

The COVID-19 Pandemic and the Reconfiguration of Learning Spaces for English as a Foreign Language (EFL): students, teachers, and stakeholders

Wafa Rougab, University of Limerick

Helen Kelly-Holmes, University of Limerick

Kerstin Mey, University of Limerick

Abstract

The COVID-19 pandemic transformed the educational landscape. It engendered a re-evaluation of long-established pedagogical practices and spatial norms. This study explores how EFL students, teachers, and design stakeholders in an Irish higher education institution experienced and responded to the reconfiguration of learning spaces during the pandemic. Data were gathered through semi-structured interviews and analysed using Braun and Clarke's (2006) six-phase thematic analysis. Four key themes emerged: negotiating the online learning experience, reconfiguring learning spaces for personal agency, redesigning pedagogy in the digital space and re-defining learning spaces: from emergency to lasting change. The results reveal that the reconfiguration of learning spaces promoted deep reflection on space, pedagogy and agency. Participants experienced both struggle and adaptation as they navigated the shift highlighting the complex interplay of limitations and creativity. The study concludes that despite the challenges of maintaining interaction, and emotional disconnection, it also promoted personal agency, growth in digital literacies and pedagogical innovation. This suggests a re-imagination of the role of the classroom in the post-pandemic as multi-dimensional and dynamic, with implications for pedagogy, design, and training.

Key words: learning spaces, reconfiguration, COVID-19 pandemic, online learning, thematic analysis.

Introduction

Over the last decade, there has been an increasing effort from educational institutions to promote students' learning experience (Gray & Woods 2022). These efforts have included not only the approach used for teaching but were also directed towards the learning environment. An increasing body of research has also been examining the connection between learning spaces and learning outcomes. It would appear, that learning varies significantly from one learning environment to another and the learning space is considered as an essential element that has the potential to change the dynamics of teaching and learning (Thomas et al,2018; Baum 2018).

There has been a considerable amount of research on learning spaces within the educational sphere (Oblinger 2006; Blackmore et al. 2011; Thomas et al. 2018; Eickholt et al. 2019; Oliveras-Ortiz et al. 2020), which was largely led by the USA, UK, and Australia (Leijon et al 2022). This increasing focus on learning spaces is due to social development, generational change, the incorporation of new technologies and the shifts in pedagogical instruction, which places students at the heart of learning (Radcliffe *et al.* 2008).

Although the learning space often refers to the classroom environment, the concept has grown to cover student-focused environments such as cafes, libraries and other on and off campus spaces, and, also, online learning spaces (Todhunter 2015). Indeed, learning spaces can refer to both physical and virtual spaces where learning and teaching happen. Keppell et al. (2012), divide learning spaces into “physical, blended and virtual learning spaces”. This definition of learning spaces aligns with that of Johnson and Lomas (2005, p.20), who argue that “learning spaces may be seen as all those spaces in which learning occurs, from real to virtual, from classroom to chat room”.

In one of the recent systematic reviews on learning spaces, Leijon *et al.* (2022) note that research on learning spaces reached its peak in 2016 and has remained stationary in the last few years. The COVID-19 pandemic enforced spatial reconfigurations that have highlighted the need for the discussion of learning spaces and rekindled these. This article explores how EFL students, teachers as well as design stakeholders perceive and evaluate the experiences of space reconfiguration they had during the pandemic. Having looked briefly at the evolution of the concept of learning spaces, the next section examines the impact of COVID-19 on education. Following this, the study and methods will be presented before the findings are discussed.

The Impact of the COVID-19 Pandemic on Education

The COVID-19 pandemic is considered as one of the most unprecedented societal challenges that was confronted on a global scale (García-Peñalvo et al. 2021; Chakraborty & Maity 2020), It pointed to existing critical issues in ongoing educational practices (Rashid & Yadav 2020). The pandemic posed a temporary crisis for higher education at the level of operational and financial stability. However, university stakeholders attempted to safeguard effective functioning of their institution even during hard times (EY-Parthenon, 2020). During the pandemic, face-to-face classes and in-person examinations were suspended in part or all together (Pokhrel & Chhetri 2021; Muchiri 2021). Universities around the world had to change their instruction by going towards hybrid or remote processes centred on online modes of learning and teaching, which allowed for the continuation of education across all levels (Tarkar 2020; Agasisti & Soncin 2021; de la Hoz-Torres et al. 2022).

Online learning had myriad positive aspects during the pandemic. According to Dhawan (2020), online learning offered greater accessibility since it is possible to join classes remotely from any place and it is also a wallet-friendly mode of learning as neither transportation nor accommodation is needed. It appeared to be flexible, as students might choose their time to complete a certain class available on a specific platform. In study conducted in Saudia Arabia, teachers indicated their positive attitude towards teaching English language online during the COVID-19 pandemic (Hakim 2020). Moreover, in another study (Bashir *et al.* 2021), students have reported that they did not face problems with online learning. This was promoted by the quality of internet connectivity (Bashir *et al.* 2021). However, the internet connection was not of high quality everywhere, which influenced student participation and engagement online (Cullinan *et al.* 2021). This exacerbated the social divide among students (Reimers 2022).

