# No Walls, No Limits? Universal Design for Learning in the New Landscape of Higher Education



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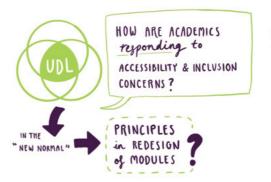
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# Abstract

The period since March 12<sup>th</sup> 2020 and the sudden pivot of Higher Education Institutions (HEIs) to an online teaching and learning environment due to COVID-19 restrictions is arguably the most turbulent time in Irish Higher Education (HE) since the foundation of the State. For those who teach, this unprecedented move online posed an enormous challenge as it demanded considerable upskilling in digital competencies in order to engage students and develop suitable online assessment approaches. Many HE teachers were required to very quickly adapt their teaching, learning and assessment practices which had been designed for a face-to-face learning environment. Similarly, learners were equally challenged to respond to learning in an unfamiliar context. This chapter explores how academics approached the learning of new skills in the context of the COVID-19 crisis, with a particular focus on how they respond to concerns relating to accessibility and inclusion. This chapter argues that as we move to an online and blended "new normal", the Universal Design for Learning (UDL) framework (CAST, 2018) offers us the opportunity to harness the power of technology to develop truly inclusive learning environments. This study seeks to explore the effectiveness of the UDL framework in the context of this "new normal" by exploring the extent to which the principles of UDL were considered in the re/design of modules for online and blended delivery. Through an analysis of qualitative research data and an examination of the extant literature, a model is proposed which calls for a structured and institutional approach to upskilling HE teachers, recognising that ongoing pedagogic training is recommended to ensure HE teachers practice to a high professional standard (ESG, 2015). This chapter argues that the crisis posed by the COVID-19 situation provides opportunities to reimagine our teaching and learning approaches in order to create truly inclusive learning experiences.

# **Keywords**

Universal Design for Learning, Professional Development, Remote Learning, Inclusive Teaching





### Introduction

The period since March 12<sup>th</sup> 2020 and the sudden pivot of Irish Higher Education Institutions (HEIs) to an online teaching and learning environment due to COVID-19 restrictions is arguably the most turbulent time in Irish Higher Education (HE) since the foundation of the State and there is widespread evidence of the disruptive effects of the pandemic on HE both nationally and internationally (e.g. Marinoni et al., 2020; Quality and Qualifications Ireland, 2020; YERUN, 2020). According to UNESCO, by mid-April 2020 schools and HEIs were closed in 186 countries worldwide, affecting over 1.5 billion learners (UNESCO, 2020). For those who teach, this unprecedented online and remote shift posed an enormous challenge as it demanded considerable upskilling in digital skills in order to engage students and develop suitable online assessment approaches. Many HE teachers were required to very quickly adapt their teaching, learning and assessment practices which had been designed for a face-to-face learning environment and to develop new approaches. Similarly, learners were equally challenged to respond to learning in an unfamiliar context and without the usual surroundings of their college campuses (Aucejo et al., 2020). It is well documented that Irish HE learners are increasingly diverse; the Association for Higher Education Access and Disability (AHEAD) point to a 17% increase in the number of students with disabilities accessing HE from 2017 to 2018. Most recent statistics indicate that participation rates of students with additional needs stands at 6.2% (AHEAD, 2019). The situation prompted by the COVID-19 crisis has highlighted some of the vulnerabilities of 'traditional' approaches to teaching, learning and assessment, including a reliance on face-to-face forms of content delivery and written forms of assessment. The sudden shift to a remote learning context, while posing considerable challenges for both staff and students, does offer enormous potential to rethink traditional approaches and to harness the potential of technology to design more inclusive and accessible learning environments.

