CORA Cork Open Research Archive
Cartlann Taighde Oscailte Chorcaí

Title	Teaching spaces: The fourth corner of university learning
Authors	Power, Catherine (Katie);Supple, Briony
Publication date	2021
Original Citation	Power, K. and Supple, B. (2021) 'Teaching spaces: The fourth corner of university learning', Transformative Dialogues: Teaching and Learning Journal, 14(3), pp. 90-106. Available at: https://journals.kpu.ca/index.php/td/article/view/1509/1157 (Accessed: 14 March 2022)
Type of publication	Article (peer-reviewed)
Link to publisher's version	https://journals.kpu.ca/index.php/td/article/view/1509/1157
Rights	© 2021, the Authors. This is an Open Access article distributed under the terms of the Creative Commons Attribution-NonCommercial-NoDerivs 3.0 Unported License. - https://creativecommons.org/licenses/by-nc-nd/3.0/
Download date	2026-10-15 01:22:16
Item downloaded from	https://hdl.handle.net/10468/12897

UCC
University College Cork, Ireland
Coláiste na hOllscoile Corcaigh

Transformative Dialogues: Teaching and Learning Journal
Winter 2021, Volume 14, Issue 3
https://journals.kpu.ca/index.php/td/index

Teaching Spaces: The Fourth Corner of University Learning

Author Information

Katie Power
Munster Technological University

Briony Supple
University College

Abstract
Teachers hold valuable knowledge and intimate understanding of the spaces where students learn. It is important to leverage their knowledge and allow their voices to be heard in planning new spaces. This article reports on mixed methods research undertaken at the School of Law, University College Cork, to assess teachers' views on spaces, with particular focus on two rooms—a traditional lecture room and a discipline-specific Moot Court room. We present an inquiry-focused conceptual framework, the application of which has helped us investigate and make public the perspectives of teachers regarding engagement in spaces on campus. As this paper demonstrates, it is vital that the staff voice is captured to inform best practice and in the planning and usage of spaces. This idea may be obvious, but we argue it is often overlooked and not leveraged to its full potential. There is also transformative potential for staff as both researchers and research participants in investigating their teaching and the impact of space on practice. The goal of the study is to promote the value of the authentic participation of teachers in the development and use of university spaces from a teaching perspective.

Keywords
university room planning; teachers' views; student learning; student participation; legal education

Introduction

Teaching spaces are the fourth corner of university education—the fourth of the essential ingredients which come together to produce strong, powerful university education worldwide. First is the student, second the teacher, third the discipline, and fourth the classroom where the learning comes to life. This metaphor is reflected in the traditional image of a lecture theatre—the square room, which is sturdy and reliable as our university must be—strong to withstand the test of time, strong to weather the climates of change, strong to welcome the new faces of every coming generation, and strong to embrace modern technology as it unfolds around us (Van Horne et al., 2012). The classroom is an aspect of any lecture that is so pervasive that it

changes the experience of both the teacher and the student (Jamieson, 2003). While it is accepted that learning may happen wherever learners are situated, for the purpose of this paper we look specifically at spaces used for formal teaching, and the phrase "teaching spaces" will be used throughout. The teaching space is capable of making the learning session an empowering, inspirational, collaborative event or, on the contrary, a stagnant, tedious endurance, depending greatly on the dimensions and attributes of the space (Jamieson et al., 2000).

This research examines staff perspectives on the spaces where they teach at the School of Law, University College Cork, Ireland. For the purposes of this paper, the word "staff" is a catch-all which refers to people who teach or are administrators in universities. The word "teachers" refers to faculty members who teach. A convergent mixed methods approach using surveys and interviews was used to collect qualitative data from voluntary participants. Our development of an inquiry-focused SoTL lens informed by Bass (1999), Felten (2013), and Hutchings (2000) and complemented by literature pertaining to teaching spaces in universities has enabled both ourselves as researchers and our research participants to articulate the symbiotic relationship between teaching and students' learning within the context of space. As a result of our research, we have developed a conceptual framework, the application of which has helped us investigate and make public the perspectives of teachers and provide the opportunity to discover how space impacts teaching, and therefore how teaching impacts student learning in various spaces. Our findings point to the fact that teachers were working hard to accomplish the highest standard of education possible for students on a day-to-day basis within the limitations of the spaces offered by the university.

Literature Review

Space Matters—How Space Impacts Teaching and Learning

The spaces where students learn are a crucial element of university life and university experience. The traditional approach to teaching spaces is that both teaching and learning only happen in the large, structured lecture theatre. However, contemporary approaches to teaching have resulted in a move towards spaces which reflect a more constructivist (Vygotsky, 1925/1979) approach to student learning: one where there can be flexibility for collaboration between students and more democratic facilitation by teachers. It is important that staff are confident to engage with students in these new spaces and readily adapt their teaching to a more active means.

Research on teaching spaces has been emerging over the last number of decades with recognition of the important role played by the classroom for the student (Beckers et al., 2016). The research tells us that teachers are looking for high specifications in all rooms to meet the growing demands of service provision to our modern students. Research on learning spaces from the University of Oslo confirms that learning spaces must be dynamic, allowing for alterations and changes to meet the needs of students in the space (Damsa et al., 2019). Race, who has written and published extensively on learning and teaching in universities, tells us that staff are "paid to do everything we reasonably can to make sure that [student] learning is successful" (Race, 2015, p. 14). The spaces themselves must perform a role in university education as they are not a passive element where teachers and students simply sit and learn but rather are an active, living, and essential element to the shared learning experience of staff and students. In effect the space can allow for full engagement and inclusion of students in the learning experience or in contrast can exclude students and prevent equality and equity (Benade, 2019).

