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SHIFTING GOALPOSTS: LESSONS LEARNT FROM THE EXPERIENCES OF LEARNING DESIGNERS ADAPTATING TO THE COVID-19 PANDEMIC AND A FUTURE POST-PANDEMIC WORKING ENVIRONMENT

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This paper investigates the experiences of learning designers, during their adaptation to the pandemic working environment. It narrates a collective story from the seven learning designers who worked at different educational levels and geographical locations across the world. The findings suggest that, although the learning designers were ready for the pandemic emergency, the transition has not been smooth. The decreased timelines and an accelerated pace of work required them to embrace change, take on additional, significantly expanded responsibilities and adopt new ways of thinking about the design process. This study offers a unique contribution to exploring the challenges of being a learning designer during the COVID-19 pandemic, and the opportunities for post-pandemic adaptation. Furthermore, it has potential implication for directions which educational institutions could pursue, with regard to instructional design and course deployment, during and beyond the pandemic.

JEL Classification: I29.

Keywords: learning design, COVID-19 pandemic, post-pandemic working environment, change, adaptation, EdTech.

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Introduction

The COVID-19 pandemic resulted in the interruption of education of about 1.5 billion students around the globe (UNESCO, 2020; UNICEF, 2020). Although scholars have acknowledged emergency disruptions of education in the past (for instance, Williamson, Eynon, and Potter (2020) point out the instances of strikes and wars), the COVID-19 pandemic was unprecedented because it impacted the global population.

The pandemic and its consequent restrictions forced higher education providers to make an emergency shift to online teaching and learning. This transition has been associated with a rapid workload increase for those involved in the design, delivery, and support of remote education (Brown et al., 2020), as it occurred under circumstances that typical online course development does not have to face. The pandemic emergency required that educational institutions adjust the face-to-face curriculum, content, and assessments to accommodate new remote learning provision at an extremely accelerated pace (Xie & Rice, 2021; Cutri, Mena & Whiting, 2020). Such urgency created distress among all stakeholders in education (Salari et al., 2020; Xie & Rice, 2021).

While the increased workload and associated stresses experienced by teachers (Rapanta et al., 2020; Arora & Srinivasan, 2020; Marek, Chew, & Wu, 2021; Ogbonnaya, Awoniyi, & Matabane, 2020; Wang, Bajwa, Tong, & Kelly, 2020; Delgado, Bhark, & Donahue, 2021), university faculty and administration (Cutri, Mena, & Whiting, 2020; Izumi, Sukhwani, Surjan, & Shaw, 2020; Code, Ralph, & Forde, 2020; Rannastu-Avalos & Siiman, 2020; Houlden & Veletsianos, 2020), and students (Rapanta et al., 2020; del Arco, Silva, & Flores, 2021) has received much attention, less is known about the experiences of the learning designers[5] and how their work has been impacted as a result of the pandemic (Bellaby, 2020).

A few studies have examined the role of learning designers during the COVID-19 pandemic (see, for instance, Fujita, 2020; Bellaby, 2020) and how it has evolved and became a subject for rapid overhaul (Xie & Rice, 2021). Learning designers had to approach design tasks in more creative and innovative ways to address pressing issues. The emerging research on the educational adaptation to the pandemic situation showed that many design practitioners are working blind (Neelen & Kirschner, 2020; Fujita, 2020), as conventional learning design models do not work during the pandemic. Yet, surprisingly, little research has focused on the experiences of learning designers and their work during the pandemic. To shed light on the challenges of learning design during the pandemic and to facilitate the recovery of the sector, the education and research community should not dismiss the first-hand experience of learning designers. Understanding the experiences of learning designers, as individuals working behind the scenes of the educational provision process, can contribute to knowledge on the transition to emergency remote learning. Furthermore, evidence on how learning designers adapted their work during the pandemic and addressed technological, pedagogical, and infrastructural challenges can provide insights for the development of more effective and efficient learning design models. Therefore, the study reported in this article answers the following research questions:

- What experiences have learning designers gained since the start of the COVID-19 pandemic?
- What challenges have learning designers faced in designing online programs and courses?
- What lessons from the COVID-19 pandemic period can be applied to creating online programs and courses in a post-pandemic environment?

[5] In this study, we employ the broad definition of a learning designer provided by Smith & Ragan (1999). According to them, a learning designer is a professional who is involved in "the systematic and reflective process of translating the principles of learning and instruction into plans for instruction materials, activities, information resources, and evaluation" (Smith & Ragan, 1999, p. 2).

In answering these questions, we provide educational institutions and scholarly communities with knowledge of how learning designers approached design agendas during the pandemic

This paper makes two primary contributions. First, the study is one of the first qualitative investigations into the experiences of learning designers throughout the transitional pandemic period and opportunities for the post-pandemic environment. Therefore, our study offers a significant contribution to the literature on instructional design strategies by focusing on the real-life challenges experienced by design practitioners during the COVID-19 pandemic, working at different educational levels and in geographically diverse areas. Secondly, we provide a summary of the lessons learned from the learning designers and indicate future directions which educational institutions could pursue with regard to instructional design and course deployment, moving through and beyond the pandemic.

The paper is organised as follows. First, we provide a review of the literature on the educational responses to the COVID-19 pandemic. Then, we introduce the research methodology and methods employed in this study. The two subsequent sections are dedicated to the discussion of the research results and a summary of the lessons learnt. Finally, we summarise the study contribution to the relevant literature in the field of instructional design and note directions for further research.

Literature review

Throughout the pandemic, news outlets have covered the switch to online learning from an emergency remote teaching perspective, with articles converging around student satisfaction levels and faculty experiences. After the first six months of online delivery, journalists began to write about administrative views on the longevity of online, hybrid, and blended delivery, alongside avenues for unique program creation to meet the needs of learners at different career stages. The growing numbers of lifelong learners who have happily adopted online education validated the expanding and more nuanced delivery plans that universities have embarked upon.

Interestingly, the scholarly literature on educational responses and delivery during this global event has followed the same contours as mainstream journalism. Much ink has been spilled examining the faculty experience and adaptations during the fast-paced shift to online learning, parsing the differences in the strategic approaches for emergency teaching versus truly online education, with articles that discuss best practice for effectiveness in course delivery (Murillo & Jones, 2020; Schultz & DeMers, 2020; Marek, Chew, & Wu, 2020). Apart from a handful of articles, the experiences of learning designers are largely absent from the literature, even when the design and delivery of courses form the main argument advanced (Connolly & Hall, 2020; Kessler et al., 2020). In the articles that have been published, the focus has been on the rapid change of the learning designer's role (Xie & Rice, 2021) and the relationship challenges between faculty and learning designers. Where learning designer perspectives are incorporated in the literature, it is of ancillary nature and in the context of supporting academic faculty in transitioning to online delivery (White, White, & Borthwick, 2020).

A holistic examination of the expanding scope of the learning designer's role, the increased demands on their skills from faculty and departments for course development, and the pressures experienced in supporting faculty in transitioning to online teaching have not been undertaken. The dearth of literature that places learning designers at the heart of this seismic change in higher education is noticeable. This study steps into that void and looks at learning designer's experiences, work demands, and professional pressures during the pandemic, alongside the opportunities and changes for the post-pandemic landscape.

The main area of inquiry in the literature has remained the faculty, focusing on the way support was given or tailored to their needs (Kessler et al., 2020), particularly for faculty who had never taught online before. Cutri and Mena (2020) emphasised that accelerated faculty transition to online education coupled with varied levels of faculty readiness and openness to this new challenge, left faculty feeling that their identity as experts was in jeopardy. Faculty entered new territory where they were learning to use new mediums and interact with students differently. This yielded a new power dynamic between student and faculty, with increased student autonomy in online delivery. Patnaik and Gachago (2020) note that the more learner-centred online classroom shifts the position of the faculty from knowledge giver to guide and suggest that faculty experience could be improved by support from more knowledgeable and experienced adopters of online learning.

Othman (2020) examined faculty experience migrating to and teaching classes online during the pandemic. The article focused on the adaptations made by a faculty member who was now also a resource provider, content facilitator, designer, advisor, and co-learner. Another line of discussion was around course effectiveness and student satisfaction. Other literature that examined course effectiveness in the context of faculty shifting to online teaching and, overwhelmingly, in emergency remote instruction situations, include Harrison and DeVries (2020), Cutri and Mena (2020); and Looi, Chan, and Wu (2021).

Hodges et al. (2020) discussed how faculty that transitioned to online as an emergency response did not have the same level of support as faculty who had already been teaching online. This framed their investigation into the level of expectation, preparedness, and results for emergency remote teaching versus online teaching. This differentiation between emergency circumstances and true online teaching is another thread discussed in Kessler et al. (2020), Cutri and Mena (2020), and Xie and Rice (2021). Similarly, discussion around the changing role of educators and their interactions with students in online delivery do not meet with the contributions and demands placed on learning designers to bring entire suites of programmes online in record time (Kessler et al., 2020; Hodges et al., date; Connolly & Hall, 2021).

The literature centred around learning designers tend to spotlight their training and how that skillset, in combination with a willingness to adopt and support new technologies, yields well-built courses with clear learning outcomes. Harrison and DeVries (2020) incorporated an examination of the institutional barriers, issues with professional recognition, and limited leadership support faced by learning designers. They noted that learning designers provide leadership and are advocates, often lone ones, for new frameworks, technologies, and approaches/practices. Dave and Mason (2020) looked at design thinking, as a strategy for learning designers to address the challenges of changing contexts and stakeholder needs, whereas Xie and Rice (2021) examined the rapid overhaul of learning designers' remit, finding that learning designers engaged in more technical support tasks in exchange for a stronger connection or working relationship with faculty. Our study extends this discussion by offering a holistic picture of the learning designers' experiences and pressures in supporting faculty in transitioning to online teaching and learning during the pandemic.