This chapter explores how academics approached the learning of new skills in the context of the COVID-19 crisis, with a particular focus on how they are responding to concerns relating to accessibility and inclusion in relation to the unprecedented move to an online and blended learning environment. Using a qualitative methodology - specifically semi-structured interviews with academics in an Irish HEI - this research probes the extent to which concerns relating to supporting the needs of diverse student cohorts were considered when approaching the redesign of teaching, learning and assessment approaches. It questions the extent to which the principles of Universal Design for Learning (UDL) were used to underpin the redesign of module materials and assessment strategies. This chapter argues that as we move to an online and blended "new normal" where technology becomes ubiquitous, the UDL framework (CAST 2018) offers us the opportunity to harness the power of technology to further develop inclusive learning environments that allow us to move beyond an 'accommodation' model of diversity (discussed below). This study seeks to explore the effectiveness of the UDL framework in the context of this "new normal" by exploring the extent to which the principles of UDL were considered in the re/design of modules for online and blended delivery. Through an analysis of qualitative research data and an examination of the extant literature, a model is proposed which calls for a structured and institutional approach to upskilling those who teach in Higher Education, recognising that ongoing pedagogic training is recommended to ensure HE teachers practice to a high professional standard (ESG, 2015).

This chapter argues that the crisis posed by the COVID-19 situation provides opportunities to reimagine our teaching and learning approaches in order to create truly inclusive learning experiences for all students.

### **Literature Review**

This study can be situated within the context of the Hunt Report or National Strategy for Higher Education to 2030 (Department of Education and Skills, 2011) which recognises that there is considerable enthusiasm among lecturers in HE to innovate and excel in teaching and learning. It emphasises the need to capitalise on this by providing system-wide investment to ensure the availability of appropriate technological infrastructure and pedagogical support. It also suggests that traditional teaching methods should increasingly be accompanied by e-learning and blended learning opportunities. The Strategy acknowledges that it is not sufficient for academics to be experts in their disciplinary area, they also need to know how best to teach that discipline; digital skills are central to this. This is echoed by the recent findings of the *INDEx: Irish National Digital Experience Survey* (National Forum for the Enhancement of Teaching and Learning in Higher Education, 2020) which recognises the importance of developing the digital skills of HE teachers. As a result of the COVID-19 pandemic, we have found our educational systems hugely reliant on technology as a means of developing and delivering educational content and it is important to consider the upskilling and ongoing professional development of those who teach in HE.

Recent advances in neuroscience have provided a renewed understanding of individual differences, characterising them instead as predictable, normal variability that exists across the population. Brain functions and characteristics fall along a continuum of systematic variability. Thus, differences are incremental, distributed, and dynamic rather than stable and categorical within an individual. This contradicts the idea of bright lines between an idea of normalcy and deviation from normalcy and challenges the practice of diagnosing and labelling individuals (Rose et al., 2013). Diversity presents faculties with pedagogical challenges to support the goal of learning for all students that go beyond a model of 'accommodation' (LaRocco et al., 2013; Oliver, 2013). Griful- Freixenet et al., (2017) note that the most significant source of barriers to academic success that students with disabilities encounter relates to the current established model of 'identify, label, tutor and accommodate' that aims to provide optimal access to the general curriculum. Moving beyond the 'identify and accommodate' model of disability towards developing a design-based curriculum that enables all learners would create a more enhanced sense of ownership of learning. Particularly in a digital age, the student role should be one of active and engaged developer and contributor, not simply consumer (c.f. Bovill 2020). The principles and theories of Universal Design for Learning (UDL) offer enormous potential when designing for learning: by using the UDL framework, educators can accept learner variability as a strength to be leveraged, not a challenge to be overcome (Rose and Meyer 2002). UDL has been defined as a framework that 'proactively builds in features to accommodate the range of human diversity' (McGuire et al., 2006, p.173) and encourages teachers to anticipate a variety of students' needs at the beginning of the lesson instead of modifying materials as an afterthought (Hitchcock, 2001). As Meyer et al., (2014) maintain, UDL 'happens' both in the design and in the use of the design to facilitate the appropriate, dynamic interaction between learner and context.