Literature has gone some way towards assessing the nature of spaces in higher education institutions, focusing on elements involved in assessing a teaching space, characteristics of the student, characteristics of the teaching staff, and how content is delivered (Granito & Santana, 2016; Gurung et al., 2012). Kolb and Kolb (2005) state that the learning environment is the interface between student learning and "the institutional learning environment" (Kolb & Kolb 2005, p. 193). Studies such as those undertaken by Cox (2011) highlight the importance of physical space and its impact on learning, arguing that where students and teachers are enabled to actively engage with one another within physical spaces, a more positive learning experience is enjoyed by students. However, while these studies focus on various elements of student learning within spaces, they do not focus on the views of teachers to inform best practice and planning. The views of staff need to be captured as an additional perspective to understand how to develop and improve the use of spaces in universities from a teaching perspective. Involvement of staff in such dialogues regarding impact of their teaching on student learning and considering their teaching from an investigative stance will also assist teachers in developing a research-based lens to their teaching practice within spaces.

While some literature has attempted to capture the experience of teaching staff, we suggest the topic has not been explored fully. Granito and Santana's (2016) paper, for example, which involves data collection from both teachers and student groups, reveals that the conditions of the physical space (light, temperature, etc,) impact concentration, engagement, and student grades. In Cox's (2011) study, semi-structured interviews were conducted with six undergraduate students and two teachers. Cox examines students' experience of university space and states that in general these spaces are produced as "depersonalized and regimented environments" not allowing for true engagement of students. (Cox, 2011, p. 197). However, while these two publications involved staff and students, we argue there is a need to go beyond simply allowing the voice of staff and instead to give solid consideration to how this voice can be leveraged fully for planning, organising, and using space for the optimal benefit of student learning.

Statement of the Problem

Authentic Participation of Staff

Literature is developing around the need for authentic participation of teachers and other stakeholders in the design of university spaces to allow for high quality of space in engaging students, ensuring optimal delivery of materials, and effective design of curriculum to match the spaces that exist in our universities (Zainuddin et al., 2018). Roman and Uttamchandani argue that it is important to "understand pedagogy and learning in [Active Learning Classrooms]" and conclude that active learning pedagogies are "enacted as joint accomplishments" (Roman & Uttamchandani, 2018, p. 16). Carnell of the Bartlett School of Architecture, University College London, has also emphasised the link between enhancing the university itself and university teaching spaces, highlighting the need for dialogue and communications between key players responsible for these often-disconnected aspects of university life (Carnell, 2017). This approach builds upon Jamieson's work in the area which called for academic developers to step beyond curriculum design and become involved in the design and creation of spaces (Jamieson, 2003).

Universities must hear from teachers themselves as to their user experience of spaces; this sharing of the "insider" perspective will allow the management level of universities to plan for new spaces and to organise or restructure existing spaces. The findings of any such investigations then need to be made public for the benefit of other educators. Our research aims

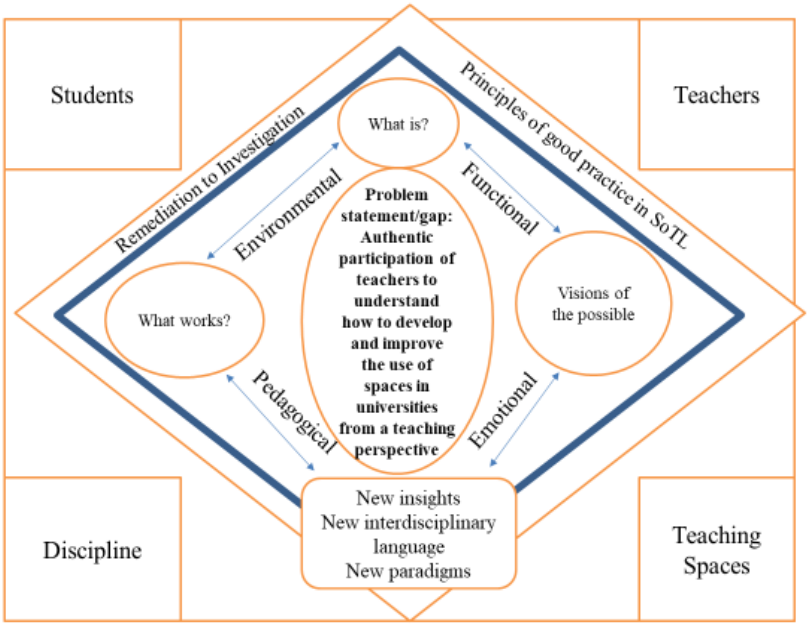
to do just that and is focused on perspectives pertaining to two specific teaching spaces: a discipline-specific Moot Courtroom and a "traditional" teaching space. These spaces are a typical sample of the kinds of space which are in use in the school of law. Elements of the two chosen spaces mirror characteristics of other rooms across the university. Anecdotally, spaces such as the traditional lecture space have been heavily critiqued, so the researchers were keen to formally evidence and record the experiences of staff in this regard.

Our statement of the problem therefore is seeking authentic participation of staff to understand how to develop and improve the use of spaces in universities from a teaching perspective.

Conceptual Framework

This study is underpinned by a fusion of SoTL theory and approaches to teaching space design. Implicit here is the impact of space on student learning. The main throughline for our work is Bass's (1999) perspective of investigative approaches to teaching (vs. remediation models). As such, our framing language avoids terms of remediation and deficit. We have used Felten's work (2013) to highlight the relevant areas of SoTL inquiry and Pat Hutchings' Taxonomy of SoTL questions as a method of formulating research questions and analysing the data. We have combined these approaches with ways of assessing teaching spaces under four distinct categories—environmental, functional, emotional, and pedagogical, developed by Germany (2014). Our conceptual framework allows for equal consideration of pre- and post-occupancy investigations and is therefore flexible in its application. Here it is argued that by assessing current use of space through the views of teachers, universities can then move forward by investing that knowledge into the planning of future space. In this vein we can allow the creation of clear links between lessons learned through use of space and advancing the planning of future university spaces.

Figure 1



The Fourth Corner of University Learning Conceptual Framework.

