a curriculum design framework that seeks to include the maximum number of students by designing for choice and flexibility.

The [Student-Centred Learning](#) process draws upon Laurillard's (2013) Pedagogical Patterns and expands the six types of student learning she advocates. ENABLE identifies more than 12 ways in which students can learn, such as observing, imitating, memorising, thinking critically, explaining, applying in practice, investigating and analysing, evaluating, creating, engaging with others, contributing outside a class setting, and advocating for others based on existing learning and education theories. Under each of these options, for example, 'Learning by engaging with others', ENABLE provides a list of possible strategies for the in-person and/or online modes of engagement linked to relevant UDL guidelines.

Discussion

ENABLE: A Bridge Between Theory and Practice

The development of the ENABLE framework reflects both the importance of a strong theoretical grounding in existing bodies of literature on curriculum and pedagogy, along with praxis in South African HE contexts. The framework is characterised by a reciprocal exchange - applying theory to contextual challenges as well as allowing contextual considerations to inform the theory. This exchange highlights the fruitful

relationships between educators and academic development practitioners. In developing this framework, the ENABLE team benefited from collaborations with educators who provided rich case studies and empirical data on teaching and learning practices *in situ,* which informed the framework. By the same token, educators benefited from the wealth of practical tools, templates, references to seminal works, and further reading offered by the framework. The framework is also able to provide a helpful bridge between effective teaching practices that staff often apply intuitively in their contexts and teaching and learning theory that can elucidate and expand on those practices. The student-centred approaches that are integral to this framework consider the diversity of South African student cohorts and the rich contributions they make to teaching and learning.

Practical Applications and Inclusive Processes

This article highlights the contributions that the ENABLE framework has made to practical applications of existing teaching and learning theory, including an extension of Bloom's Taxonomy (Krathwohl 2002) and Laurillard's (2013) Pedagogical Patterns. Despite the rich theoretical contributions, this framework is intended primarily as a living artefact rather than a static document - a mindset to be adopted and embedded across teaching and learning decisions, both big and small. Setting the resources up in a deliberately flexible format (editable Google documents) was an intentional choice to allow for ongoing adaptation and contextual adjustment. ENABLE is not envisioned as a pre-determined pathway - it maps to a course design process for easy navigation and clustering and provides staff with on-demand resources for use in their design and teaching practice. For those working on the framework (including learning designers and those teaching), it has been encouraging to hear ENABLE contributors describe the changes to their own thinking and how they now approach their work with an inclusivity mindset first and foremost.

In the interests of advocating for inclusivity, the development process of the ENABLE framework (in addition to its outputs) has been approached in inclusive ways. During the project period, invitations were extended to students, learning designers, educational technology specialists, and senior academics to contribute to the design of ENABLE (see Figure 1).

Embedding Inclusivity in Engagements and Presentations

In presentations and meetings related to the ENABLE framework, attention was also given in accordance with the accessibility principles outlined in the framework, and contributors have continuously made efforts to 'walk the talk' of inclusivity. The design of presentations and workshops foregrounded inclusion – which extended from the format of slides, the selection of accessible online activities, sharing documents and slide decks in advance to assist those using screenreaders, providing both textual and spoken explications, such as reading what is on slides rather than saying 'as you can see', and through to promoting community building with ice breaker activities at the

start of sessions to engage everyone in online or hybrid environments. Adopting inclusive practices takes time, advocacy, and consistent commitment. This project operated with inclusion as both an institutional goal and as a community of practice to support the project staff in adopting new modes of working. Some progress was made, but more work is needed to ensure access and inclusion is never merely an afterthought.

Conclusion

The ENABLE framework answers the call of Rose (2021) to address the current limitations of UDL and to re-imagine its application in contexts of complexity and inequity. While systemic and intersectional barriers to equity have previously been considered outside the remit of UDL, Rose (2021) argues that UDL can and should address these. This cannot be achieved in a de-contextualised and isolated manner but requires deeply contextual understandings (Rose 2021). In its guidance, recommendations, examples, and case studies, the ENABLE framework endeavours to incorporate a nuanced understanding of the South African HE environment and to demonstrate how UDL can be applied in contextual ways.

This article underscores the importance of academic development work and its increasing centrality as blended teaching and learning approaches become more commonplace in the South African HE context post-COVID. The ENABLE framework reflects the challenges and opportunities associated with integrating practical staff support and educational technology design practices within a broader social justice imperative. The framework enriches the theoretical foundations of the academic development field and its legitimacy while cementing its axiological position regarding social justice in South African higher education.

Acknowledgements:

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