The three UDL principles, i.e. multiple means of engagement, multiple means of representation and multiple means of action and expression (CAST, 2018) can scaffold and guide educators in the design of curricula and resources which support students to become expert learners. The COVID-19 remote learning situation presents an unprecedented opportunity to design truly inclusive learning environments to embrace the opportunities that technology affords us. An example of this can be found in recent research from Dickenson and Gronseth (2020). They determined that the principles of UDL can inform curricular and pedagogical changes in surgical education that may be employed during a time of social distancing, isolation, and quarantine. UDL involves planning flexibility into curricular design from the outset, recognising that learners are varied in their learning preferences and capabilities, motivational characteristics and environmental constraints. Viewing the design of remote learning opportunities through the UDL lens aims to remove barriers to learning during this pandemic by targeting three areas: expansion of the means that information is communicated, ways that learners are supported and motivated, and approaches to assessing learning through available distance learning technologies (CAST, 2018).

Salmon (2013) highlights that one of the primary components of teaching and learning in distance education is the ability to create learning environments that are engaging and motivating, and that provide access to contributors who share similar learning objectives, laying out more specific approaches to ensuring success for all students. Furthermore, Novak (2019) argues that UDL allows educators to remove barriers to learning by offering voice and choice. She states that when we provide students with such agency, we allow them to be more engaged and creative, providing a platform for more meaningful, deeper learning that is culturally sustaining and linguistically appropriate. Dickenson and Gronseth's study (2020) demonstrates that the UDL framework provides a lens for strategically planning curricular and pedagogical decisions in the context of the COVID-19 pandemic. By incorporating flexibility into curricular design from the outset, the varied needs, characteristics, and environmental constraints could be addressed, enabling continuation of quality surgical education at this difficult time. This study seeks to build on their research by exploring the extent to which the principles of UDL were used to underpin the redesign of module materials and assessment strategies within one Irish HEI. It recognises that teachers and curriculum designers need to look beyond replicating online what we do in the face to face environment and instead leverage the opportunities that technology offers to reimagine our learning spaces to engage and support the most diverse learner cohort as possible.

## Methodology

This study adopts a qualitative approach, with semi-structured interviews as the primary methodological approach. It is established that qualitative methods are widely used in teaching and learning scholarship (Divan et al., 2017) as qualitative research 'allows for in-depth analysis of complex systems and experiences which cannot be fully captured with measurement scales and multivariate models' (Divan et al., 2017, p.18). This study seeks to capture the unique experience of Higher Education teachers adapting to the challenges posed by the COVID-19 pivot to online and blended learning, and therefore qualitative semi-structured interviews were deemed appropriate for exploring these subjective and lived experiences.

In September 2020, following appropriate ethical approval, an invitation to participate in semistructured interviews was circulated to all staff who teach in a HEI in the Midwest region in Ireland. The university-level College of Education and the Liberal Arts is a multi-campus institution with a student population of approx. 5000 students and offers undergraduate and postgraduate programmes in Primary and Post-Education, Liberal Arts and Early Childhood Care and Education. While a number of programmes were offered in an online or blended format, face-to-face delivery formats dominated in this HEI and thus presented a rich site for exploring how HE teachers adapted their academic practice in response to the COVID-19 crisis, with a particular focus on issues pertaining to accessibility and inclusion.

A total of four participants were recruited, composing of HE teachers from both the Faculties of Education and Arts. Two participants had previous experience of teaching in online environments, while two other participants had previously taught predominantly in a face-to-face environment. Interviews were conducted in real time, using Microsoft TEAMS to enable remote participation in the study. An interview schedule of questions was created which offered the opportunity to explore how academics approached the learning of new skills in the context of the COVID-19 crisis, based loosely around Sharpe's (2004) four key questions for exploring how professionals learn and develop: what do they learn? How? Where? When?. Questions were also asked around responding to issues relating to accessibility and inclusion in the context of the sudden shift to online and blended teaching, learning and assessment. Participants were also encouraged to discuss related areas of interest, in line with a semi-structured qualitative approach.