The conceptual framework presents the four corners of university education as students, teachers, discipline, and teaching spaces. Our SoTL lens, informed by Bass (1999), takes an investigative stance seeking to explore the views of teachers regarding the spaces where they teach. The following principles of good practice (Felten, 2013) have been applied: inquiry focused on student learning, grounded in context, methodologically sound, appropriately public. The next layer of the framework pertains to Hutchings' (2000) taxonomy of SoTL questions and is exemplified in our research questions in the following section: What works, what is, and visions of the possible. The final layer is based on Germany's (2014) evaluation model of learning spaces, which speaks to following categories: environmental (indoor air quality, acoustics, lighting, temperature), functional (furniture, fixtures, technology, accessibility, utilisation of space), emotional (colour, vistas, security, ownership), pedagogical (flexibility, configuration, student outcomes, teacher outcomes). All of these elements lead to enabling critical discourses for space and inform implications for learning and teaching. Central to our conceptual framework is our problem statement, which is concerned with capturing the views of staff to understand how to develop and improve the use of spaces in universities from a teaching perspective. The outcomes of this exploration will be 1) new insights into teachers' perspectives of the form and use of university spaces, 2) a new, shared interdisciplinary language making SoTL terminology explicit as it applies to space, and 3) new paradigms of inquiry where staff are empowered to identify space as a critical component of their students' learning.

Our research question is threefold to reflect the complexity of this problem statement and to allow thorough and deep consideration of teaching spaces at the School of Law. These evolved as informed under our conceptual framework, with particular reference to Hutchings (2000):

1. *What works?* What perceptions (positive or negative) do staff have about the spaces in which they teach?
2. *What is?* How do staff conceptualise/articulate the impact of space on their teaching, and therefore their students' learning?
3. *Visions of the possible:* What opportunities exist to develop innovative approaches to teaching and learning in transition to new spaces?

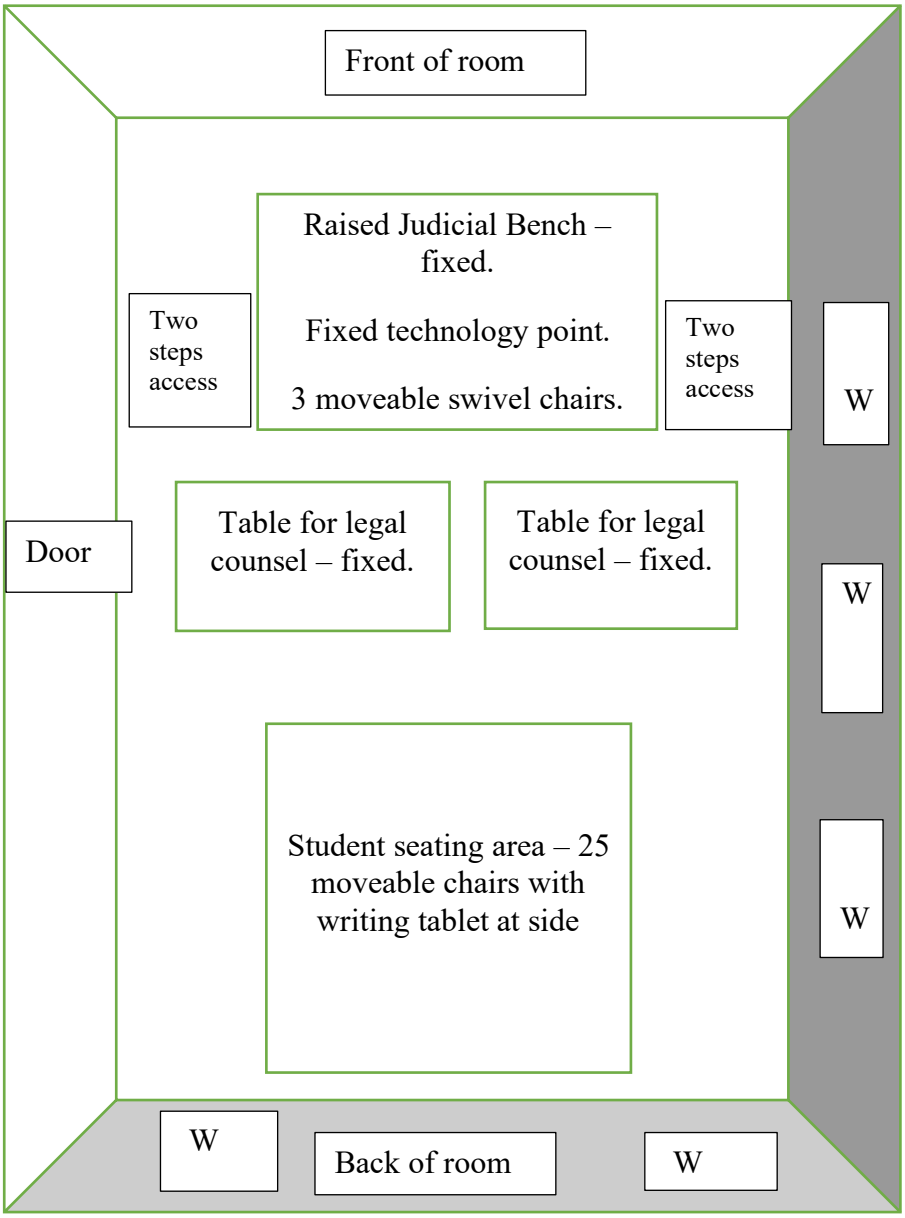
Methods

This research was undertaken by the first author, who was completing the study as part of a Master's qualification in Teaching and Learning in Higher Education. The second author was supervisor for the project. The first author also lectures with the School of Law at University College Cork. At the time of data collection there was a total staff population of 50 at the Law School. The research was designed as a mixed method approach through survey and interviews. The survey consisted of a variety of question types: open-ended, closed, rating scale, and short and long answer. Questions were formulated around the three overarching research themes—what works: flexibility; what is: adaptable and accessible teaching; visions of the possible: training and support for staff. The interviews were semi-structured to ensure an equal dialogue with teaching peers and with the empowered participants to direct the conversation as they wished with focus on elements of particular relevance to them.