It was also difficult for students to study online due to disturbance and distraction caused by their families or flat mates, which led to challenges related to separating classes and everyday life (Williams *et al.* 2022). Additionally, in Ireland, 17 percent of students lived in areas which did not have adequate internet coverage (Cullinan *et al.* 2021), and some schools reported a lack of devices which prevented students from attending classes online (Mohan *et al.* 2020). As a response to the move online, in the 2020/2021 academic year a fund of 15 million euros was provided by the Irish government to HEIs to promote students coming from lower socioeconomic conditions to avail of laptops, tablets and internet connectivity (Cullinan *et al.* 2021).

During these unexpected circumstances, educational institutions had to establish contingency plans for these unpredicted circumstances to prepare for, mitigate, engage with and overcome these scenarios to minimise operational disruption (Muchiri 2021). The COVID-19 pandemic pushed educational institutions to shift from the conventional physical on-campus environment to virtual off-campus learning settings, which resulted in the use and improvement of existing or the creation of new virtual learning spaces (Neuwirth *et al.* 2021). In fact, it can be argued that the pandemic seems to have resulted in a new understanding of the idea of learning spaces.

Building on this, previous research has focussed mainly on the impact of physical and virtual spaces on learning. Other studies explored the broader impact of COVID-19 on education. Little research has explored how different educational groups -EFL students and teachers as well as stakeholders- responded to the reconfiguration imposed by the crisis, presenting a multi-dimensional perspective. To explore that, this research addresses the following question: How did EFL teachers, EFL students and design stakeholders respond to and experience the reconfiguration of learning spaces during the pandemic?

Methods

This article draws from a broader doctoral study underpinned by Grounded Theory Methodology aimed to generate a theory. The article focuses on one emergent category, revisited in detail to allow for a deeper exploration of student, teacher and design stakeholders' experiences of spatial reconfiguration and adaptation during the pandemic, following the six-phase thematic analysis framework developed by Braun and Clarke (2006).

Semi- structured interviews were used as the main tool for data collection. Thirteen participants were interviewed individually. They were previously contacted via email, and the data was anonymised and pseudonyms used in this article. All interviews were conducted online via Microsoft Teams as a precautionary measure due to the ongoing COVID-19 situation.

Table 1

Participant profiles and interview details

Date of the interview	Introducing the participants (p)
P1: 26 July 2022 P2: 3 August 2022	Wan (p1) and Zain (p2) are Chinese undergraduate computer science students in Ireland. Wan, newly arrived, with intermediate English. Wan expressed herself clearly, with occasional dictionary use (44 minutes). Zain, her friend, lives in university

<p>P3: 12 August 2022</p>	<p>accommodation, had more difficulty expressing himself (32 minutes).</p>
<p>P4: 14 September 2022</p>	<p>Kami (p3) and Anwar (p4) Algerian PhD students with advanced English who came to Ireland in January 2021. They had experienced both online classes as a part of their programme and face-to-face EFL classes (30 minutes each).</p>
<p>18 October 2022</p>	<p>Mairead (p5) is a TESOL Irish teacher and a PhD student. Her experience includes teaching students from different countries and has previously taught in an Arab country (42 minutes).</p>
<p>P6: 21 October 2022</p>	<p>Paola (p6) A teacher of English in the language centre and an educational technologist at the university, with an experience of teaching different age groups (43 min).</p>
<p>8 November 2022</p>	<p>Donal (p7) An English teacher who has been teaching in the languages building for many years, with extensive experience in Ireland and Korea. (32 minutes).</p>
<p>17 November 2022</p>	<p>Emma (p8) A French MA Erasmus TESOL student taking advanced English classes in the languages building (25 minutes).</p>
<p>21 November 2022</p>	<p>Briana (p9) An Irish English teacher. She also experienced teaching in the UK and Taiwan. (20 minutes).</p>

<p>6 February 2023</p>	<p>Tawan (p10) A Thai applied linguistics student, he studied remotely but reflected on and compared university spaces in Ireland and Thailand (39 minutes).</p>
<p>13 February 2023</p>	<p>Jack (p11) an architect trained in Germany and the UK, currently a lecturer in the department of architecture. He contributed to projects related to building learning spaces. (58 minutes).</p>
<p>22 February 2023</p>	<p>Barney (p12) An executive administrator, responsible for the management of all university buildings and outdoor spaces (43 minutes).</p>
<p>2 March 2023</p>	<p>Aine (p13) A facilities manager within the university, and responsible for the architectural maintenance, cleaning, security and on campus projects (40 minutes).</p>