Methodology and methods

This study was carried out during 2021 as part of the Accelerating Business Collaboration initiative at the Faculty of Arts and Social Sciences (FASS), Lancaster University. The project was funded by the Economic and Social Research Council. Ethical clearance was obtained from the FASS and Lancaster University Management School Ethics Committee.

The study aimed to examine learning designers' experiences of adaptation to the COVID-19 pandemic and future post-pandemic environments. We employed a qualitative research design

as it is the most appropriate methodology to uncover the richness of the individuals' experiences compared to other methods (e.g., a survey method) (see McCracken, 1988). Seven learning designers were selected using purposeful sampling techniques. The participants were selected to include two in-house learning designers, one learning designer working in a K-12 institution, one learning designer working on professional development programs, and three learning designers working in higher education institutions. Purposeful sampling was chosen for two reasons: first, it aligned with the need of the business collaborator to interview a small number of in-house learning designers, and secondly, it ensured the recruitment of learning designers from different educational levels and geographical regions.

Initial interview questions were designed by the first author, discussed with the leadership team of the business collaborator, and revised by the second author. The final set of interview questions was agreed by both researchers (see Appendix 1). All the interviews were carried out between March and May 2021 by the first author. The interviews were audio recorded and transcribed and anonymised by the first author. The initial summary of the research results was published online to gain participants' feedback (Rotar, 2021). The full-length analysis was undertaken by both authors to address the risks of subjectivity and individual bias.

Grounded theory approach

To uncover the experiences of learning designers, we employed a grounded theory approach (Birks & Mills, 2015; Strauss & Corbin, 1998). Grounded theory is effective in examining new phenomenon as it allows an exploration of concepts and conceptual interrelationships emerging from the data without limiting such interrelationships to existing theoretical frameworks. The application of grounded theory allowed us to capture approaches to the learning design adopted for the pandemic situation and to formulate a core orientation to the future design agendas.

Data analysis

To analyse the data using a grounded theory approach we followed three phases of a coding procedure: open coding, axial coding, and selective coding (Birks & Mills, 2015).

The open coding phase involved reading and re-reading interview transcripts to highlight relevant information in relation to the research questions and creating codes that represent meaningful themes. Specifically, the first author adopted the following strategy:

1) The first transcript was read, and codes that represented unique themes were generated,
2) The second transcript was read to identify themes that are either unique or match the themes from the first interview,
3) The third and subsequent interview transcripts were read and the process described in step 2 was repeated until the analysis of all seven interviews was finished.

Vertical code lines emerged, demonstrating which codes were common and which were unique to each participant. The list of initial codes created by the first author contained 47 elements (Appendix 2). These codes were discussed with and revised by the second author. The second author engaged in the coding process independently and provided comments and suggestions. All disagreements were negotiated by returning to the data until a consensus was reached.

During the second, axial coding phase, we were looking at the relationships between the created codes in order to identify hierarchies and connections (Aldiabat & Le Navenec, 2018). In considering the relationships between the codes, it was apparent that the core themes (e.g., change of the work routine and change of the design process, changes in social and emotional domains of work) were connected to each other and thus, their differentiation involved a discussion between

both researchers. As a result, we had several core codes (axes) that were supported by a set of sub-codes.

Finally, selective coding involved connecting and gathering all core categories under the umbrella of one unified theory. This unified theory represents the main argument of our research results.

Results and discussion

The core theory which emerged from this study centres around the theme of change expressed by the learning designers in relation to different aspects of their adaptation to the pandemic and a future post-pandemic working environment. The change was present in such dimensions as work routine, design processes, communication with subject matter experts (SME),[6] and personal adjustment to the pandemic situation, and was associated with different challenges.

Experience of transition during the COVID-19 pandemic

1. Change in the work routine

A common theme raised by all seven learning designers was change in the work routine. Specifically, our participants reported that during the first weeks of pandemic, there was a forced adaptation to the new routine where no one could rely on a stable schedule:

> *We were forced to become more flexible, and it doesn't necessarily mean a good thing… So that [a continuous change] made us work faster [...]because we didn't know what to expect next and we wanted to complete a certain chunk of the project before the next news emerged. (Participant 2)*

The pandemic was a unique situation when *"workloads became different, schedules became different" (Participant 7),* resulting in a dramatic change in how work was approached:

> *The big difference in how I manage that is I learned how to juggle more projects at once… If something was out being reviewed, I recognize that the review cycle would take longer, which would allow me more time to do more work on other projects. (Participant 7)*

Changes in the work routine were discussed by our participants in relation to three themes: shortened timelines, increased workload and accelerated professional development. Although learning designers were ready to embrace change and adjust the pace of work, they reported different degrees of preparedness and support.

2. Shortened timelines and the accelerated pace of work

Several learning designers (n=4) reported working on a larger number of projects during the pandemic, with shorter turnaround times:

> *We had these really long development periods and during Covid, and as we got further into our work, sometimes these timelines were shorter, sort of two weeks development time. So, we had to learn how to design and build a lot more rapidly… (Participant 5)*

[6] According to Caplan and Graham (2008), in online course development, educators function as Subject Matter Experts, providing educational content, assisting in designing learning activities and assessment instruments, and making sure those are in line with the learning objectives.

Shortened timelines and the need to *"switch to online learning very quickly" (Participant 4)* resulted in the increased speed of work:

> *No matter how well prepared we were and no matter how many tools we had, the timeline to switch to online was short. Obviously, we are in a better position today, but back then nobody was expecting this pandemic. (Participant 4)*

Such a change of work routine caused structural changes. Specifically, one participant emphasised the lack of opportunity to discuss the nuances of work with colleagues which brought about the need to organize developmental work in a more structured way:

> *You didn't see a lot of the development happen, which meant that a lot of that development needed to happen in a more structured manner. [… A] lot more requests started coming in. (Participant 7)*

Structural changes were also happening in the functioning of individual departments, since some departments or individuals had a larger capacity and more adequate skills to deal with pressing tasks during the pandemic:

> *We spent a lot of time rearranging roles and responsibilities within the school to try and help the Department which had too much capacity with the Department that didn't have enough. (Participant 6)*

3. Increased Workload and Expanded Responsibilities

The focus of the work of the learning designers during the first weeks of the pandemic was to respond to the needs of faculty and teaching staff. An increase in the number of requests was categorised as "unexpected":

> *It was obviously a surprise for everybody, and we got lots of requests from different staff members, faculty members, etc. So, it was […] unexpected (Participant 4)*

The workload grew *"significantly" (Participant 3)* and *"exponentially" (Participant 7):*

> *I'm normally a high output sort of person, so I would create 20 or 30 courses. Now the expectations were I'm managing up to 100! (Participant 7)*

> *We killed ourselves. [From] March till about September I don't think I slept more than two hours a night, I'm not going to lie, because we were just loaded with material. (Participant 6)*

> *The scale of the work and having to do so many courses in such a short amount of time and all at the same time was like a tsunami. (Participant 3)*

Not surprisingly, the theme of expanded responsibilities was also salient among learning designers. There was a feeling of how new responsibilities are emerging, evolving and expanding. For instance, learning designers in this study reported becoming more closely involved in direct teaching and learning support, support with online pedagogy, and institutional planning during the pandemic:

> *Although [the responsibilities] did not formally change on the HR side, I felt my role and responsibility was extended a lot during the pandemic. Since the pandemic, I have been involved quite heavily in answering questions from staff who run campus-based programs.*

I think, my role, in reality, expanded to support the whole Department, instead of only a distance learning group. (Participant 1)

[When the pandemic began,] we were given an insane amount of responsibility and basically freedom to make a lot of the decisions, and to be the spearheads of online education and what online education was going to look like at the XXX school. (Participant 6)

Often, the work [of learning designers] would extend much further into the evening than it would have previously. And it has taken a year to adjust to that and get back on top it. (Participant 5)

The expansion of responsibilities also involved a greater collaboration with other stakeholders at a higher level of management, and "*with different teams and different Departments" (Participant 4).* However, two learning designers (Participant 1 and 7) reported that there were unrealistic expectations of the output from learning designers:

Workload [...]increased, and I don't know how managers didn't change their expectations of output. It's always expected that you get assigned to a project. We don't get yelled at, but you know when the work triples… how do you manage that? (Participant 7)

4. Accelerated professional development

The COVID-19 pandemic created natural conditions for professional development of learning designers. Furthermore, learning designers commonly reported greater involvement in the decision-making process associated with moving educational programs online:

I got roles and responsibilities I could only have dreamed of. Selfishly, I'm going to say that this was one of the best experiences I've ever had. I got every sort of leadership opportunity, and advantage, and the learning that I got was just incredible… I think I've changed as a person. (Participant 6)

I took this challenge as a learning experience, and I was like "OK, I'm really learning a lot, learning new skills and I'm helping. This is not just a challenge but a good learning experience". (Participant 4)

Those learning designers who were given greater responsibilities and agency during the pandemic had a unique chance for professional growth. They adopted roles of "secret managers" (Kehm, 2006), maintained he function of a person of first contact (White & White, 2016), and connected different stakeholders during the transition to emergency teaching and learning. Furthermore, learning designers were embracing "the responsibility of aligning pedagogy, technology and organisation" (Dron & Anderson, 2014, in White & White, 2016, p. 8). All this significantly accelerated learning designers' professional development.