In order to ensure the questionnaire, interview questions, and research approaches were methodologically sound (Felten, 2013) and to ensure their validity and reliability, the questions were tested in advance with a sample group of peers on the programme of the master's degree qualification in Teaching and Learning in Higher Education. Ethical approval was also granted via the institutional Social Research Ethics committee.

Two specific spaces were chosen for particular focus (Moot Courtroom and traditional lecture space) as these were located in the building which houses the Law Department itself and were frequently used by Law students and teachers. The layouts of the rooms can be seen in Figure 2 and Figure 3 below.

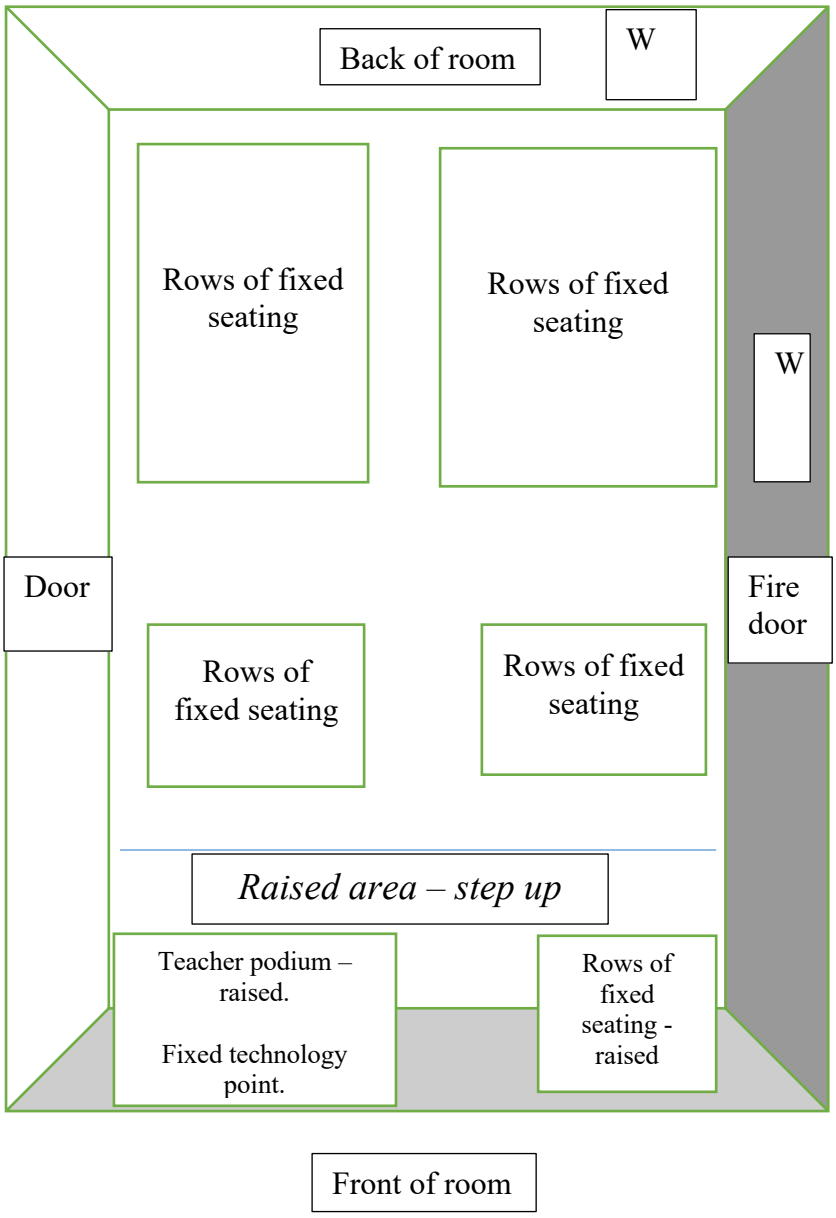
Figure 2



Moot Court Room, School of Law, University College Cork – capacity 30.

The Moot Courtroom is located on the first floor of the building that houses the School of Law. It is a discipline-specific environment which is primarily used as a performance space. The layout mirrors the power dynamic of a court setting through the raised judicial bench at the front of the room which can be accessed on both sides, on the left by two steps and on the right by a slope. There are four windows in the Moot Courtroom, marked W in Figure 2.

Figure 3



Traditional Teaching Space: Lecture Theatre, School of Law, University College Cork – capacity 70.

The traditional classroom is located on the ground floor of the building that houses the School of Law, University College Cork. This teaching space has a raised platform at the front of the room which can be accessed all along the top of the room by a step. There are two windows in the traditional classroom, marked W in Figure 3.

Data Collection and Analysis

Mixed methods data collection via survey and interview was undertaken to draw from opinion-based information of staff members. The teaching spaces under review were the teaching spaces used by Law staff and students.

The first stage of the data collection was the questionnaire, which was emailed as a Google Form, with 21 questions and suggested completion time of approximately 12-15 minutes. The survey was sent by email to a total of 50 staff of School of Law; 11 responses were received, a 22% response rate. Ten of the responses were from teaching staff, with 1 response being from administrative staff.

Stage 2 of the data collection was interviews. Participants were recruited via an invitation at the end of the Google Forms survey. Four volunteers came forward for interview. Each interview lasted approximately 40 minutes and was recorded and transcribed by a third-party professional transcription service. The interviews were semi-structured, with 15 draft questions pre-approved by the university ethics committee but with freedom for the conversation to be steered by the interviewee to specific elements of teaching spaces.