Having given informed consent to participate, interviews were conducted of approximately 45 minutes duration. Interviews were audio-recorded, transcribed and subsequently analysed using *Nvivo*, following Braun and Clarke's (2006) six phases of thematic analysis, which involves following a series of steps to bring through the researcher firstly through a processes of data familiarisation, followed by initial coding and searching for themes. Themes are subsequently reviewed and then defined in order to assist the final (writing up) stage. Braun and Clarke's (2006) six stage framework has been recognised as being a particularly 'influential' approach within the social sciences (Maguire and Delahunt 2017, p.3353) as it facilitates the analysis of both semantic and latent themes: consequently, it enables the surfacing of both explicit data interpretation but also 'underlying ideas, assumptions, and conceptualisations – and ideologies – that are theorised as shaping or informing the semantic content of the data' (Braun and Clarke, 2006, p. 84).

### **Findings**

In order to probe the extent to which concerns relating to supporting the needs of diverse student cohorts were considered when approaching the redesign of teaching, learning and assessment approaches in response to the COVID-19 shift to an online and blended learning environment, participants were firstly asked the following question: 'to what extent did you consider issues relating to accessibility and inclusion when it came to redesigning your course and/or assessment approach?'. All participants reported a concern with ensuring that their module materials were accessible and were proactive in providing material in varying formats and taking accessibility concerns into account; this is exemplified in the following quotations:

So I try to use alt text for images. Then I linked, you know, embedded links and text hyperlinks and that kind of thing and transcriptions for audio so that you know ... Yeah, so I use concise and clear writing, but I do that anyway and use accessible fonts and style. For example, I would have done that already, but I'm more aware of it now. So yeah, just mostly for the PowerPoint presentations that I make them accessible. (Participant 1)

We've got students are all around the world. [...] You know you need to make sure they can access and we test. Do you know we're not going to take fees from someone if they don't have the bandwidth? So that's the most basic. I suppose. (Participant 2)

However, some participants did note that their approach to curriculum design and responding to diverse student cohorts was based on a reactive, rather than proactive response, perhaps aligned to the 'accommodations' model discussed in the literature review. For example, Participant 2 noted the following:

People who do our course, most of them are teaching or they are involved in languages in some way. So, that's not to say that if they had auditory or visual impairments, they wouldn't be working as interpreters, translators, or teachers necessarily, maybe that's the presumption, but maybe that's why we haven't encountered anyone in the last five years who has raised these issues. So yeah, it hasn't come up.

However, Participant 2 did remark on the inherent flexibility within the programme (which has always been delivered online), particularly with regard to learners selecting tools and technologies which were best suited to them when it came to assessment:

Like if an assessment required something that they couldn't do, technically, if they had an issue, [...] there are probably some really good examples of work arounds when there are technological issues because there's always some solution and we are very very flexible like that. For example, if someone didn't like say one of our assessments this year, we've had it in last few years where they have to design a poster [...] they may have been someone who didn't have the software to create, you know, a PowerPoint. And they did their best with the word version. So there's a certain amount of flexibility [...] because you're dealing with a lot of unknowns when you're teaching online, you have variables, huge amount of variability.

Additionally, Participant 3 pointed out that despite considerable efforts to make lecture content available in multiple format (PowerPoint, podcast, PDF), she only recently discovered that the format of her audio podcasts was not compatible with Apple devices. This was easily rectified once a student contacted her to highlight the issue, however, it underscored the importance of providing students with multiple means of engaging with module material, particularly in the context of a remote learning environment.

When participants were asked whether there were 'any previous considerations that you would have given to inclusion and accessibility in the face-to-face environment might have been comprised in the online environment?', two participants who had previously taught in a face-toface format noted the challenges posed by the lack of opportunity for real-time interactions and discussions with students. As expressed in the quotations reproduced below, HE teachers in this study felt that their students were missing out on the opportunities for engagement and dialogue which they valued in live teaching scenarios:

Yeah, I do think the personal touch is kind of lost a bit you know. Like in the past, students which talk come talk to me and I think there wouldn't be really that. Maybe they wouldn't feel as comfortable doing it. [...] So I think so yeah, so that that idea of sort of building a community or pastoral thing. And I think that does get lost a bit unfortunately. (Participant 1)