Changes in the design process

Due to the lack of time, experience and expertise, educators and university management turned to the learning designers for help in re-designing and delivering online courses (Bojović, Bojović, Vujošević, & Šuh, 2020). Thus, learning designers were often involved in the decision-making process at higher levels. Yet, as experts in design, learning designers knew they were entering uncharted territory, where conventional design principles do not work. Instead, they had to innovate and experiment with learning technologies and pedagogies to adapt to the pandemic working environment. Among the innovative approaches adopted by some of our study

participants were rapid development and prototyping, and the adoption of a template approach to the instructional design.

1. "You have to flip your way of thinking"

During the pandemic, the meaning of being prepared changed (Cutri, Mena, & Whiting, 2020). Rather than relying on the past experience or "firefighting" emerging issues (White & White, 2016, p. 8), learning designers had to adopt innovative ways of approaching the design process, and experiment with learning technologies and pedagogies:

> *I think, that was one of the first times [near the start of pandemic] when I thought "Wow! Ok, this is completely different! A design process is an entirely different approach. I'm doing it with such a rapid timeline and they're [management and educators] still expecting very high-quality results at the end of it" This illustrates how we had to adapt our process. (Participant 5)*

Although the differences in design of campus-based and online courses are clear (Gregory & Lodge, 2015) and the peculiarities of online learning design are well documented, the experience of our participants shows that conventional design models did not work during the pandemic:

> *At the start of the pandemic, the first few rapid turnaround projects were definitely a challenge, because you have to flip your way of thinking and you have to think what does quality mean in this new context? It was a case of learning the places where I could compromise on quality, and the places where I would refuse to compromise on quality. (Participant 5)*

As quote above suggests, for our participant, it was a challenge to find the right balance to address the quality concerns whilst meeting tight design timelines. Similarly, innovative thinking was required in finding an appropriate technical solution, with almost no opportunity for testing:

> *I needed to find the technical solution or combine the tools or software into structures that would work. And would work without having a chance to test it that much, work rapidly. (Participant 2)*

2. Rapid development and template approaches

The requirement to work with shortened timelines was viewed as one of the major impacts of the pandemic. To address this issue, there was a turn towards "*rapid development practices*" *(Participant 5).* The focus of this approach was on offering pre-designed templates and "ready-to-go" courses that could be easily and promptly adapted by educational institutions:

> *I actually looked through the faculty members' resources. I spent a day looking through them and essentially planning out their whole course for them before I even presented it to them. So that I had a sort of suggested course "ready-to-go". (Participant 5).*

> *Usually, yes, we would first do a minimum viable product, then we would test it with the internal team (which was skipped during the pandemic), then we would test it with a small group of volunteer teachers. Then we would discuss it with the principles who make decisions on whether to expand the program to other teaching staff or not. We also skipped that part. So, we ran right into the launch of the project for the bigger audience. (Participant 2)*

A rapid approach to the design was adopted by learning designers as a response to requests of educators and management. With this approach, the structure of the course could be suggested after "*one or two intensive meetings" (Participant 5)* with educators, and with an opportunity to do adjustments to the design at later stages. This is not a conventional approach to the design process, yet it was "*extremely beneficial*" *(Participant 5)*:

> *Not having a storyboard and not having those long timelines to have back and forth [communication] with faculty [is a challenge]. But I think that when it needs to be turned around quickly, rapid development can work very well for online elements. In terms of our template approach, instead of having to discuss every single activity sequence on a case-by-case basis, we've got the structure of the course planned out in advance. (Participant 5)*

The potential for adopting more inclusive and experimental approaches to learning design by means of rapid prototyping and template design, and simultaneous design for multiple modes of delivery was described by Xie and Rice (2021) as "a path to strong design" (p. 82). Similarly, Dave and Mason (2020) advocate innovative design thinking as a strategy to address the challenge of changing contexts and needs of educational institutions. Prior research suggests that innovative approaches to design tasks often emerge under pressing conditions (Scoppio & Luyt, 2015). As Scoppio and Luyt (2015) highlight, "non-linear approaches to course development" facilitate "innovative online programming" (p. 743). However, during the pandemic, apart from professional challenges, learning designers also faced experienced changes and challenges in their personal lives.

Changes in social domains of work

1. The emergence of peer and community support

One of the interesting themes that occurred in data is the emergence of a supportive professional community. The working environment during the pandemic period was characterised not only by time pressures and increased workload, but also estranged and isolated working conditions:

> *We were all in emergency mode and I think especially at the beginning there was this solidarity. So, everybody was helping each other. We were all sharing our skills and our competency. (Participant 4)*

One learning designer pointed out at the large number of global networks that have emerged since the start of the pandemic, which is in line with findings of Xie and Rice (2021):

> *A lot more people started reaching out online and creating much more robust communities just in general. We're seeing a lot more people come out of the woodwork and just asking questions like, hey, how do I do this? Or does anybody else do this or hey, I have this idea. And just that sharing of knowledge back and forth has been kind of super, has been pretty interesting to see. (Participant 7)*

To maintain an emerging professional community, learning designers expressed a need for professional events and channels for collaboration and knowledge exchange:

> *There should be some events or additional education but specific for the industry where the instructional designer works. (Participant 2)*

Participant 2 emphasised that there are many conferences for teachers but nothing for learning designers, whereas Participant 5 expressed that "*there was nowhere to channel"* difficulties and concerns experienced during the pandemic. (Participant 5)

For learning designers, support communities are vital since many professionals were overwhelmed physically and psychologically. Our study participants stressed that their teams, colleagues and a newly established community served as a source of immense support by sharing experience and advice, and providing emotional support. Similar findings have been reported by Scoppio and Luyt (2015) and Xie and Rice (2021) who found that learning designers were actively engaging with external networks with "an immediate purpose of sharing resources" and "to build the communities" for sophisticated professional scaffolding and development (Xie & Rice., 2021, p. 77).

2. Work from home: health and personal life

In addition to the global impact of the pandemic on learning designers' work, the discussion with our study participants revealed that COVID-19 affected their personal life, health, and well-being:

> *[The pandemic] forced me to work in highly stressful circumstances, like children being always with me and conducting meetings at the same time. So, it was stressful. And it was overwhelming. (Participant 2)*

> *Your physical health kind of gets impacted. Needless to say, though, there's a lot more sedentary activities happening. (Participant 7)*

Due to the unsettled working routine, continuous requests and working from home, it was hard to establish boundaries between work and personal life:

> *It was a lot harder to disentangle the start and end of the workday and the start and end of social life. I think it's taken quite a bit of work for people to re-establish more of a work-life balance. (Participant 5)*

This challenge was captured sharply by the K-12 learning designer, who experienced burnout during the pandemic:

> *It was tough [the burnout]. I think, I wouldn't want to come back to it. What actually helped me is the acknowledgement that you have the right to be a human being with their own emotions and not just the professional opinions to deliver results in a certain point of time. (Participant 2)*

Learning designers were the professionals who worked to eliminate the disruption of the COVID-19 pandemic on educational provision. Interviews with our participants revealed that often, they were overwhelmed with requests and faced unrealistic expectations. This created conditions not only for higher professional agency and freedom to experiment, but also raised the level of stress experienced by the learning designers. Furthermore, the change of the physical environment and family responsibilities are something that we need to consider when examining the working environment of the learning designers during the pandemic. As our findings show, it is tough when professional and personal pressures overlap.

Challenges faced

The challenges faced by the learning designers during the transition to the emergency remote teaching fell into six main themes: quality concerns, assessment, designing for a new audience of

students, finding an adequate technical solution, communication with educators, and recognition and support.

1. Quality concerns

A quote from one of our study participants *"we were building at such a rapid pace that I would say that the quality really suffered" (Participant 6)* reflects the commonly experienced worry around the quality of online programs designed during the crisis. The pandemic forced learning designers to compromise the quality of the design:

> *We needed to launch it [the program] as soon as possible because it was on digital skills, and everybody required those digital skills. And I didn't have time to make sure that everything was right and developed to the extent that I am satisfied with. (Participant 2)*

> *If you're feeling rushed, you know there are basic issues of whether there are any mistakes that you've missed, because you've just had to speed through it, and perhaps you haven't been able to have another colleague looking at it because they are also busy. (Participant 5)*

The learning designers were concerned that they had to *"fundamentally compromise the design experience" (Participant 5)* and quality of the product, which reflected their professional ethics. As Participant 1 emphasised, some educators were in such a rush they could not see the potential issues and danger of the poorly designed online course for students' learning experiences:

> *I have to explain a lot of potential problems based on my experience dealing with the distance learning. [Academics] say "OK, I understand that. Thank you for the advice", but I just can feel that it's just to be polite. (Participant 1)*

The quality concerns were also associated with the lack of time for testing new ideas and innovations:

> *When you do things in such a rush, there's no time for testing. It was kind of building the plane as we were in flight and seeing what stuck well and adjusting as we went. (Participant 3)*

Another participant expressed a worry of "*having the faculties' stamp on a course*" (Participant 5):

> *I think that when you're in a rush, courses out of necessity start to feel more generic, and they don't have so much of the faculty's personality. (Participant 5)*

However, as the pandemic progressed, the same participant added that they managed to arrive at more creative ways of learning design and produce *"quality at speed"* (Participant 5).