Quantitative data from the surveys was collated via the inbuilt Google Forms analysis tool. Analysis of the qualitative data from the interviews was theme-based through hard and soft copy review and colour coding. Common threads that emerged were placed within the overarching themes as informed by the research questions. The following presents the analysis of the data. Responses regarding the spaces have been coded as follows: M.C. - Moot Courtroom, T.C. - traditional classroom.

Findings and Discussion

1. What Works? Flexibility

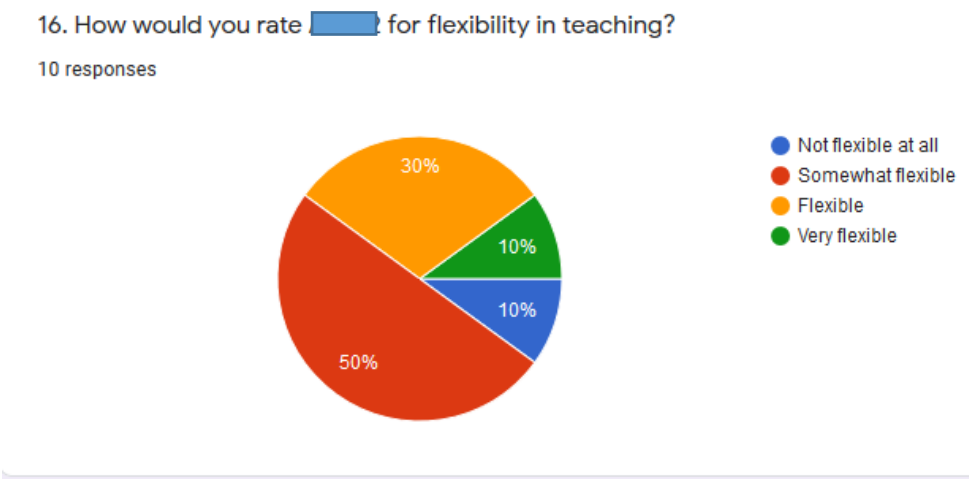
As per our conceptual framework, central to feedback from staff on teaching spaces was the focus on students and their learning. Flexibility of teaching spaces was at the forefront of many staff comments and viewpoints. This arises for the expressed reason of benefiting the learning experience of students. Staff identify how imperative it is for students to be comfortable in a classroom, particularly that students have enough room for themselves and their belongings so that they feel secure in occupying the space.

"I would like more comfortable seating for the students—in that they would have more space for their books, their laptop or whatever they need; increased space for each individual student. So that they could have their books open at the same time as their laptop and that they are not sitting too close to people. They could get up freely and move if they needed to, without causing chaos." Interviewee 4, T.C.

Certain spaces were highlighted by law staff as being inflexible—indicating where seats and tables are fixed and therefore students prohibited from moving into groups and secondly, where the environment of the room makes collaboration of students difficult due to issues with lighting, ventilation, or sound. Both the Moot Court room and the traditional classroom were criticised for inflexibility on the basis of fixed technology points (M.C.) and inflexible furniture (T.C.).

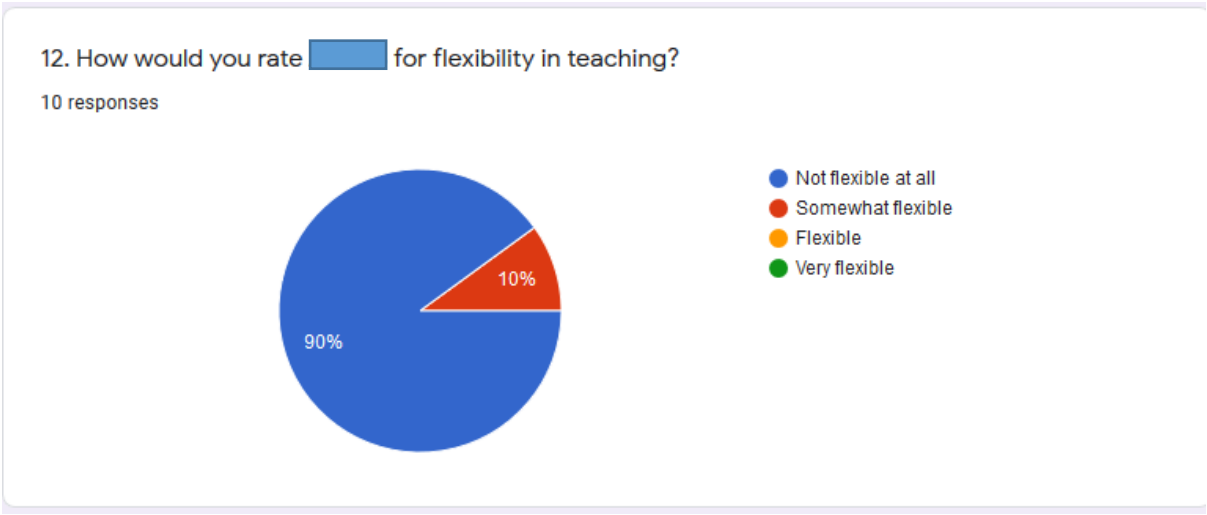
"Static microphone restricts teaching on the basis that it is not practical to move around the lecture theatre which reinforces the separation between the lecturer and the students." Survey, M.C.

Figure 4



Extract from questionnaire – flexibility rating for the Moot Courtroom.

Figure 5



Extract from questionnaire – flexibility rating for the traditional space.

"I think the furniture is so important. Make it modular, make it movable. Put the students in a different formation." Interviewee 2, M.C.

Teachers say that ideally, they would like to embrace role playing, group discussions, and legal case analysis during their teaching sessions to allow deep approach learning of the law (Morgan et al., 2004). However, this is not accomplishable in all of our spaces.

"Lots of spaces can be hard to navigate." Survey.

"I try to involve students in class discussion but it is difficult." Survey, T.C.

"... group work is too difficult due to lack of flexibility but I do get students to make presentations." Survey, T.C.

Lack of flexibility in our spaces can prohibit such an open approach of including other persons in the demonstrative capabilities of a room. Conversely, however, seeing the potential within a space can enable a high level of student engagement.