And then it's also then the modelling of the skills, and that's what I feel is really compromised for me. You know the walking around to observe the students as they are engaged in their work. It's greeting them when they come in the door and you know, thanking them and saying goodbye to them as they leave. If they don't experience that, they can hear about it, but it's not part of what they're going to do. They need that emotional experience. (Participant 3)

Trying to figure out how to maintain communication with the cohorts on an on-going basis and open up communication channels, so more backward communication channels. And get the students to communicate back with me. (Participant 4)

One of the participants cited above (Participant 4) had considerable experience teaching online, but did note the challenges with regard to being '*flexible and adaptable and responsive*' when teaching online in the context of the COVID-19 pandemic, and consequently being able to '*adapt* [*the*] approach based on the challenges [*the students*] were facing'. Participant 4 later observed an increased awareness on the affective component of learning which has been highlighted by the recent sudden shift to remote learning:

I do realise the affective element is becoming more and more important [...] The emotional element of using technology is emotional. Learning is emotional, remote learning is emotional. So how do we motivate and encourage learners and also the intrinsic motivation elements? (Participant 4) Thus, participants in this study reported that the move to a fully online environment was comprising, to varying extents, their ability to create an engaging and supportive atmosphere which encourages interaction and dialogue with learners. This suggests a need for greater support and professional learning opportunities for HE teachers who are new to online teaching to be equipped with strategies which encourage multiple means of engagement, both with module material but also with the HE teacher.

Interestingly, three participants noted the benefits of accredited and formal professional development for developing their awareness of and competency in designing for diverse student needs. For example, Participant 1 reported the following:

So actually the first time I heard about accessibility and inclusion was doing my Masters programme last year. Before that, I have never thought about it too much. [...] You learned about all universal design, universal design principles, and that was all very new to me, so I've been aware of it. (Participant 1)

Similarly, both Participants 3 and 4 noted that they had gained considerable skills and approaches to inclusive practice stemming from their recent participation in an open course on UDL offered by the National Forum for the Enhancement of Teaching and Learning (AHEAD, 2017). This suggests that when it comes to designing and offering accredited and formal professional development opportunities (including programmes, modules, workshops and open courses), it is crucial that the principles of UDL are introduced and HE teachers are given opportunities to develop their expertise and practice in this area. The two participants cited above noted the impact of their engagement in formal PD in this area in their practice, and consequently on their students' learning experience. This underscores the importance of opportunities such as the open course in UDL offered by the National Forum for the Enhancement of Teaching and Learning and other such professional learning opportunities.

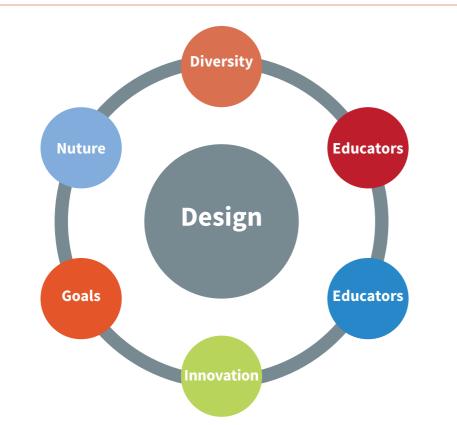
# Discussion: Proposing a Model for an Institutional Approach to Embedding UDL

The findings outlined above suggest that for HE teachers, there is a concern with issues pertaining to inclusion and accessibility, and this was a consideration when it came to redesigning their teaching and learning approaches in the context of a shift to remote learning prompted by the COVID-19 situation. However, the participants in this study acted largely on an individual and modular level, drawing on their existing skill set and expertise, and they noted there were some gaps or areas of their practice which they felt had been compromised by the move to remote learning. Indeed, one participant noted the potential for students to 'get lost' as they felt distant from them, without the usual mechanisms for following up on vulnerable students; consider the following quotation from Participant 3:

But let's say there's 450 second year students. Can you check through 450 and that are enrolled roles and see who's falling through the cracks? I would imagine that there's somebody probably at home whose anxiety is gone so high now with having missed 3 full weeks of lectures that they're going to find it impossible to reengage. I think there is a risk of them falling through the cracks, isn't there?