2. Assessment design

Another challenge uncovered in the interview with the learning designers was associated with online assessment. Specifically, it was clear that traditional forms of assessment cannot be directly transferred to the online learning environment:

> *Assessments online were quite a difficult topic, because a lot of institutions had certain rules around how assessment had to be conducted, and it didn't necessarily directly translate onto what we were offering online. (Participant 5)*

There were a lot of different aspects that we had to consider when switching from face-to-face to online learning, and one of them, for example, was the entire online assessment process that we had to work on very quickly. (Participant 4)

Our participants pointed out at the need to focus on alternative forms of assessments, e.g., formative assessments and peer feedback:

There wasn't enough emphasis placed on activities as forms of formative assessment and providing students with feedback. And my third [recommendation] is more emphasis on group collaboration. (Participant 3)

We should never underestimate assessment. We have learned that because of the pandemic, there are lots of different ways in which students can be assessed, so we have to think about different assessment types, and we have to do this in a collaborative way. We have to test it and try different ways, and we always have to think about the student, how the student is going to feel in this process. We should think a little bit more about that in the future. (Participant 4)

These suggestions reflect the practice adopted by some countries during the pandemic. As Bozkurt et al. (2020) reported, many countries turned towards evaluation practices that are focused on meaning-making and a progress as "defined by the values and interests of learners and parents" (p. 10) rather than on converting traditional forms of assessments into an online environment.

3. Serving "a new target audience"

One learning designer described students who faced the pandemic as a new audience that was "*not used to online and didn't want to study online and they certainly had to*" (Participant 4). A *"different target audience"* or a *"different persona"* (Participant 4) held particular expectations about their learning experience, yet were forced to study online:

With the pandemic, we had to design something for students who signed up for a face-to-face experience and then suddenly they had to learning a different mode that maybe they didn't like, so we had to make the experience suitable for everybody. Even for those who are not really into online learning. We had to think about universal learning design and not just "OK, let's translate this internal and experience" so that that was my main concern. (Participant 4)

I think the whole design of the program including the assessment and how you're going to support them and online learning activities etc. is so different for two different learning experiences [online and campus-based]. (Participant 1)

4. A selection of an adequate technical solution

The pandemic emergency meant that learning designers had to find technical solutions to assist educational institutions to move online. Yet sometimes there was an expectation that learning designers can offer a "magic":

I think it was frantic. I'm uncertain. And I think that learning designers were expected to [offer] magic solutions without much thought or consultation with university leadership. So, there was a real disconnect between leadership strategy and the inputs and the work that learning designers could bring to the table. (Participant 3)

Although learning designers were ready to discuss potential solutions, communication with other stakeholders was challenging due to their limited understanding of the learning design processes and associated issues. Educators, especially those who had been heavily relied on face-to-face teaching could not imagine "*how is it going to work online*" (Participant 5), so for a learning designer, it was "*a journey that we had to take them on to convince them that this was still a really valid way of doing education*" (Participant 5):

> *We had to work with the people who were not expected to design programs, work with people who had less experience with online education and weren't necessarily open to it in the first instance. (Participant 5)*

The barriers in communication in selecting an appropriate solution was mentioned by two other participants:

> *I needed to find the technical solution or combine the tools or software into structures that would work. And would work without having a chance to test it that much, work rapidly. (Participant 2)*

> *It's not my major role or written into the contract to support those staff who develop and design campus-based programs. So, I found this quite a challenge to look at their program in a holistic way. I just have to reply to emails and find some solution to part of their program. (Participant 2)*

5. Communication with educators

Challenges in communication with educators was one of the most salient issues expressed by the learning designers. First, educators were not always able to appreciate the input from the learning designers' expertise who designed programs that have the best outcome for students:

> *I would say that you're facing an uphill kind of challenge here between academic freedom and letting them design their own course. We have just spent March till September not sleeping or eating, just living and breathing this technology. We're basically experts in it. But [academic staff] say that you don't want [learning designers] in there. Unless [academic staff] come to you, you are not allowed to produce your services. You're not allowed to encourage them. (Participant 6)*

> *I understand from the academic perspective, [educators] found an easy solution for them, but they didn't realize that's actually two different cohorts [campus-based and online students] and different assessment strategies and different learning journeys. They just want to put them together and try to make things easier. (Participant 1)*

There was a notable division between those who were ready to embrace the technology and those who continue to resist it. Going through the educators' resistance was an additional barrier for the learning designers:

> *You've got these group of faculty members now who have perfected and bettered their courses with this technology that would almost suffer to go back. And then you've got these other groups of faculty members that resisted and created these horrible [online] courses. So, you're lowering one group to bring it to the other group. I find there is this weird dichotomy going on. (Participant 6)*

> *I think with some faculty resistance actually increased. I think as the pandemic wore on their teaching responsibilities became much harder and they had to balance home-*

schooling and other responsibilities. I think there became less and less enthusiasm for exploring. (Participant 3)

During the pandemic, the resistance from educators was a natural phenomenon, as many of them were overwhelmed and tired:

We had a lot more situations where the faculty members just felt so overwhelmed with their personal lives with Covid that they didn't feel like they had the time to revamp their whole course, because moving a course from in-person to online, it's pretty much revamping your course. (Participant 6)

There was a lack of understanding among educators of the particulars of pedagogical adaptations and this made professional advice from learning designers less valuable. However, the need for expert advice was slowly changing through the pandemic:

They were really open and welcoming and friendly. And there were some people who were obviously reluctant to use technologies at the beginning or choose too many technologies and that's normal. I have the impression that they had more time and maybe they were more inclined to collaborate with us online. And some of them, if not most of them, really enjoyed experimenting and trying new technologies because they saw the positive reaction from students when they were using this technology well. (Participant 4)

These findings reflect the results reported by Xie and Rice (2021) that learning designers "were pleased that the teaching faculty seemed to be increasing their interest in asking for and accepting assistance" (p. 79).

The resistance to change among educators associated with distance learning is well documented and educators' anxiety and nervousness in such circumstances is not surprising (Saunders et al., 2020, p. 682). Although our participants reported that some educators were ready to experiment and viewed the pandemic as an opportunity, it was a role of the learning designer to support the educators lacking competences, skills and experience (Scoppio & Luyt, 2015). That said, there was an acknowledgement that the pandemic was not the ideal environment for introducing the nuances of online learning design:

If we think about the faculty and their experience, it was all very hurried or very rushed. And I wonder if they reflect on whether they've had good experiences and actually if things hadn't been so frantic and they may have had better experiences of learning design as well. (Participant 3)

6. Recognition and support

The visibility of learning designers as professionals has significantly increased during the pandemic. Yet, despite the increase in demand of their professional competences, the majority of participants felt that there was not enough recognition of how dramatic an impact the pandemic emergency had on their work:

In terms of support, no, I don't really [have that]. But I realize that I receive more attention. After the pandemic [faculty members and academics] realized my existence and started to send me loads of emails. (Participant 1)

There wasn't time for anyone to do anything aside from focus on deadlines [in the first weeks of pandemic], but I think it's improving now. (Participant 6)

Learning designers expressed that during the period of pandemic they were often in need of support from their colleagues and management. However, the experience of support and recognition varied among our study participants, and not all of them felt their work is adequately acknowledged:

> *This pandemic started last year, and nobody really gave me any support in any way. (Participant 1)*
>
> *I don't think that either the Department or the faculty of the University realize [the increased workload] or give me personally any support or maybe… put that into my job roles or responsibilities. I feel that I use my own time to deal with them. (Participant 1)*
>
> *I wouldn't say that [management] didn't say thank you. It's just after a while it became hollow. When you started asking for things like "Hey, I think I need to take a mental day off, or Hey I need to not work for a hot minute just so I can recover from everything going on", the deadlines didn't change. (Participant 7)*
>
> *When it comes down to actual evidence, I didn't see much appreciation and kind or positive words, words of affirmation that the work we were doing was beneficial and that they recognize that the extra workload was indeed rough. (Participant 7)*

The interviews with our study participants reflects findings of White and White (2016) who found that learning designers realised that they had a tendency to "gift as "goodwill" their personal time to work on the design tasks" (White & White, 2016, p. 6). Similarly, Harrison and DeVries (2020) emphasized the lack of professional recognition and support experienced by learning designers, which meant that they often had to take the exciting but lone roles of innovators and experimenters.

The readiness of the learning designers to take on extra work during the COVID-19 pandemic was also reported by Xie and Rice (2021) who emphasised that although learning designers were hesitating to adopt support roles, they eventually had to take such responsibilities as "they saw that instructors and students were in dire need of such support" (p. 78). Not surprising that learning designers express great hope that their contribution and work will be more respected (Xie & Rice, 2021).

Lessons Learnt and Future Directions

The learning designers interviewed in our study articulated changes brought by the COVID-19 pandemic and highlighted lessons that could be transferred to the post-pandemic period.

The learning designers predict further development of the online mode of learning and increased presence of asynchronous teaching and learning elements in educational programs. According to Briggs (2005), the increased use of technology in education and a shift to online learning, will result in the changing roles of many stakeholders, including learning designers, educators, and institutions in general. Similarly, our study participants anticipate an expansion of their own responsibilities and responsibilities of SMEs, who will require additional professional development programs (e.g., around the use of technological tools, understanding online pedagogies, curriculum design for online teaching and learning). These findings are also in line with Koehler and Mishra (2009), who emphasised future needs "to redesign the curriculum for technological knowledge" and professional development programs for teachers (in Bozkurt et al., 2020). As Roberts (2018) reported, perceptions of the academic staff are that "the roles of the technology expert and instructional designer are seen to be growing in importance in the future" (p. 51).