"I teach moot court and I've had more than one good experience there, where the students have stood on the podium and I've been able to sit back. You see how the students interact with each other and you can almost disappear in the space and the students become more active." Interviewee 4.

2. What is? Adaptable and accessible teaching

Teachers' views show that inherent difficulties arise in certain spaces. These challenges can be broadly divided into two groups of issues—firstly, numbers of students, and secondly, booking of spaces. Data shows that when it comes to numbers of students, the law staff are of the view that class sizes are too big to enjoy the advantages that may be explored in a given teaching space. These views were repeatedly given across the surveys and interviews: that staff would prefer smaller numbers of students for full engagement of the students and to allow various teaching methods to be used, rather than staff being tied to the traditional formula of standing at the top of the room and teaching at the students.

The views of teachers are that numbers of students are a barrier for efficient use and flexibility in spaces. The data shows that there are difficulties being experienced by teachers in physical spaces being challenged to meet the numbers of students on law programmes, as well as lack of flexibility to reconfigure the room.

"Rooms are cramped." Survey.

"Not ideal to feel as you are up on a stage as the facilitator as you are somewhat removed from the group." Survey, M.C.

"They [the students] cluster on one side [the far side] of the corridor [the entrance]. My distance from them on the podium compounds [the divide]." Survey, T.C.

"Accessibility, in both spaces could be improved by providing large buttons to open the doors for those with limited mobility. I am not sure how accessible either spaces are for those with a visual impairment but I did on one occasion feel the need to walk alongside a student to help them to exit the Moot Courtroom as they seemed to experience difficulty." Survey.

University education continues to change and move with the needs and demands of the sector. There are higher numbers in classes than there used to be, and we are dealing with greater volumes of programmes, modules, and therefore higher numbers of students overall. This pressure is being felt by staff.

"Students are now becoming customers and we have to give good customer service. I don't disagree with it." Interviewee 3.

While capacity itself is not the focus of this study, it must be remarked upon that numbers within spaces have a bearing on how teachers interpret their abilities to be flexible in teaching and can also be interpreted by them as a barrier to engagement. Teachers are very aware of the

larger numbers of students sitting in the classrooms, and generally this is seen as a challenge for staff. It is significant that emerging from the data is a link for teachers between numbers of students and usability of the teaching spaces. Each student registered on a programme is allocated a seat within the scheduled room, and attendance for these cohorts of students will typically remain high throughout the semester.

"We try to pack them in here…" Interviewee 1.

"It is a very densely packed space; our students are crammed into it." Interviewee 1, T.C.

"We seem to be focused on getting massive numbers in." Interviewee 1.

The research identifies that getting access to spaces is also a challenge for staff. There are some spaces at the School of Law, University College Cork, which generally encourage positive learning experiences for students as they are more conducive to active and collaborative learning. However, it is not always possible for staff to access these spaces. The booking of spaces can be controversial in any university, and it is unfortunately the same at University College Cork—anecdotally there are issues of territorial ownership of spaces and staff being unable to book rooms through the centralised booking system. Some rooms are not even listed in the booking system and staff have no knowledge of how to book these spaces.

The size of the teaching space and the number of students occupying the space are both factors which impact the teaching methods to be employed during a lecture. Teachers seem to be well practised in fitting the method of teaching with the space being used. With reference to the Moot Courtroom, participants gave a variety of information on teaching methods employed in this space:

"I teach by giving lectures using slides and also take tutorials in this space. When using slides, I stand on the podium which is necessary because that is where the computer is, I manually move the slides. This is not ideal in terms of engagement with the students however it is a good space in which to encourage participation because microphones are not necessary." Survey.

"Some PowerPoint, lots of general discussion, interaction through class asking questions and sharing experiences." Survey.

These comments highlight the adaptability some teachers are willing to apply in relation to space.

3. Visions of the Possible: Training and Support for Staff

While teachers have excelled in their discipline and are experts in their own field, they may require support in how to use a teaching space. We conceptualise this as a point for investigation rather than remediation for staff (Bass, 1999), an opportunity for teachers to consider the ways in which space impacts their practice and how investigating new approaches to the use of spaces will bring a fresh outlook to the classroom. Teachers cannot face this alone, however.

The idea of auditing the usage of these rooms was suggested and seems a stellar idea to get a genuine reflection of how often the rooms are being used and by how many teachers and students. It is necessary to know how often rooms are booked and used, and likewise how often rooms are booked and not used. This would allow a rigorous assessment of usage of teaching spaces and from there an evaluation of what kinds of spaces are most used or least used and

what type of spaces need to be created to meet student and staff demands. Radcliffe et al. (2009) undertake case study analysis of data to evaluate spaces by examining aspects such as computer log-in information, wireless usage data, room booking information, and door counts. These examples of processing and examining the available information to evaluate use of teaching space could be utilised at University College Cork to ascertain accurate usage of rooms.

"We need to audit the rooms, to know—the level of usage they are getting, I think there are a lot of the small rooms that are being booked but not being used and I think the way to start is by counting footfall in rooms." Interviewee 1.

Another benefit of quantifying student attendance at lectures is to assess whether certain spaces attract more students; will students attend more frequently spaces which are more flexible, which allow more flexible teaching and learning? This is an action plan to be considered at University College Cork and other university institutions, because while we may glorify flexible spaces and other attributes of a "good" space such as colour or movable furniture, it is only by checking attendance in these rooms that we produce evidence that students enjoy such spaces.

The comments from the data show that teachers desire to be able to move around the space and not remain static at the front of the room. They are not looking for an environment of "us" the teachers and "them" the students; the learning experience is a shared one—shared by teacher with students, and students with students, and these members of the experience need variety and adjustability in the environments where they coexist. Otherwise, the people involved in our university education are at risk of becoming stale, bored, and as rigid themselves as some of the teaching spaces where they work.