This observation, coupled with the findings outlined above, highlights the importance of a holistic and programmatic approach to student support which recognises the diversity inherent in student learning cohorts and the importance of offering HE teachers opportunities to develop their abilities to respond to such diversity, particularly in the new context of blended and remote teaching, learning and assessment, as required by the COVID-19 crisis. The paragraphs which follow outline a model for a structured and institutional approach to upskilling those who teach in HE in the domain of UDL. As discussed above, UDL represents a paradigm shift in education that has the potential to improve outcomes for all learners. The implementation process needs to be well designed and well structured, with communication recognised as a key element in the implementation process so that all participants need to have their voices heard. UDL is a process of active development between teacher and student; as Norman (2013) maintains, 'design is really an act of communication, which means having a deep understanding of the person with whom the designer is communicating'. The successful implementation of UDL in the HE sector depends on understanding the needs of the learner and addressing those needs in an effective way through good design. The following 'DESIGN' model has been developed by one of the authors (Jean Reale) as part of her doctoral research to propose a multi-stakeholder approach to supporting educators and educational designers to create truly inclusive learning environments for all students:

#### Figure 1: UDL Implementation Process Model (Reale, 2020)



#### Diversity

The concept of diverse learners is nothing new, we have worked for decades to improve inclusivity in our classrooms to develop strategies to accommodate students with additional support needs within our educational system. The HE sector has developed rigorous support systems for these students and are continuously working to develop opportunities for marginalised students to participate. The difficulties that we are currently experiencing with these supports and accommodations is that they are designed to work with traditional modes of teaching and learning. As discussed above, accommodations and supports that are designed around the individual, in a face to face environment are not sustainable in a fully online environment. COVID-19 has highlighted a much greater issue of diversity, one that not only affects the traditional minority who are considered diverse learners, but all students (Aucejo et al., 2020). UDL can support staff and students by harnessing the power of this newfound flexibility to support students in identifying their strengths through multiple means of engagement, representation, action and expression.

### Educators

The need to build digital capacity among teachers has never been greater (c.f. National Forum for the Enhancement of Teaching and Learning in Higher Education 2020). Educators now need to be able to teach through technology and be able to identify the best fit technologies for their discipline, along with supporting students to use technology to find solutions and approaches aligned to their learning preferences. To implement the principles of UDL, educators require digital skills to teach every student. This model argues for the need for professional development to equip educators to be at the cutting edge of technology adaption in their subject area to ensure that their students are supported to use technology to scaffold their learning and create supportive environments which encourage exploration and the development of independent self-directed learners. It also underscores the importance of PD in the areas of accessibility, inclusion and UDL, a point echoed by the participants cited above.

### Students

Digital literacy is now a fundamental basic literacy that needs to be at the foundation of every learning path, regardless of the discipline. Going forward technology-supported learning is likely to be the cornerstone of our education system. This pandemic has highlighted disparities in access to digital devices and broadband which has caused some traditionally successful students to be disadvantaged in the same way that disabled students were disadvantaged by traditional access issues. The old concept of accommodations for students with additional learning support needs is not sustainable in this new educational landscape; this 'new normal' offers an opportunity to reimagine the 'accommodations' model of responding to diversity and instead to consider UDL-based approaches which empower students to become expert learners, learners who are self-aware and able to adapt any learning environment to suit their individual needs. By offering a student multiple means of engagement, action and expression we are placing the student at the centre of the learning, both supporting and challenging them to take ownership of their learning.