Lesson 1: Embrace change

The quote of one of the learning designers, that the *"cheese has to be moved"*[7] *(Participant 4)*, referred to the need for new approaches to the design of the teaching and learning during the time of crisis. Reflections of other learning designers on their work during the COVID-19 pandemic also indicate that change was inevitable in addressing the pandemic, as solutions for the emergency transition required new ways of thinking about the design process. The adaptation, some of our participants believe, offers room for innovation, and will continue to influence the approach to learning design agendas in the future:

> *We're kind of going into uncharted territory, everybody's perspective has changed. And when your perspective changes, you get a new insight on how people work, what work means for people. So, there's a lot of room to do some pretty solid innovation. (Participant 7)*

One of our participants emphasised the opportunities that emerged during the pandemic:

> *Although there have been challenges during the pandemic, it's been a really great opportunity to spotlight our field and to have more discussions about how we work, how we can improve and what our job looks like. (Participant 5)*

An important lesson learnt through the pandemic is how to be adaptable to uncertainties that may happen, predict how the needs may change and think about how the course can be *"repurposed in the future" (Participant 5)*:

> *I've really learned from the pandemic the importance of when you're doing that initial design period to think from the outset "Well, what would this course look like if it had to be 100% online?" Let me have that as a sort of initial starting point for the design, and it's much easier than to adapt it one way or the other—if it needs to be done so in the future rather than necessary designing for the exact specific delivery mode. In which it can be delivered in the first instance, looking at more generic design that can be adapted in the future. (Participant 5)*

> *The universal design technologies are key, and we should focus on this from now on. (Participant 4)*

> *Organizations that provide the directional experience can be much more flexible than we think we are. This this can be either internal, like delegating or re-delegating tasks to each other and supporting each other, when somebody is absent or has a burnout; and external as well as flexibility with providing access to the course, flexibility with deadlines. (Participant 2)*

A flexible curriculum, such as a universal design, offers promising ways to meet the diverse needs of different learner populations. Our study participants support that idea, suggesting that in the future, all learning experiences should be designed in a way so that they can be easily adapted to different formats.

[7] The statement made by one of our study participants relates to the book "Who Moved My Cheese?" (Johnson, 1998), which describes how individuals deal with changes in their lives.

Lesson 2: Be Prepared for Change

Nobody among our study participants could predict how long the pandemic would last. The importance of adopting "*the observer principle" (Participant 2)* and strategic and forward-looking thinking was needed to be ready for both continuous uncertainty and ongoing changes:

> *It's a balance of purpose, mission, vision, and that is a balance of short term, and long term. And I think, that gets baked into our learning designs and the work that we put was this emergency remote teaching. (Participant 3)*

> *We had good knowledge. I think for me that part of the question that worries me is that technology should not be the reason why you do online courses in what you want to teach. How you want to teach should dictate what level of technology you need. (Participant 6)*

> *I love the discoveries that I had during the year. I would like to adopt the observer principle. So first, I need to understand what the learners are experiencing right now beyond the learning environment. And then I need to decide how should I address this thing they are experiencing as well. (Participant 2)*

The importance of being prepared for change appears to be critical in the learning designers' reflections about professional development. Two participants emphasised the need for additional professional training and support for academic staff to produce good quality online lectures.

> *There needs to be some coaching for people who are struggling but also there needs to be some psychological safety for these people to step forward and say that they need some help. (Participant 3)*

Scoppio and Luyt (2015) state that barriers for educators to be involved in online course design include "anxiety, a technological skill gap, lack of experience with online teaching and awareness of online learning pedagogies" (Scoppio & Luyt, 2015, in Bozkurtet al., 2020, p. 8). Similarly, the pandemic showed that educators may feel *"quite uncomfortable at being novice at something that they are really well crafted at in the classroom". (Participant 3)*

> *The amount of training which became a requirement because what happened was [incredible]. (Participant 7)*

> *During the pandemic, I understood that, for instance, gamification is never enough. Like when you're stressed you don't want to get entertained, you want to get your piece of mind back. And that's how our coaching element emerged. (Participant 2)*

The pandemic experience taught learning designers to get ready for any potential emergency in advance. This reflects the idea of monitoring, anticipating and being prepared for change through the professional development of designers and educators, and the exchange of knowledge, practice, and professional expertise between different stakeholders.

Lesson 3: Focus on building partnerships

The majority of our study participants emphasised that partnership between learning designers, faculty, and other stakeholders is critical. This substantiates Keppell's (2007) argument, that a learning designers' role is shifting towards "brokering" (p. 2) between different departments and organisations. Past research, and more recently, the pandemic experience, shows that conflicts between learning designers and educators are inevitable, since the two stakeholders represent

"distinct cultures" (Cowie & Nichols, 2010, p. 2). Therefore, it is essential to foster successful relationships and partnerships, rather than focussing on a goal-oriented approach:

> *So, there were you and faculty together as partners. Finding yourself on that continuum depended mainly on personal circumstances. The institution I was working for took a faculty-like cultural approach to this as opposed to institutional directed approach. So, the faculty were invited to the table on their terms. (Participant 3)*

Participant 3 expressed hope that the recognition of the importance of partnerships would increase over time, especially when educators realise that learning design is not a one-person activity:

> *I think the conversations with faculty would be much more enriched if faculty also came to the design meetings with a higher appreciation of the role of learning designers, and the value that we can bring to projects. (Participant 3)*

The pandemic emergency required learning designers to accept responsibility for the decision-making at multiple stages. The adaptation to the post-pandemic environment must involve negotiation and discussion among different stakeholders at critical stages of the design process (White & White, 2016, p. 8). Furthermore, the increase of the significance of input of learning designers reflects the research on "unbundling" faculty services and responsibilities in the context of online education (Tucker & Neely, 2010). It suggests the need for a team effort in designing and delivering online programs, resulting in the unbundling and outsourcing of some of the conventional roles of faculty members (Cowie & Nichols, 2010; White & White, 2016).

Lesson 4: Human presence and pedagogy

The delivery of lectures changed dramatically following the start of the pandemic (Xie & Rice, 2021). Pre-recorded video lectures became the only available alternative for delivering teaching materials. Despite previous scepticism from the faculty, educators were able to appreciate and see the benefits of online course delivery:

> *I've seen quite a bit of feedback from these courses recently, and even though a lot of the faculty were quite reluctant to have online preparatory activities, a lot of the students had really great feedback on that. They said actually being able to start doing the initial work, learning the basic terms during the base greetings, responding with my peers, starting to think about the topic online at my own pace first was really helpful because it means that when I went to the classroom and knew more about the topic, I was able to have a richer discussion and understand more of what was going on. More generally, I think that we've tried to do more work during the pandemic on ensuring that we're doing community building and that students who are working online still have a real sense of presence working with their peers. (Participant 5)*

There was *"an aspiration for all courses to have some asynchronous presence" (Participant 3),* but the common agreement between the learning designers was that the design of asynchronous elements should be done in line with online pedagogy:

> *I think we will definitely retain more recorded video. I think that students value the opportunities to be able to self-pace and self-manage their learning. (Participant 3)*

> *Students love videos. Our data shows that students actively view the video sessions before their live seminars and group work sessions, but they continue to access those resources again afterwards. That was a nice surprise for everybody. (Participant 3)*

They responded to the human presence. All the videos that were recorded—the introduction video or the motivation support video—they were so happy to see to watch them and they reacted a lot. (Participant 2)

Participant 7 shared a view that, in the future, interactions between learners and educational materials would be observed and enhanced by machine learning. The learning designer will use data to change the learning behaviour based on the successful achievement of learning objectives, rather than on their theoretical understanding or feeling:

Ok, now we capture all that data from a million people, put it into a machine learning algorithm, and it can actually start determining when people are going to start pushing the bad button instead of the good button. And then, as learning designers, we should be taking that data and say like OK, how can we change that behaviour? (Participant 7)

I would almost go so far as to say [machine learning] is going to end up being a requirement, so that we can make better decisions for learners and create much larger impact without as much effort. (Participant 7)

The use of learning analytics, as a means to evaluate the effect of the learning design, is a growing field of research. Learning analytics gather student data to analyse their behaviour and to optimise the learning environment and designed activities (Siemens, 2010; Holmes, Nguyen, Zhang, Mavrikis, & Rienties, 2019). However, even with the increased role of technology, it will be necessary to think outside the technological issues:

I observed that [educators] started to switch to more pedagogical questions… they asked me "Would it be better to let students switch on their camera or not during the seminar?" and "How can they develop some effective online discussion questions for students to participate?". (Participant 1)

We had to come up with a plan on how to create some sort of story for students to follow on the platform. It was really about thinking "OK, how do we now create a platform to deliver that story?". (Participant 6)

I think there's a lot of work being done on how to make the live sessions less transmissional, so moving away from it just being the faculty lecturing, to being a really dynamic interactive experience. (Participant 5)

The importance of human presence and care was mentioned by one of our participants. Recent research also showed "the need for a pedagogy of care, over the need to teach the curriculum" (Bozkurt et al., 2020, p, 19), not only to address the pandemic, but as an essential element of future educational delivery:

Before the pandemic, I was targeted at making the course as automatic as possible, knowing that there are always some human beings next to the learners. [During the pandemic] it was not possible, and I understood how important it is to keep the human presence—the humour, the style of speech, the style of communicating with the learners. (Participant 2)

Discussion

International research on the emergency transition to online learning has brought to the fore the technical, organisational and psychological issues associated with this mode of educational delivery (Soria et al., 2020; Blankstein et al., 2020) and initiated a search for innovative approaches to the design and delivery of education (Blankstein et al., 2020; Rotar, 2021). The rapid transition

to online teaching and learning was unprecedented in scale and tested the strength of the global education system. The results of studies focused on the pandemic showed that the system as a whole coped well with embarking on a new mode of educational delivery (Barannikov et al., 2020; Klyagin & Makarieva, 2020). However, the transition was not without challenges. Surveys showed that it was difficult to prepare students and teachers for the required changes, to address technical problems caused by the absence of the necessary equipment for online teaching and learning, to address the lack of distance teaching and learning skills, and to deal with psychological problems, and inequality (Barannikov et al., 2020; World Bank, 2020). What became apparent during the pandemic is an urgent demand for the expertise of the learning designers and the multiplicity of their roles. For instance, some tasks required detailed knowledge of specific programming or web design skills, while others were focused on the development of the online learning experience. Yet, past research has been predominantly concerned with the transitional experiences of educational institutions, faculties and students, while the perspectives of the learning designers were neglected.