"I would like to see in any new lecture hall—an audience response system inbuilt. So, it becomes part of teaching but also for culture change the lecturer would have to use it. They'd win prizes if they use it." Interviewee 1.

When staff were asked in the survey what type of training would be necessary for new teaching spaces, there were overwhelming references to technology training. Throughout the surveys and interviews there were references to technology and the part it takes in our teaching spaces. Staff know technology is to be embraced in using spaces but are not entirely confident in their use of it.

"We need explanation of the technological and spatial possibilities, demonstrations of what can be done." Survey.

"Maybe lecturers who regularly use innovative methods could invite colleagues to observe or join in some classes as a learning experience?" Survey.

A teacher uses a space and ascertains what will work and what will not work to engage students, taking into consideration all aspects of the room. Here we can see the evidence of applied inquiry of staff into their teaching—trying what works, ascertaining what doesn't, and considering the investigative potential in their teaching (Bass, 1999; Hutchings, 2000). In the data it was remarked that this research gave the participants the opportunity to really think about the spaces where they teach:

"It's important [to make teachers aware of the space they are in]—everybody's busy, but it would be very important, I think, to engage all lecturers, as a matter of course, in terms of thinking about the space." Interviewee 4.

"We should start as early as possible to get the students to think and talk in the classroom.… You have to start early and I think the way classrooms are laid out is vital." Interviewee 2.

"I think it's probably a good thing that [teachers] aren't going to be told what to do anymore, this kind of blind faith that we've had in this country for 30, 40, or 50 years, it's gone. [Teachers] are beginning to question more and [we must let] them speak, and the question could be the space." Interviewee 3.

This indicates to us that staff do have a curiosity about the connection between teaching and approaches within various spaces and the impact on their students' learning.

Implications of Results

Teaching in the Time of a Pandemic

We are writing this article at an unprecedented time when we are still significantly impacted by COVID-19. The inflexibility of the traditional lecture halls for enabling reconfigurations conducive to good teaching and meaningful learning while adhering to social distancing guidelines will be a huge challenge for teaching staff, management, and administration alike. However, certain teaching activities can be embraced in all genres of university spaces to allow effective engagement and participation of students (Li et al., 2019). The question remains as to whether staff are fully aware of the methods they can employ within these restricted traditional spaces, and within the restrictions of a pandemic. We hence find ourselves at the perfect juncture for teachers to fully embrace `the investigative lens they can bring to their teaching at this time. Our conceptual framework offers an informed way for teachers to embrace this curiosity.

What remains to be researched is how to connect the dots from the administrative level to the teacher level; how to link administrative planning and scheduling to teachers' teaching to ensure that teachers have a voice and impact on strategic planning, design, and booking of rooms going forward. Carnell (2017) highlights a need for dialogue and communications between key players in order to create a connected approach between those responsible for spaces on the one hand and those responsible for student learning on the other. It is through a united approach of "connecting university spaces with innovative educational strategy that higher education will see real improvements to the student experience" (Carnell, 2017, p. 10).

Conducting this research allowed us to explore the views of staff on teaching spaces at the School of Law. This opened up a dialogue and allowed staff themselves to give focus to the teaching spaces they occupy and the potential for new teaching in those rooms. Staff proffered very many positives (proximity to law offices, access to booking some rooms, convenient, clean, some flexibility, modern, generally pleasant to work in) and negatives (numbers of students, difficulties with booking some rooms, inflexible furniture, technological issues, poor design).

Our data reveals that teachers are actively thinking about the value the teaching space brings to each and every teaching moment—that it is a real and genuine element of the learning experience for students and must be taken as a factor when planning a class. The practical

aspects of the room—such as seating, lighting, and technology—all play a part in the quality of the experience for both teachers and students. These practical elements very often cannot be changed, but with the right support, the teaching methods can be adapted to facilitate a positive experience in that space. Again, this will be a new challenge we all face in the context of COVID-19.

Conclusion

Aspects of a teaching space are influential for a host of reasons: Colours, size, shape, student numbers, and furniture all influence how the space can be used. However, once a teacher has been made aware of these elements, with curiosity, it will then be a choice for the teacher—What will I do here in this room? What would the students like this class to include? Where and how can I best achieve the goals of this lecture in this particular teaching space?

It is necessary to include teachers in the narrative on teaching spaces, and it is important that they feel a sense of power when they enter a teaching space in deciding the form their teaching will take. This study adds to the body of academic literature through the in-depth capturing of the voices of teachers in the School of Law on the impact of space on teaching and learning. The paper provides a novel approach of exploring how teacher participation in decision making on spaces can be transformative in university education.

What if—teachers were allowed some input in planning teaching spaces?

What if—teachers were asked, “What shape would you like a new teaching space to take?”

What if—teachers were given training on how to best use teaching spaces to overcome perceived obstacles in that room?

The way forward is to communicate with staff—to share information and to listen to their views. There are very real implications for University College Cork arising from this research, which emphasises the desire and need for staff to inform space planning. There has been a teaching and learning seminar at the School of Law to create open discourse among staff and management as to the need for staff input in booking rooms, refurbishing rooms, and tracking room usage. This research has inspired further considerations such as the form and period of integration of staff in new spaces.

Limitations

Although multiple emails and requests were sent inviting participation in the research, law school teaching staff were slow to participate; they are busy in the day-to-day work of teaching and research. Once staff decided to participate, they were generous with their opinions and contributed to the surveys and interviews. However, because of the wide number of rooms being used by law staff, many teaching spaces across University College Cork were referred to by participants; this means it is difficult to obtain a general consensus on particular spaces, as not all law staff teach within the walls of the School of Law. Each participant is aware of and familiar with the two specified teaching spaces of the traditional lecture room and the Moot Court room, which allowed the sharing of inside knowledge and authentic opinions on the use of these rooms.