Phase 1: Familiarisation with the Data

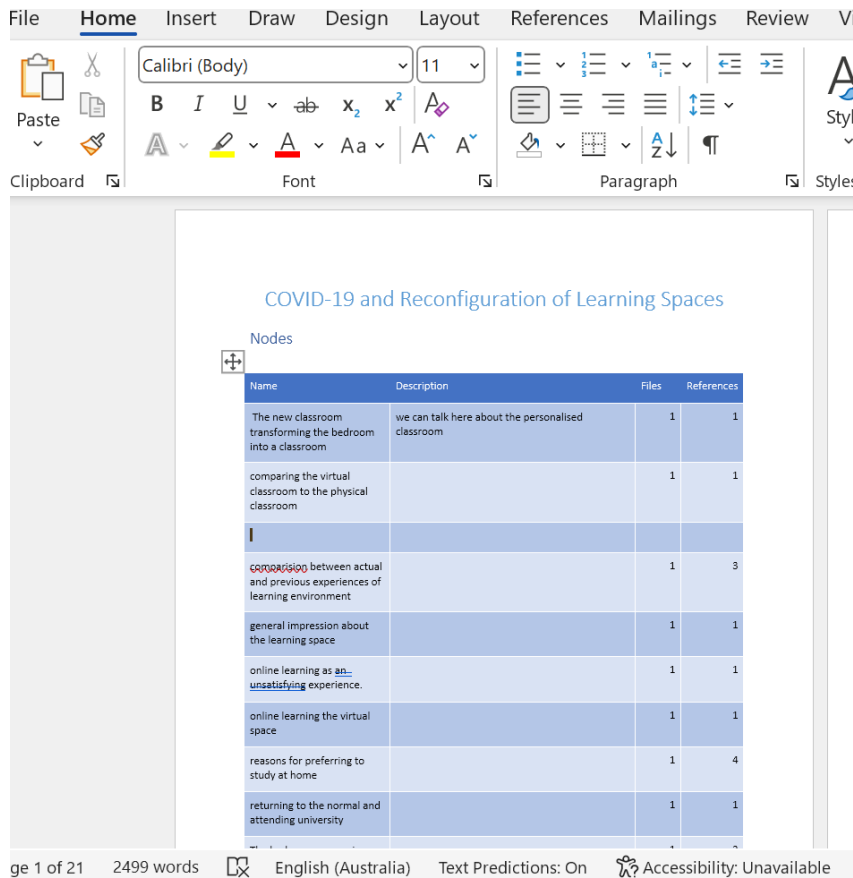
Here the researchers had to immerse themselves with the interviewees. they started reading each transcript while listening also to the video recordings again. Notetaking was key in recording ideas and noticing patterns.

Phase 2: Generating Initial Codes

In this phase, data were labelled into codes through the use of Nvivo Software. Meaningful interview segments were coded. -see table below-

Figure 1

Sample of initial coding



COVID-19 and Reconfiguration of Learning Spaces

Nodes

Name	Description	Files	References
The new classroom transforming the bedroom into a classroom	we can talk here about the personalised classroom	1	1
comparing the virtual classroom to the physical classroom		1	1
comparison between actual and previous experiences of learning environment		1	3
general impression about the learning space		1	1
online learning as an unsatisfying experience.		1	1
online learning the virtual space		1	1
reasons for preferring to study at home		1	4
returning to the normal and attending university		1	1

Page 1 of 21 | 2499 words | English (Australia) | Text Predictions: On | Accessibility: Unavailable

Phase 3: Searching for Themes

In this phase, it was time to group initial codes into themes to see connection among those codes.

The following figure shows the themes that started emerging from the grouping of codes. These themes were later reviewed following the phases of Braun and Clarke (2006).

Figure 2

Theme development through code clustering from Nvivo

Files				
interviews with architects and stakehold...				
interviews with students				
interviews with teachers				
File Classifications				
Externals				
ORGANIZE				
Coding				
Codes				
Sentiment				
Relationships				
Relationship Types				
Cases				
	<input type="radio"/> The lighting as an important factor for students	1	1	2/18/
	<input type="radio"/> The nature of the class influences the type of archite	1	1	2/20/
	<input type="radio"/> the new normal a new perception of the role of the c	1	1	2/20/
	<input checked="" type="radio"/> the online experience moving forwards	9	44	8/2/2
	<input type="radio"/> Difficulties in accepting the online classes	2	2	
	<input type="radio"/> Online as an effective way for transition of knowledge	1	2	
	<input type="radio"/> online experience with simple learning spaces	1	1	
	<input type="radio"/> online learning as an unsatisfying experience.	1	1	
	<input type="radio"/> online learning being a part of the virtual space	2	4	
	<input type="radio"/> returning to normal classroom and losing comfort	1	1	
	<input type="radio"/> returning to the normal and attending university	3	3	
	<input type="radio"/> School accommodation as a learning space during covid.	1	1	
	<input checked="" type="radio"/> Students positive feedback on the virtual learning space	3	4	
	<input type="radio"/> Studying online a passive experience	1	1	
	<input type="radio"/> the absence of discipline in the new normal	1	1	
	<input checked="" type="radio"/> The covid as motivating factor to create an adequate per	6	10	

Phase 4: Reviewing the Themes

Themes that had emerged during the grouping of codes were systematically reviewed. Codes were revisited to see patterns and to ensure accurate representation of the intended meaning. Themes were revisited, merged or in some cases removed.

Table 2

Preliminary Themes

Theme 1	The COVID-19 pandemic and the move to online learning environments
Theme 2	Benefits of online learning

Theme 3	Disatisfaction with online learning
Theme 4	The creation of a personalised learnnig and teaching space
Theme 5	The COVID-19 causing a disruption to the online leaing space
Theme 6	The pandemic as a cataluyst for teaching and learning

Phase 5: Defining and Naming Themes

The themes in the previous phase were revised and defined in a more detailed way to ensure depth and representaion. Out of the six themes, four emerged in the final list.