This study is one of the first qualitative investigations into the experiences of learning designers of their transition to the pandemic and future post-pandemic environments. It provides an outlook on the challenges and lessons learned during that process. Our study found that the pandemic emergency required learning designers to accept responsibility for the decision-making at multiple stages. Such an increase of the significance of the input from learning designers reflects the research on "unbundling" faculty services in the context of online education (Tucker & Neely, 2010). Thus, our findings are in line with advocates of the need for a team effort in designing and delivering online programs (Cowie & Nichols, 2010; White & White, 2016).

Communication and collaboration skills were found to be critical and were prioritised as the adaptation to the pandemic involved negotiation and discussion among different stakeholders at critical stages of the design process (Heggart & Dickson-Deane, 2021). The importance of communication and teamwork is easy to overlook in favour of technological issues. However, the focus on technology would ignore the essential aspect of human communication in addressing design tasks. Learning designers are often required to work with subject matter experts, and therefore, they need to be able to collaborate and communicate effectively to develop and maintain effective relationships.

Further, our study reflects the findings of White and White (2016), who found that learning designers tend to "gift, as "goodwill", their personal time to work on the pandemic tasks" (p. 6). This corresponds with Harrison and DeVries (2020), who emphasized the lack of professional recognition and support experienced by learning designers. Harrison and DeVries (2020) also argued that learning designers often had to take the lone roles of innovators and experimenters. The readiness of the learning designers to take on extra work during the COVID-19 pandemic was also reported by Xie and Rice (2021). They emphasised that, although learning designers were hesitant to adopt support roles, they eventually had to take such responsibilities, as "they saw that instructors and students were in dire need of such support" (p. 78). It is not surprising that learning designers express great hope that their contribution and work will be more appreciated and respected (Xie & Rice, 2021)

Another aspect, closely related to the point emphasised above, is the need for the design process to be flexible in terms of planning and delivery (Wedman & Tessmer, 1993; Yanchar & Gabbitas, 2011). The impact of the pandemic meant that significant flexibility was required, although the constraints of moving to an online environment also provided unique opportunities for innovation and experimentation.

Finally, this study emphasised the need for building a community for learning design practitioners. During the pandemic, a large number of informal communities were created to provide peer support in estranged and isolated working conditions. To maintain this emerging

professional community, learning designers are in a need of professional events and channels for collaboration and knowledge exchange. Our study adds to the discussion by Scoppio and Luyt (2015) and Xie and Rice (2021) on the vitality of support communities since many professionals are overwhelmed physically and psychologically.

To conclude, this paper is unique in that it studies learning designers' perspectives on what lessons can be taken on board to address future design agendas. However, this study did not aim to offer an in-depth interpretation of the research results. Rather, we wanted to highlight the issues that have emerged during the work in times of pandemic and summarise the real-life experiences of professionals who are working in the frontline of moving educational programs online during the pandemic. By doing so, we lay the ground for further research into the issues of emergency transition in times of continuous change and uncertainty.

Conclusion

The learning designers' adaptation to the pandemic and future post-pandemic environment is shaped by changes in their work routines, design practices, and personal lives. The findings of this study augments better understanding of what is involved in these processes, highlighting the lessons learned by the learning designers. Overall, the transition to online learning during the pandemic seemed to realise the silent wishes of at least some of the learning designers, who are ready to innovate, problem-solve, and experiment. However, the shortened timelines is the most pressing concern of the learning designers, who used to have more time to focus on the quality of the design process and its outcomes.

Interviews with the learning designers generated unique insights that had not been previously documented. First, the ability of the learning designers to provide unconventional forms of support, such as psychological counselling and coaching. Secondly, the learning designers were able to recognise unique opportunities for professional development during the pandemic. It was a period that provided an opportunity for experimentation for those learning designers who were given agency and authority. The pandemic created natural conditions for experiments and innovation. However, such innovations were unsystematic and followed by quality concerns among the learning designers.

One of the learning designers stated that working during the pandemic was *a "great time and opportunity for innovation, but actually, was this really the right time?" (Participant 3).* As one of our study participants put it *"Nobody likes it, when their cheese has been moved" (Participant 6),* which captures the idea that changes were not without uncomfortable challenges and forced adjustments for learning designers. Although change is often sought for growth and development purposes, in "*in times of crisis or in times of panic*" *(Participant 6)* these changes were chaotic and random.

Due to uncertainty, especially regarding to the length and scope of the pandemic, it was often a challenge to convince educators of the need for change, the development of online content, and embracing technology. However, the COVID-19 pandemic showed that learning designers as "design experts" were experiencing tensions in communication with educators, the "content experts" (Halupa, 2019, p. 55). The learning designers felt that educators were willing to work in partnership during the first weeks of the pandemic and expressed hope that this trend would continue in the future. However, due to the complexity of online learning projects, the emergence of tensions and misunderstandings between learning designers and other stakeholders is almost inevitable (Cowie & Nichols, 2010).

Tensions were particularly visible when learning designers attempted to "cross the line and try to influence content instead of providing guidance on content delivery" (Halupa, 2019, p. 55).

One of the solutions offered by Halupa (2019) is to "clearly articulate their expected roles in the collaborative course creation process" (p. 55). This suggestion emphasises the importance of the dialogue and partnership relationships with educators and other stakeholders involved in the online learning design process. Richardson et al. (2012) and Scoppio and Luyt (2015) also highlight the criticality of communication and dialog around online pedagogy and theories, successful teaching practices, and potential issues in designing online learning experiences.

The stories shared by our study participants illustrate that there were unrealistic expectations for the learning designers to find quick solutions to problems, which at the time were unprecedented. They also revealed tensions between educators and the learning designers around the design process and highlighted the need for "unbundling" traditional roles of educators (Tucker & Neely 2010; King & Bjarnason, 2003). The learning designers who participated in our study noticed resistance from subject matter experts to accept their expertise. There was a lack of general understanding of online pedagogies among educators and other stakeholders. Yet, when designing online programs, a team effort rather than an individualistic approach to design, is the formula for success (Cowie & Nichols, 2010).

Past research also suggests the need for collaboration with other stakeholders due to the complexity of the online learning design process (Chao et al., 2010). It also emphasises the importance of the learning designers' in designing a quality learning experience. Keppell (2007) argued that learning designers are also responsible for mediating communication across different units and departments of the educational institution.

The pandemic challenged the perception of the teacher as a "jack-of-all-trades" even further (Moore, 2007, p. 113) by emphasising the areas of limited expertise of academics (Bojović et al., 2020), while the expertise and experience of learning designers were put forward. Learning designers' responsibilities significantly expanded during the first weeks of the pandemic, formally and informally. However, their efforts, invested personal time, and sacrifices were not always adequately recognised by other stakeholders.

Bozkurt et al. (2020) emphasised that the change in technologies of the learning delivery will have a strong, long-term pedagogical impact. The COVID-19 pandemic initiated a shift to "the greater responsibility for learning placed on learners and their parents observed in the history of education" (Bozkurt et al., 2020, p. 10). As online courses have become more common in education, instructional designers have come to support the online course design process by ensuring the appropriate application of learning design principles. This involves reimagining the instructor's role when teaching online, leveraging the advantages of the online modality, planning for thte appropriate pacing through the course, utilizing strong asynchronous pedagogies, managing online communications, revising assessments for online use, accessing tools to give better feedback, advocating for reasonable student-instructor ratios, and supporting student roles in online courses (Means et al., 2014; Xie & Rice, 2021).

Changes in how to approach learning design, to apply learning design principles, and to negotiate roles and responsibilities of different stakeholders were inevitable during the pandemic and will be required for the post-pandemic adaptation. We round off this discussion with the statement of White and White (2016) who stress that "complex interactions with seemingly peripheral actors (legal, marketing, media production) will shape the course design and development process, to some extent diluting or 'unbundling' the conventional 'jack-of-all trades' role of educators, or creating new roles required to satisfy organisational needs and priorities" (p. 10).