#### Innovation

Drucker (1980, p.37) has argued that 'the greatest danger in times of turbulence is not the turbulence; it is to act with yesterday's logic'. UDL offers us the opportunity to embrace technology to create a more equitable and truly inclusive learning environment for all. Harnessing the power of everyday technology allows a level of access to education that is unprecedented in our lifetime. But we as educators need to embrace this opportunity to be innovative in our teaching and not fall into the trap of replicating the face to face experience online; it has been noted that the rapid shift to remote learning 'may have opened eyes to new possibilities and challenged the necessity of some ingrained practices that may have been considered sacrosanct until COVID-19 struck' (Quality and Qualifications Ireland 2020, p.172). Institutions are now provided with the opportunity to consider how to implement the rich knowledge and understanding they have acquired in this pivotal time in our lives.

### Goals

Some interview participants highlighted that an accommodation model is being employed where staff consider themselves "flexible" in their approach to meeting student needs. There is an expectation that some student cohorts will not have additional learning support needs because of the nature of the programme of study. If students do have additional needs these are dealt with on an individual basis. This model of support is not sustainable and scalable in a predominantly online learning environment. The UDL framework assumes learner diversity from the outset and embeds flexibility for all learners into the curriculum. For UDL to be successful it takes commitment and cross institutional adoption to ensure quality of delivery, continuity of access and a high level of appropriate support for all learners. UDL is a continual process of learning and refinement; therefore, this model proposes that institutions consider the development of an implementation plan that is incorporated into every aspect of the learning process. The implementation plan is best likely to succeed if it is realistic and progressive with clear goals and targets for the institution, staff and students.

#### Nurture

UDL is likely to be most effectively implemented if it is a key tenet of an institutions' development plan through a combination of top down and bottom up processes, thus enabling it to become part of the cultural landscape of the institution and embedded in its quality processes. Participants noted the benefits of accredited and formal professional development for developing their awareness of and competency in designing for diverse student needs. Furthermore, Popovic and Plank (2016) point to the importance of combining both a 'top down' and 'bottom up' approach to institutional initiatives in order to promote change within a HEI. Therefore, a nurturing environment which involves staff and students working in partnerships in ongoing training and development to develop a co-created curriculum is likely to support the development of an inclusive and engaging learning environment. It is very important to scaffold staff and students through the UDL adoption process using established processes for example, the "Dive Into UDL" method (Kendra and Perez, 2018). This three-stage process allows staff to identify their own level of understanding and provides a roadmap for their professional development.

### Conclusion

This study has attempted to explore the possibilities offered by the UDL framework in the context of the shift to remote teaching, learning and assessment required by the COVID-19 pandemic. Focusing particularly on the HE educator, it questioned the extent to which issues relating to accessibility and inclusion were considered as part of this shift, and highlighted some emergent concerns in relation to the loss of traditional approaches to supporting student learning favoured in the face-to-face environment. This small-scale study suggests that designing for inclusion and diversity is typically focused at the individual and modular level and dependent on the skills and expertise of the individual HE teacher. The study therefore calls for an institutional and multistakeholder approach to embedding UDL within HE institutions; although we recognise that UDL is not a 'silver bullet' fix to all the challenges faced by the HE sector, it offers enormous potential to address some of the shortcomings of the traditional 'accommodations' approach adopted for students with diverse learning needs.

There are many lessons to be learned from the impact of the COVID-19 pandemic on the HE sector and it is likely that the repercussions of this turbulent period will take some time to truly interrogate. However, one recent study into the impact of COVID-19 on HE around the world suggests that a positive trend emerging is 'the incredible innovative approaches to issues faced and the resilience of the sector' (Marinoni *et al.* 2020, p.7). We are currently witnessing an intensive period of innovation and development, coupled with the potential for a rethinking of current norms and approaches within the HE sector. This study argues for the importance of placing UDL at the heart of any 'new normal', and recognises the importance of ongoing PD and upskilling for those who teach in HE, contextualised within a systematic and institutionalised approach to embedding UDL, in line with the 'DESIGN' model proposed above. It seems apt to close with a quotation from one of the participants in this study: amidst all the turbulence and change which is currently facing the HE sector, it is important that we place inclusion at the heart of good teaching: 'teaching is good teaching and good teaching is inclusive teaching' (Participant 3).

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