Table 3

List of the final themes

Theme 1	Negotiating the online learning experience
Theme 2	Reconfiguring learning spaces for personal agency

Theme 3	Redesigning pedagogy in the digital space
Theme 4	Re-defining Learning Spaces: From Emergency to Lasting Change

Phase 6: Production of the report

The final phase is to present the themes in the section of the analysis.

Analysis and Discussion of Findings

The following provides an in-depth exploration of the final themes that emerged from the qualitative data collection.

Theme 1: Negotiating the Online Learning Experience

As a result of the COVID-19 pandemic, participants had to experience the transition towards online learning. They had to shift their physical learning space, their routines, expectations and modes of engagement. This theme highlights how some EFL students and teachers navigated this transition. Their reflections reveal adaptation and, at times, struggle. Indeed, for some, the pandemic offered increased flexibility while for others it reduced the level of engagement and motivation.

Places of residence, traditionally conceived as personal and private, had to be reimagined and negotiated as multifunctional spaces. Indeed, the pandemic blurred the line between private and pedagogical space. As stated by Mr Jack, a stakeholder and an architect: “Our homes had to change during the pandemic. Being classrooms and sports studios.” (Jack, stakeholder). This might have created some challenges such as competition for accessing a desk, laptop and the shared space

which might be surrounded by children, or flatmates causing noise interference. Moreover, learning and teaching were interwoven with the necessity to conduct other responsibilities that might have coincided with class time. This required a negotiation.

One teacher participants expressed how the move towards online learning increased her autonomy in her routine and provided her with flexibility:

Working online, had its benefits. For example, it saved me time. I didn't have to commute or dress up for work, and I could take a break. And since I was at home, I could make a cup of coffee. So, it gave me more time. (Briana, teacher).

Although the participant is reporting everyday conveniences, the meaning is a deep reflection about rhythm, autonomy, and personal space, as online learning allowed for a reconfiguration of space, time and routine.

Another teacher expressed the expanded potential for collaboration and communication beyond the boundaries of the physical classroom. For her, online learning during the pandemic permitted students to study collaboratively and access their teachers virtually: "You can contact your teacher or collaborate with your classmates while each is in his house and in different parts of the world and that's very important." (Paola, Teacher). This highlights another dimension of the negotiation of learning spaces during the pandemic: the reconfiguration of presence and interaction in virtual environments. It reshaped the idea of presence and proximity in the virtual learning, as collaboration is no longer limited to and dependent on physical presence but can be promoted through digital platforms.

For a student participant, online learning removed structural financial barriers: "Online learning saves money in that you do not need to travel and pay for your transportation fees. Thus, you reduce your spending." (Tawan, student). Despite differences in priorities, the EFL student and the EFL teachers in the previous two passages both described the online learning environment

as a space of reconfiguration of daily commitments and patterns of engagement in response to the new learning environment.

While the previous reflections reveal how some participants were able to navigate the reconfiguration to online learning in a way that aligned with their personal rhythms and routines, others encountered some difficulties. For some participants the transition caused pedagogical misalignment and emotional limitations. For example, one student expressed it as follows: “Because the online class was not that efficient, I did not have a positive experience of it.” (Wan, student). For another student, online learning was perceived as passive: “In my experience, the online classes would always make me feel sleepy.” (Zain, student)

The students above point to a deeper level of misalignment between the format of learning and their needs. This inefficiency affects engagement and emotional presence which are crucial elements for EFL students trying to learn a foreign language, because language learning depends heavily on active participation and real-time engagement as well as exposure to communicative contexts.

Another student stated that: “It was not easy to accept the pandemic.” (Kami, student). It seems that online learning required an emotional and psychological negotiation and not only an academic one. This reports an emotional burden and resistance to the broader context. The pandemic appeared to disrupt students’ sense of stability.

The reconfiguration of the learning space led to a comparison between the usual readymade learning space and the new virtual and personal learning space. As expressed by a student: “Maybe what you miss from the ordinary classes is the discipline, like you have to wake up and go to study.” (Kami, student). Another student expressed her longing for formality of the classroom environment: “You miss that official environment.” (Emma, student).

The negotiation of the reconfiguration made students reflect on how external structures and physical routines create a sense of academic rhythm and self-discipline. In fact, the online learning made students revisit how they should negotiate their sense of responsibility and time management which was challenging for some. It had an impact on the social element too, as the pandemic did not allow students to meet in person. The communicative nature of human beings was impacted by the new shift in the way of learning.

It was weird because it is a good thing to have to go to the classes physically to meet people and make friends. This is something I have really missed when I was at home due to the pandemic. (Emma, student)

This participant appears to experience isolation which contributes to the idea that the reconfiguration during the pandemic was not only about rhythms and routines, but also about relational distance.

In fact, online learning prevented students from interacting effectively as stated by a student: “I really missed nonverbal cues from the person that I communicate with, from the eye contact or even their facial expressions.” (Tawan, student). The student participant reflected on an important point showing how communication itself was reconfigured during the pandemic and that it is not only about the structure but the depth of human interaction. The student is communicating a negotiation of emotional connection and meaning making in communication.