Future research

This study uncovered learning designers' concerns around assessment in online courses. More research is needed into the principles and practical implementation of assessment instruments for online and blended learning. This study also highlighted ongoing tensions between learning designers and other faculty members and educators due to the overlap of different cultures. More research is needed on identifying successful forms of partnerships with different stakeholders involved in design and delivery of online programs. Lastly, this study captures the evolution of the role of a learning designer and evidenced an expansion of learning designers' responsibilities. Further research should explore this phenomenon and investigate and document changing roles of a learning designer in more depth.

Disclaimer

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References

Aldiabat, K. M., & Le Navenec, C. L. (2018). Data saturation: The mysterious step in grounded theory methodology. *The Qualitative Report, 23*(1), 245-261.

Arora, A. K., & Srinivasan, R. (2020). Impact of pandemic COVID-19 on the teaching–learning process: A study of higher education teachers. *Prabandhan: Indian Journal of Management, 13*(4), 43-56.

Barannikov, K., Karlov, I., Leshukov, O., Nazaikinskaya, O., Sukhanova, E. & Froumin, I. (2020). Lessons from the "Stress Test": universities in times of pandemic and after it. [report] Moscow. Retrieved from https://www.hse.ru/data/2020/07/06/1595281277/003_%D0%94%D0%BE%D0%BA%D0%BB%D0%B0%D0%B4.pdf. [Accessed 14 November 2021]

Bellaby, A., (2020). Educational Designers: A sure hope and anchor amid a global pandemic. [Blog] ASCILITE Technology Enhanced Learning Blog. Retrieved from https://blog.ascilite.org/educational-designers-a-sure-hope-and-anchor-amid-a-global-pandemic. Accessed 28 September 2021].

Birks, M., Mills, J., (2015). *Grounded Theory: A Practical Guide, 2nd edn*. London: Sage.

Blankstein, M., Frederick, J. K., & Wolff-Eisenberg, C. (2020). Student experiences during the pandemic pivot. Ithaka S+ R. Retrieved from https://www.luminafoundation.org/wp-content/uploads/2020/07/sr-report-student-experiences-during-the-pandemic-pivot.pdf> [Accessed 14 November 2021]

Bojović, Ž., Bojović, P. D., Vujošević, D., & Šuh, J. (2020). Education in times of crisis: Rapid transition to distance learning. *Computer Applications in Engineering Education, 28*(6), 1467-1489.

Bozkurt, A., Jung, I., Xiao, J., Vladimirschi, V., Schuwer, R., Egorov, G., ... & Paskevicius, M. (2020). A global outlook to the interruption of education due to COVID-19 pandemic: Navigating in a time of uncertainty and crisis. *Asian Journal of Distance Education, 15*(1), 1-126.

Briggs, S. (2005). Changing roles and competencies of academics. *Active Learning in Higher Education, 6*(3), 256-268.

Code, J., Ralph, R., & Forde, K. (2020). Pandemic designs for the future: perspectives of technology education teachers during COVID-19. *Information and Learning Sciences*, 419-431.

Connolly, C., & Hall, T. (2021). Designing for emergency remote blended and online education: a response to Bennett et al. (2017). *Educational Technology Research and Development, 69*(1), 281-284.

Cowie, P., & Nichols, M. (2010). The clash of cultures: Hybrid learning course development as management of tension. *International Journal of E-Learning & Distance Education/Revue Internationale du e-Learning et la Formation à Distance, 24*(1), 77-90.

Creswell, J. W. (2002). *Educational research: Planning, conducting, and evaluating quantitative and qualitative research*. Upper Saddle River, NJ: Pearson Education

Cutri, R. M., & Mena, J. (2020). A critical reconceptualization of faculty readiness for online teaching. *Distance Education, 41*(3), 361-380.

Cutri, R. M., Mena, J., & Whiting, E. F. (2020). Faculty readiness for online crisis teaching: transitioning to online teaching during the COVID-19 pandemic. *European Journal of Teacher Education, 43*(4), 523-541.

Dave, K., & Mason, J. (2020, November). Empowering learning designers through design thinking. In 28th International Conference on Computers in Education, ICCE 2020 (pp. 497-502). Asia-Pacific Society for Computers in Education.

del Arco, I., Silva, P., & Flores, O. (2021). University teaching in times of confinement: The light and shadows of compulsory online learning. *Sustainability, 13*(1), 1-16.

Delgado, T., Bhark, S. J., & Donahue, J. (2021). Pandemic Teaching: Creating and teaching cell biology labs online during COVID-19. *Biochemistry and Molecular Biology Education, 49*(1), 32-37.

DeVries, I., Harrison, M. (2020). Open Educational Practices Advocacy: The Instructional Designer Experience. *Canadian Journal of Learning and Technology, 45*(3), 1-17.

Fujita, N. (2020). Transforming online teaching and learning: towards learning design informed by information science and learning sciences. *Information and Learning Sciences*, 503-511.

Gregory, M. S. J., & Lodge, J. M. (2015). Academic workload: the silent barrier to the implementation of technology-enhanced learning strategies in higher education. *Distance education, 36*(2), 210-230.

Halupa, C. (2019). Differentiation of Roles: Instructional Designers and Faculty in the Creation of Online Courses. *International Journal of Higher Education, 8*(1), 55-68.

Heggart, K., & Dickson-Deane, C. (2021). What should learning designers learn?. *Journal of Computing in Higher Education*, 1-16.

Hodges, C., S. Moore, B. Lockee, T. Trust and A.Bond (2020), "The Difference Between Emergency Remote Teaching and Online Learning", Educause, Retrieved from

https://er.educause.edu/articles/2020/3/the-difference-between-emergencyremote-teaching-and-online-learning. [Accessed on 10 September 2021].

Holmes, W., Nguyen, Q., Zhang, J., Mavrikis, M., & Rienties, B. (2019). Learning analytics for learning design in online distance learning. *Distance Education, 40*(3), 309-329.

Izumi, T., Sukhwani, V., Surjan, A., & Shaw, R. (2020). Managing and responding to pandemics in higher educational institutions: initial learning from COVID-19. *International Journal of Disaster Resilience in the Built Environment, 12* (1), 51-66.

Johnson, S., (1998). *Who Moved My Cheese?* New York: G. P. Putnam's Sons: 41.

Kehm, B, (2006). Strengthening Quality through Qualifying Mid-Level Management. In M Fremerey & M PletschBetancourt, eds. Prospects of Change in Higher Education. Towards New Qualities and Relevance: Festschrift for Matthias Wesseler, pp. 161-171. Frankfurt: IKO.

Keppell, M. J. (2007). Instructional designers on the borderline: Brokering across communities of practice. In Instructional design: Case studies in communities of practice, pp. 68-89. IGI Global.

Kessler, A., Barnes, S., Rajagopal, K., Rankin, J., Pouchak, L., Silis, M. and Esser, W. (2020), "Saving a semester of learning: MIT's emergency transition to online instruction", *Information and Learning Sciences, 121*, 587-597.

Klyagin, A. & Makarieva, A., (2020). CASES OF RAPID RESPONSES OF UNIVERSITIES IN THE PANDEMIC PERIOD. [report] Moscow, pp.1-28. Available at: <https://ioe.hse.ru/mirror/pubs/share/364241595.pdf> [Accessed 10 November 2021]

Koehler, M., & Mishra, P. (2009). What is technological pedagogical content knowledge (TPACK)?. *Contemporary Issues in Technology and Teacher Education, 9*(1), 60-70.

Looi, C. K., Chan, S. W., & Wu, L. (2021). Crisis and opportunity: Transforming teachers from curriculum deliverers to designers of learning. In: Burgos D., Tlili A., Tabacco A. (eds) Radical Solutions for Education in a Crisis Context (pp. 131-145). Singapore: Springer.

Means, B., Bakia, M., & Murphy, R. (2014*). Learning online: What research tells us about whether, when and how*. New York, NY: Routledge.

Marek, M. W., Chew, C. S., & Wu, W. C. V. (2021). Teacher experiences in converting classes to distance learning in the COVID-19 pandemic. *International Journal of Distance Education Technologies (IJDET), 19*(1), 40-60.

McCracken G. *The Long Interview*. Newbury Park, California: Sage.

Miller, J. L. (2007). The new education professionals: The emerging specialties of instructional designer and learning manager. *International Journal of Public Administration, 30*(5), 483-498.

Murillo, A. P., & Jones, K. M. (2020). A "just-in-time" pragmatic approach to creating Quality Matters-informed online courses. *Information and Learning Sciences*, 365-380.

Neelen, M., & Kirschner, P. A. (2020). *Evidence-informed learning design: Creating training to improve performance*. Kogan Page Publishers.

Ogbonnaya, U. I., Awoniyi, F. C., & Matabane, M. E. (2020). Move to online learning during COVID-19 lockdown: Pre-service teachers' experiences in Ghana. *International Journal of Learning, Teaching and Educational Research, 19*(10), 286-303.

Othman, R. (2020). Managing student and faculty expectations and the unexpected during the COVID-19 lockdown: role transformation. *Accounting Research Journal, 34*(2), 217-228

Patnaik, S., & Gachago, D. (2020). Supporting departmental innovation in eLearning during COVID-19 through eLearning champions. In 2020 IFEES World Engineering Education Forum-Global Engineering Deans Council (WEEF-GEDC), pp. 1-4. IEEE.

Ragan, T. J., & Smith, P. L. (1999). *Instructional design.* New York: Macmillan Publishing Company.

Rannastu-Avalos, M., & Siiman, L. A. (2020, September). Challenges for distance learning and online collaboration in the time of COVID-19: Interviews with science teachers. In International Conference on Collaboration Technologies and Social Computing (pp. 128-142). Springer, Cham.