Theme 2: Reconfiguring Learning Spaces for Personal Agency

This theme explores how students and teachers adapted their domestic settings into functional learning and teaching spaces to ensure pedagogical continuity and psychological stability. As one EFL teacher put it:

I created my own teaching space, which I wouldn't have had. I did have an office space at home, but not to the extent of what it became so I changed the layout. It's so nice to have a proper office at home now. (Mairead, Teacher)

The pandemic engendered new roles for home. For example, previously teachers may have done their preparation at home but did not have to teach from there. However, the new situation pushed them to stay and do their instruction from home. Another EFL teacher also stated:

Being stuck in that small space was not easy, but at least I had a desk, and I had ample light. It wasn't too noisy, and I had a decent Internet connection because your Internet connection is important. Then when I moved house, I had a kind of spare room in that house, I used it as my office, and it was bright and quiet with a stable Internet connection. (Briana, teacher)

We can see in the next teacher participant comments how the pandemic seems to have resulted in a reconfiguration of the idea of learning spaces as stated by an EFL teacher:

Before, I wouldn't really need a workspace. I was just going to school or going to university working somewhere. So, if I needed to do something at home, I have my desk, I would just, do something with what I had because I didn't even think about it. (Paola, Teacher).

It seems that the pandemic made teachers consider creating a personal teaching space which is an idea that was not present before the lockdown. Therefore, there is a shift in spatial thinking and a clear move from a passive use of space to an intentional setup and adaptation. This idea was also shared by students as they saw the need to create an adequate learning space at home:

I had to buy a desk because most of the time I would sit at the table and put the PC there and it wasn't convenient. One time, I said I really need the desk...you have to get out of that comfort zone at some point in your life. (Anwar, student).

Another EFL student also mentioned:

During the pandemic I studied in my bedroom because I have this big desk, and I started to pin maps on my walls, and I cleaned everything and that was very tidy and a good place to study. Then, if I wanted to take some fresh air, I could go outside. (Emma, student).

It is evident that the COVID-19 pandemic triggered the realisation of the necessity to create a personal learning or teaching space at home as to evoke an experience of learning. This has previously usually been created for them by the educational institution. The pandemic handed over the responsibility for creating a personal learning spaces to the users. Thus, teachers and students became in charge of creating their learning and teaching environment.

The reconfiguration of the learning space allowed for personal agency as individual teachers and students had to reshape their environment based on the preferences and possibilities, they had at home as not all users had the possibility to create a separate private learning space and decided to adapt to the existing space by modifying and adjusting it. For example, for some teachers, the new personal space was simply their kitchen rather than any dedicated home office:

Well, I used my kitchen table since I live alone. The thing is that we didn't expect it to last for two years. We started off and it was for two weeks, so I said, OK, I'll sit at my kitchen table for two weeks. I made some minor adjustments, I bought cushions for my back and for my chair, so I said, OK, I'm going to be here. (Donal, Teacher)

The pivotal idea here is that the pandemic enabled users to experience new learning environments beyond the classroom and the other spaces created for them by the university. It made them responsible their learning and teaching environment, reflecting their ability to exercise agency. Their experience was both physical (reconfiguring home offices, bedrooms and kitchens) and virtual as they had to try virtual learning space.

Theme 3: Re-designing Pedagogy in the Digital Space

This theme traces the evolving experience of teachers as they transitioned into virtual environments and online pedagogies. At first, educators faced some challenges while trying

to navigate and learn digital tools and as they progressed some disruptions occurred.

Despite the many challenges, some teachers reflected positively on their experience.

The reconfiguration of the learning spaces appears to have caused issues for some EFL teachers as teachers were put in that situation for the first time and they were not necessarily equipped with the adequate skills to manage their instruction virtually, as expressed by an EFL teacher: “At the beginning you're trying to understand the new dynamics; technology, classroom management, grouping and monitoring of students and think of the features I can use to deliver my content.” (Briona, teacher). Briona’s reflection illustrates that reconfiguration required a holistic rethinking of the classroom dynamics between instruction, interaction and content delivery. Her focus on the technical side (platforms, features and tools) and the relational element (teacher talk, interaction and monitoring) reveal a deep and multilayered process of adaptation.

Moving towards online learning caused a disruption for teachers especially when they had to acquire technological skills and explore the various features available. This created a shift in the approaches to teaching and the materials used by the EFL teachers. The disruption also had an impact on the modus/ quality of the interaction which is usually an essential feature in the EFL classroom. This pushed teachers to work with different approaches and methods, forcing them to move away from the pedagogy of the physical classroom environment:

Online learning is really challenging. Students used translation software, didn’t speak English in breakout rooms since the teacher wasn’t there, and often cheated and sharing answers. I don’t think language learning online was a success. The social aspect—talking to classmates before or after class, going for coffee—just didn’t happen.” (Donal, teacher).

Donal’s account, highlights that although they succeeded in ensuring continuity for classes, they failed in replicating the relational and interactive environment which is often seen as the norm in language learning.

Indeed, interaction is one of the key elements of language learning. The pandemic by its nature necessitated a halt to physical social interaction which might have disrupted the dynamics of language learning. However, this does not deny the benefits that users have reported in relation to the enforced online learning and teaching.

Since we were not in the classroom, I created a virtual one using Google Classroom. I organised materials by day, encouraged interaction through shared documents and used online whiteboard, and explored technology to give students opportunities to collaborate. I had to explore what worked Overall, I wanted to make the experience better. (Paola, teacher).

Paola's reflection is a potential example of intentional pedagogical reconfiguration where she decided to actively redesign a learning space mirroring structural and interactional aspects of the physical classroom. The teacher here decided to view the virtual environment as a space that could maintain structure, interaction and collaboration. She recreated elements of face-to-face classroom in an online setting. This is more challenging in the instances where teachers were not trained to use digital tools. As expressed by an EFL teacher:

I taught almost exclusively online for over two years. At first, nobody liked it, and we did not expect it to go as long. We struggled with technology, classroom management, and participation. Over time, I became more confident, tried new methods, and it turned into a very good experience because I learned new ways of teaching. (Briana, teacher)

This EFL teacher here is also reflecting on the proactive role she undertook during the pandemic while adding a sense of evolution. This illustrated that pedagogical reconfiguration is not a onetime event, but a process incorporating unfamiliarity, experimenting with the new space and eventually reaching a level where you have control over the tools.

Another teacher also clearly stated that moving towards online teaching and learning had its impact on their approaches of teaching: “Especially with moving towards teaching and learning online, we've seen fundamental changes across our approaches.” (Mairead, teacher).

In fact, this reflection captures the core of the pedagogical reconfiguration that teachers faced during the pandemic. It was not a surface-level change, but caused a significant transformation in thinking about instruction, priorities that shape learning and adjustment of approaches.

Theme 4: Re-defining Learning Spaces: From Emergency to Lasting Change

This final theme explores how the COVID-19 pandemic impact goes beyond the disruption to education. It explores how the pandemic functioned as a catalyst for critical reflection, promoted rethinking about learning and teaching as well as its lasting effects on education environments.

The pandemic led to a tremendous shift in the way different roles are performed, causing a transformation at the level of operation. As expressed by a space manager: “I think COVID-19 pandemic has really, really changed how everybody either works or teaches in the university.” (Aine, stakeholder).

The pandemic encouraged teachers to re-think the importance of space for learning leading them to reconsider their instruction not only during the pandemic, but also beyond the pandemic. As expressed by a teacher: “Moving to teaching and learning brought fundamental changes across our approaches, and it's a shame to go back to the pre- pandemic because we've learned so much and we should be applying that to our teaching.” (Mairead, teacher).

The re-configuration of space opened the door for more than just thinking about the approach but also to a deeper process of evaluation for priorities, rhythms and a realisation of the key role learning spaces, both physical and virtual, play in teaching and learning. As expressed by

an EFL teacher: “I think people realised how important the space is after the COVID-19 pandemic.” (Mairead, teacher).

A space management member stated: “I suppose what's changed for us mostly is hybrid working. I had to think differently and from a buildings and estates perspective because as I said before, people are recognizing that space isn't really being utilized properly.” (Barney, stakeholder).

The reflection from the space management professional expands the concept of reconfiguration beyond the limits of pedagogical reconfiguration, illustrating that the pandemic has redefined institutional perspectives about the physical space and its importance. It reflects an increased understanding of the notion of the traditional format of space occupancy as it no longer meets the evolving needs with the presence of hybrid learning.

The move towards online learning had an impact on users’ expectations in the ‘new normal’ period this would mean that the virtual space is now an important medium for delivering content as expressed by the architect who is also a university teacher: “The pandemic has forced us to change how we interact, study, and it has introduced online meetings. It means that we don't need our classrooms to do the things we had to do in the past.” (Jack, stakeholder).

This reflection illustrates a shift in the way educational spaces are conceptualised. His account reflects an acknowledgment that the classroom is no longer the sole and default space for learning. This leads to a redefinition of the function of the classroom in the post pandemic education.

The spatial reconfiguration during the pandemic was a catalyst for a series of consequential changes. It allowed for a multi-layered landscape of reconfiguration including pedagogical reconfiguration, routine reconfiguration, emotional and social as well as institutional

reconfiguration. Each influenced how learning was designed, delivered and experienced. Indeed, the transformative impact of space actively shaped the very structure of education, emotional and behavioural responses to change and pedagogical choices.

Conclusion

This article is aimed at exploring how EFL students, EFL teachers and institutional stakeholders reacted to the spatial reconfiguration caused by the COVID-19 pandemic, and the way their experiences and perspectives redefined their engagement with learning environments. It focused on how individuals were negotiating, adapting and reshaping actively the dynamics of space and educational practice.

The first theme reveals how a group of participants (EFL students and EFL teachers) approached the virtual space not as something that has advantages or disadvantages, but as something involving tension, adaptation and personal experience, in other words, as something to navigate. As for the second theme, it illustrates how students and educators engaged with the configuration of home environments, transforming them into spaces fit for teaching and learning. They demonstrated intentional adjustment and agency in the way they adapted their personal spaces to meet the new demands of education paused by the pandemic.