Rapanta, C., Botturi, L., Goodyear, P., Guàrdia, L., & Koole, M. (2020). Online university teaching during and after the Covid-19 crisis: Refocusing teacher presence and learning activity. *Postdigital Science and Education, 2*(3), 923-945.

Roberts, J. (2018). Future and changing roles of staff in distance education: a study to identify training and professional development needs. *Distance Education, 39*(1), 37-53.

Rotar, O. (2021) Learning designers' experiences: preliminary findings around adaptation to the COVID-19 pandemic support. Retrieved from https://www.insendi.com/news-and-updates/learning-designers-experiences-preliminary-findings-around-adaptation-to-the-covid-19-pandemic. [Accessed on 15 September 2021].

Salari, N., Hosseinian-Far, A., Jalali, R., Vaisi-Raygani, A., Rasoulpoor, S., Mohammadi, M., ... & Khaledi-Paveh, B. (2020). Prevalence of stress, anxiety, depression among the general population during the COVID-19 pandemic: a systematic review and meta-analysis. *Globalization and Health, 16*(1), 1-11.

Saunders, F. C., Brooks, J., & Dawson, M. (2020). Exploring staff attitudes to distance learning–what are the opportunities, challenges and impacts on engineering academics and instructional designers. *European Journal of Engineering Education, 45*(5), 675-690.

Schultz, R. B., & DeMers, M. N. (2020). Transitioning from emergency remote learning to deep online learning experiences in geography education. *Journal of Geography, 119*(5), 142-146.

Scoppio, G., & Luyt, I. (2017). Mind the gap: Enabling online faculty and instructional designers in mapping new models for quality online courses. *Education and Information Technologies, 22*(3), 725-746.

Siemens G (2010) What are learning analytics. ELEARNSPACE: learning, networks, knowledge, technology, community. http://www.elearnspace.org/blog/2010/08/25/whatare-learning-analytics [Accessed on 11 September 2021].

Soria, K. M., Horgos, B., Chirikov, I., & Jones-White, D. (2020). *First-generation students' experiences during the COVID-19 pandemic,* Retrieved from https://conservancy.umn.edu/bitstream/handle/11299/214934/First-

Generation%20Students.pdf?sequence=1&isAllowed=y [Accessed on 10 November 2021].

Strauss, A., & Corbin, J. (1998). Basics of qualitative research (2nd ed.). Newbury Park, CA: Sage.

Tucker, J. P., & Neely, P. W. (2010). Unbundling faculty roles in online distance education programs. *International Review of Research in Open and Distributed Learning, 11*(2), 20-32.

UNESCO (2020). *COVID-19 Educational Disruption and Response*. Retrieved from https://en.unesco.org/covid19/educationresponse. [Accessed on 30 September 2021]

UNICEF. (2020). *Children at increased risk of harm online during global COVID-19 pandemic*. Retrieved from https://www.unicef. org/press-releases/children-increased-risk-harm-online-during-global-covid-19-pandemic. [Accessed on 30 September 2021]

Veletsianos, G., & Houlden, S. (2020). Radical flexibility and relationality as responses to education in times of crisis. *Postdigital Science and Education, 2*(3), 849-862.

Wang, S., Bajwa, N. P., Tong, R., & Kelly, H. (2021). Transitioning to Online Teaching. In Radical Solutions for Education in a Crisis Context (pp. 177-188). Springer, Singapore.

Wedman, J., & Tessmer, M. (1993). Instructional designers decisions and priorities: A survey of design practice. *Performance Improvement Quarterly, 6*(2), 43-57.

White, S., White, S., & Borthwick, K. (2020). MOOCs, learning designers and the unbundling of educator roles in higher education. *Australasian Journal of Educational Technology, 36*(5), 71-84.

White, S., White, S., & Borthwick, K. (2020). MOOCs, learning designers and the unbundling of educator roles in higher education. *Australasian Journal of Educational Technology, 36*(5), 71-84.

Williamson, B., Eynon, R., & Potter, J. (2020). Pandemic politics, pedagogies and practices: Digital technologies and distance education during the coronavirus emergency. *Learning, Media and Technology, 45*(2), 107–114

World Bank. (2020). The COVID-19 Crisis Response: Supporting Tertiary Education for Continuity, Adaptation, and Innovation. World Bank: Washington, DC

Xie, J. & Rice, M. F. (2021) Instructional designers' roles in emergency remote teaching during COVID-19, *Distance Education, 42* (1), 70-87

Yanchar, S. C., & Gabbitas, B. W. (2011). Between eclecticism and orthodoxy in instructional design. *Educational Technology Research and Development, 59*(3), 383-398.

Any opinions or claims contained in this Working Paper do not necessarily reflect the views of HSE.

Appendix 1

Interview protocol

Thank you for agreeing to participate in the interview. I appreciate you taking the time out of your busy schedule! Before we start, I do need to collect a signed consent form from you if I have not already.

As a reminder, the purpose of our study is to determine how instructional designers experienced the transition and adaptation to the pandemic situation, while also examining the longstanding impact of changes to delivery of online education spurred on by the pandemic. *Your participation is voluntary, and you are free to withdraw at any time. Have you had a chance to review the project consent form? Do you have any questions related to this?*

Could you please indicate verbally that I have your permission to record this interview (once permission is granted - turn on the recorder).

An experience of being a learning designer

1. What is your current role (including institutional affiliation) and responsibilities? How long have you been a learning designer?
2. How has the remit and responsibilities of your role changed as a result of COVID-19?
3. What is your overall experience of being a learning designer during the pandemic?
    - As a learning designer, how ready were you and your institution's EdTech department to meet the pandemic situation? What challenges did you face?
    - What were the hurdles and general experience of planning and implementing course design and course implementation for the adaptation to remote learning? Did your institution have fully online or blended delivery prior to the pandemic?
    - How hard has designing learning been for you, as a learning designer, during the pandemic? How has the collaboration been with subject matter experts as their classes move online?
    - What is your workload compared to what it was before the pandemic?

An exploration of challenges

4. Could you please provide an example from your professional practice that illustrates the changes to your work and/or the scope of your work as a result of the pandemic?
5. What factors were you concerned about, being lost or rushed, or harder to implement, particularly as classes needed to move online quickly, as you designed learning activities during the first stages of the pandemic?
6. To what degree has your organisation provided you with support (resources, technology, career support, etc.) during the COVID-19 pandemic?

Lessons learned

7. Thinking about your overall experiences as an instructional designer, what lessons did you learn during the pandemic that could be applied to the long term?
    - What were the most valuable lessons you learned from designing blended/online programmes during the pandemic and how do you think these lessons will affect your work long term?
8. What were the most valuable aspects and the most challenging aspects of your design experience over the last year?
9. What elements of online and blended delivery do you feel are here to stay? What have you felt faculty and students have responded to most positively when it comes to online learning

(especially when it comes to the experience and live class interaction) and asynchronous learning objectives?

Closing out

10. Is there anything else you would like to share with us?

Thank you again for taking your time and participating in this interview. If you have any questions or concerns, please feel free to reach me by email o.rotar@lancaster.ac.uk.

Appendix 2

	Theme	LD1	LD2	LD3	LD4	LD5	LD6	LD7
	General experience							
	Readiness to meet the pandemic				V			V
	Increased workload	V		V		V		V
	Change of the work routine		V					V
	Change of the design process		V			V		
	"You have to flip your way of thinking"	V				V		
	Emergence of peer and informal community support		V	V	V	V		V
	Accelerated professional development	V			V	V	V	
	Accelerated pace of work	V	V	V	V	V	V	V
	I don't think I slept more than two hours a night"/magic expectation			V			V	
0	Forced adaptation		V					
1	Structural changes						V	V
2	Quality concerns	V	V	V		V	V	

3	Expansion of the responsibilities	V	V		V		V	V
4	Tensions in communication with educators	V						
5	Tsunami experience			V				
6	“Everything so random is happening at the moment”	V						
7	Lack of recognition	V						V
8	Support			V	V	V		
9	Lack of support	V						V
0	Valuable aspect: feeling the results of the work				V			
	Concerns							
1	Assessment design concerns			V	V	V		
2	An emergence of “a new target audience”				V			
3	Short timelines				V		V	
4	Selection of an adequate technical solution		V					

5	Communication with educators: “a weird dichotomy”			V	V	V	V	
6	Work from home: health and personal life		V			V		V
7	New opportunities, but was it “really the right time for innovation?”			V				
	Lessons learnt							
8	Rapid development approach					V		V
9	Professional training for subject matter experts /educators			V				
0	A need to be adaptable					V		
1	Importance of human presence		V					
2	A need to spend more time in the beginning			V				
3	Think about universal design				V			
4	Adapt comprehensive and more flexible design approach		V		V			
5	Don’t waste time			V			V	V
	Future directions/here to stay							

6	Cheese has to be moved!						V	
7	LDs and the faculty partnership			V		V		
8	We are going to rely more on data surrounding people's behaviour							V
9	Community building approach					V		
0	Thinking beyond technological issues	V					V	
1	Create a platform that can deliver a story						V	
2	Flipped classrooms/adaptation of a less transmissional approach					V		
3	Pre-recorded video lectures		V	V				
4	"Adopt the observer principle"		V					V
5	We're kind of going into uncharted territory: room for solid innovation					V		V
6	An aspiration for all courses to have some asynchronous presence			V				
7	Changing role of a learning designer	V	V	V	V	V		V