The third theme reveals how educators reshaped their instruction within the virtual space, their experience with the new tools and their attempt to maintain interaction, classroom management and effective content delivery while preserving the quality of learning. The theme also explores educators' progression from uncertainty to mastery, reflecting adaptability and commitment. Finally, the fourth theme positioned the pandemic as a catalyst for challenging long established assumptions about the fundamental nature of education, including how and where it can take place.

Collectively, these themes construct a broader evolving notion of educational space not as a fixed setting, but as an element shaped by emotional response, individual adaptation and intentional reconfiguration in support of deeper reflections on the future of education and the evolving role of space within it. Therefore, the findings of this study suggest that learning spaces are not static, but rather, they are participatory, relational and dynamic. They are shaped by user's needs, and interactions.

While teachers struggled to replicate the communicative environment online and students felt less engaged and connected, the pandemic also led to pedagogical innovation, growth in digital literacy, and greater awareness of the constraints and affordances of learning spaces. Stakeholders questioned whether the return to the classroom model is the best practice. They recognize that the learning space is a dynamic and multidimensional environment shaped by digital technologies, interactive practices and emotional experience - key elements in applied linguistics and sociolinguistics research.

Recommendations

EFL students reflected on the limitations and occasional strengths of online learning space. Their views should inform future redesign of learning spaces in that learners should be actively involved in the creation of their learning spaces to promote inclusion, interaction and motivation. Additionally, institutional reforms should include teachers, students, design stakeholders and policy makers to create learning spaces that are not merely digitally equipped, but pedagogically and emotionally responsive.

Future studies could focus on using mixed-method approaches to explore topics related to user-experience but in a more generalized and expanded way beyond individual cases. Moreover, it is recommended to explore the relationship between language pedagogy and learning spaces in

different settings, for example using diverse student and teacher profiles, institutions and instructional settings.

Teacher training programs should include training about spatial pedagogy to help teachers learn about adapting and redesigning their language learning content to promote interaction and active student engagement in both physical and virtual learning environments. Furthermore, the experiences of students and teachers during the pandemic should not be considered ephemeral or one-off but should be seen as essential for learning how institutions can invest in hybrid learning by taking advantage of physical spaces and the possibilities of accessibility provided in online learning while maintaining language interaction and communication as the focal point.

References

- Agasisti, T. and Soncin, M. (2021) Higher education in troubled times: on the impact of Covid-19 in Italy. *Studies in higher education (Dorchester-on-Thames)*, 46(1), 86-95. available: <http://dx.doi.org/10.1080/03075079.2020.1859689>.
- Bashir, A., Bashir, S., Rana, K., Lambert, P. and Vernallis, A. (2021) Post-COVID-19 adaptations; the shifts towards online learning, hybrid course delivery and the implications for biosciences courses in the higher education setting. *Frontiers in Education*, Frontiers, 310. <https://doi.org/10.3389/feduc.2021.711619>
- Baum, E.J. (2018) Learning Space Design and Classroom Behavior. *International Journal of Learning, Teaching and Educational Research*, 17(9), 34-54, available: <http://dx.doi.org/10.26803/ijlter.17.9.3>.
- Blackmore, J., Bateman, D., Loughlin, J., O'Mara, J. and Aranda, G. (2011) Research into the connection between built learning spaces and student outcomes. Education Policy and Research Division, Department of Education and Early Childhood Development.
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative research in psychology*, 3(2), 77-101. <https://doi.org/10.1191/1478088706qp063oa>

- Chakraborty, I. and Maity, P. (2020) COVID-19 outbreak: Migration, effects on society, global environment and prevention. *Science of the total environment*, 728, 138882. <https://doi.org/10.1016/j.scitotenv.2020.138882>
- Cullinan, J., Flannery, D., Harold, J., Lyons, S. and Palcic, D. (2021) The disconnected: COVID-19 and disparities in access to quality broadband for higher education students. *International Journal of Educational Technology in Higher Education*, 18, 1-21. <https://doi.org/10.1186/s41239-021-00262-1>
- de la Hoz-Torres, M.L., Aguilar, A.J., Costa, N., Arezes, P., Ruiz, D.P. and Martínez-Aires, M.D. (2022) Reopening higher education buildings in post-epidemic COVID-19 scenario: monitoring and assessment of indoor environmental quality after implementing ventilation protocols in Spain and Portugal. *Indoor Air*, 32(5), e13040. <https://doi.org/10.1111/ina.13040>
- Dhawan, S. (2020) Online learning: A panacea in the time of COVID-19 crisis. *Journal of educational technology systems*, 49(1), 5-22. <https://doi.org/10.1177/0047239520934018>
- Eickholt, J., Jogiparthi, V., Seeling, P., Hinton, Q. and Johnson, M. (2019) Supporting project-based learning through economical and flexible learning spaces. *Education Sciences*, 9(3), 212. <https://doi.org/10.3390/educsci9030212>
- García-Peñalvo, F.J., Corell, A., Rivero-Ortega, R., Rodríguez-Conde, M.J. and Rodríguez-García, N. (2021) Impact of the COVID-19 on higher education: an experience-based approach. in *Information technology trends for a global and interdisciplinary research community* IGI Global, 1-18. DOI:10.4018/978-1-7998-4156-2.ch001
- Gray, A., & Woods, K. (2022). Person-centred practices in education: a systematic review of research. *Support for Learning*, 37(2), 309-335. <https://doi.org/10.1111/1467-9604.12410>
- Hakim, B. (2020) Technology Integrated Online Classrooms and the Challenges Faced by the EFL Teachers in Saudi Arabia during the COVID-19 Pandemic. *International journal of applied linguistics & English literature*, 9(5), 33, available: <http://dx.doi.org/10.7575/aiac.ijalel.v.9n.5p.33>.
- Johnson, C., & Lomas, C. (2005). Design of the learning space: Learning and design principles. *EDUCAUSE review*, 40(4), 16.
- Keppell, M., & Riddle, M. (2012). Distributed learning spaces: Physical, blended and virtual learning spaces in higher education. *Physical and virtual learning spaces in higher education: Concepts for the modern learning environment* (pp. 1-20). IGI Global. doi:10.4018/978-1-60960-114-0.ch001

- Leijon, M., Nordmo, I., Tieva, Å. and Troelsen, R. (2021) Formal learning spaces in Higher Education—a systematic review. *Teaching in higher education*, 1-22.
<https://doi.org/10.1080/13562517.2022.2066469>
- Mohan, G., McCoy, S., Carroll, E., Mihut, G., Lyons, S. and Mac Domhnaill, C. (2020) *Learning for all? Second-level education in Ireland during COVID-19*, 92, Dublin. The Economic and Social Research Institute, available: <https://www.esri.ie/pubs/SUSTAT92.pdf>
- Muchiri, K.A. (2021) COVID-19 Pandemic And Possible Trends For The Future Of Higher Education: A Review. *Journal of Education and Educational Development*. 8. 9-26.
 available: <https://doi.org/10.22555/joeed.v8i1.183>
- Neuwirth, L.S., Jović, S. and Mukherji, B.R. (2021) Reimagining higher education during and post-COVID-19: Challenges and opportunities. *Journal of Adult and Continuing Education*, 27(2), 141-156. available: <https://doi.org/10.1177/1477971420947738>
- Oblinger, D.G. (2006) *Learning spaces*, Washington, D.C: Educause, available:
www.educause.edu/learningspace
- Oliveras-Ortiz, Y., Bouillion, D.E. and Asbury, L. (2020) Learning Spaces Matter: Student Engagement in New Learning Environments., *Journal of Education-US*, available:
<http://dx.doi.org/10.1177/0022057420908062>.
- Ozkan Bekiroglu, S., Ramsay, C.M. and Robert, J. (2022) Movement and engagement in flexible, technology-enhanced classrooms: investigating cognitive and emotional engagement from the faculty perspective. *Learning environments research*, 1-19,
 available: <https://doi.org/10.1007/s10984-021-09363-0>
- EY-Parthenon, (2020, January 10) *New normal: Higher education in a post-COVID-19 world*.
<https://www.tiaa.org/public/institute/publication/2020/new-normal-higher-education-post-covid-19-world>
- Pokhrel, S. and Chhetri, R. (2021) A literature review on impact of COVID-19 pandemic on teaching and learning. *Higher education for the future*, 8(1), 133-141, available:
<https://doi.org/10.1177/2347631120983481>

- Radcliffe, D., Wilson, H., Powell, D. and Tibbetts, B. (2008) Designing next generation places of learning: Collaboration at the pedagogy-space-technology nexus. *The University of Queensland*, 1, 6-20.
- Rashid, S. and Yadav, S.S. (2020) Impact of Covid-19 pandemic on higher education and research. *Indian Journal of Human Development*, 14(2), 340-343, available: <https://doi.org/10.1177/0973703020946700>
- Reimers, F.M. (2022) Learning from a pandemic. The impact of COVID-19 on education around the world. *Primary and secondary education during Covid-19: Disruptions to educational opportunity during a pandemic*, 1-37. available: https://doi.org/10.1007/978-3-030-81500-4_1
- Tarkar, P. (2020) Impact of COVID-19 pandemic on education system. *International Journal of Advanced Science and Technology*, 29(9). 3812-3814. available: [\(PDF\) Impact Of Covid-19 Pandemic On Education System](#)
- Thomas, C.L., Pavlechko, G.M. and Cassady, J.C. (2018) An examination of the mediating role of learning space design on the relation between instructor effectiveness and student engagement. *Learning environments research*, 22(1), 117-131. available: <http://dx.doi.org/10.1007/s10984-018-9270-4>.
- Todhunter, B.J. (2015) An examination of the views of key stakeholders on the development of learning spaces at a regional university. *Journal of Facilities Management*, 13(2), 204-222. available: <https://doi.org/10.1108/JFM-06-2014-0016>
- Williams, C.A., Nordeen, J., Browne, C. and Marshall, B. (2022) Exploring student perceptions of their learning adaptations during the COVID-19 pandemic. *Journal of chiropractic education*, 36(1), 82-93. <https://doi.org/10.7899/jce-21-11>