There is scope for us to continue to engage with staff and capture their perceptions of space in ways which do not add to workloads. For example, there is now an element in our higher

education teaching qualification which includes a mini-investigative task for staff to report on approaches, methods, reflections on the functionalities, and affordances (or otherwise) of a space where they teach. Elements of this have been created into a guidance document for staff at University College Cork.

Visions for the Future

While our research has underscored various issues at a micro and meso level, at the macro level we see broader issues in relation to the need for institutions to locally support their staff through ongoing training and continuing professional development that is contextually and culturally relevant (Felten, 2013). University College Cork is at the forefront of innovative teaching and research, which must be supported by the environment where these activities occur (University College Cork Strategic Plan 2017-2022). This case study analysis of teaching spaces used by the School of Law highlights that staff are very aware of the importance of the classroom to the learning journey of students and that teachers are energised to use each space to the best of its ability. Students' views need to be included in the analysis of use of spaces in universities. Future research will triangulate student views. The second iteration of research on university spaces will build on this staff baseline to give further analysis and will engage Felten's principle of good practice with work being "[c]onducted in partnership with students" (Felten, 2013, p. 122).

There are challenges for teachers in relation to spaces, often linked to the bureaucracy involved in a large organisation such as inaccessible booking systems for rooms, territorial issues between departments wishing to use spaces housed within the walls of a different school, the slow turn of the cogs to initiate training for technology in spaces, and lack of training for using a combination of teaching methods in our spaces. There is a hugely complex relationship between institutional space, booking restrictions, and systematic barriers which all create situations that can inhibit teaching. As we advocate for new and more flexible teaching spaces, this relationship only becomes more complex. Ensuring that the teaching space that is assigned fits with the teaching approach of the person who will be teaching in it is an important part of the process, and one no doubt that many institutions will continue to struggle with. Asking teaching staff what they would like in a teaching space before that space is assigned and matching that with the course capacities can be a very difficult balancing act.

We argue that, despite these challenges, university institutions have a responsibility to continually promote the importance of our teaching spaces through academic initiatives and policy plans, as it is through consistent re-emphasising of the connection between the space itself and the learning experience of students that the language around teaching spaces will be normalised and made accessible to both staff and students. This language will also enable teachers to become active agents of change in investigating their teaching and will underscore the symbiotic relationship between actively researching teaching and its impact on student learning.

Ethics

Ethical approval for this research was granted by the Social Research Ethics Committee of University College Cork.

References

Bass, R. (1999). The scholarship of teaching and learning: What's the problem? *Inventio, 1*(1).

Beckers, R., van der Voort, T., & Dewulf, G. (2016). Why do they study there? Diary research into students' learning space choices in higher education. *Higher Education Research & Development*, *35*(1), 142–157.

Benade, L. (2019). Flexible learning spaces: Inclusive by design? *New Zealand Journal of Educational Studies*, *54*(1), 53–68.

Carnell, B. (2017). Connecting physical university spaces with research-based education strategy. *Journal of Learning Spaces*, *6*(2).

Cox, A. M. (2011). Students' experience of university space: An exploratory study. *International Journal of Teaching and Learning in Higher Education*, *23*(2), 197–207.

Damsa, C., Nerland, M., & Andreadakis, Z. E. (2019). An ecological perspective on learner-construed learning spaces. *British Journal of Educational Technology, 50*(5).

Felten, P. (2013). Principles of good practice in SoTL. *Teaching & Learning Inquiry: The ISSOTL Journal*, *1*(1), 121–125.

Germany, L. (2014). Learning space evaluations—Timing, team, techniques. In Fraser, K. (Ed.), *The future of learning and teaching in next generation learning spaces* (International perspectives on higher education research, Vol. 12). Emerald Group Publishing Limited, 267–288.

Granito, V. J., & Santana, M. E. (2016). Psychology of learning spaces: Impact on teaching and learning. *Journal of Learning Spaces*, *5*(1).

Gurung, R. A. R., Daniel, D. B., & Landrum, E. (2012). A multisite study of learning in introductory psychology courses. *Teaching of Psychology*, *39*(3), 170–175.

Hutchings, P. (2000). Introduction. *Opening lines: Approaches to the scholarship of teaching and learning*. Jossey-Bass.

Jamieson, P. (2003). Designing more effective on-campus teaching and learning spaces: A role for academic developers. *International Journal for Academic Development*, *8*(1), 119–133.

Jamieson, P., Fisher, K., Gilding, T., Taylor, P. G., & Trevitt, A. C. F. (2000). Place and space in the design of new learning environments. *Higher Education Research and Development*, *19,* 221–236.

Kolb, A. Y., & Kolb, D. A. (2005). Learning styles and learning spaces: Enhancing experiential learning in higher education. *Academy of Management Learning & Education*, *4*(2), 193–212.

Li, R., Zhu, L., Singh, J., & Mo, Y. (2019). Using active learning spaces to support flipped classroom, *5th International Conference on Higher Education Advances* (HEAd'19), Universitat Politècnica de València, València.

Morgan, C., Dunn, L., Parry, S., & O'Reilly, M. (2004). *The student assessment handbook: New directions in traditional and online assessment*. Routledge.

Race, P. (2015). *The lecturer's toolkit: A practical guide to assessment, learning and teaching* (4th ed.). Routledge.

Radcliffe, D., Wilson, H., Powell, D., & Tibbetts, B. (Eds.). (2009). *Learning spaces in higher education: Positive outcomes by design.* The University of Queensland.

Roman, T. A., & Uttamchandani, S. (2018). Researching pedagogy within small active learning classrooms: Examining enacted pedagogies of learner and instructor interactions. *International Journal of Research and Method in Education*, *41*(4), 447-467, DOI: 10.1080/1743727X.2018.1452199

University College Cork. (2017). *Independent Thinking, Shared Ambition: Strategic Plan 2017–2022*, University College Cork.

Van Horne, S., Murniati, C., Gaffney, J. D. H., & Jesse, M. (2012). Promoting active learning in technology-infused TILE classrooms at the University of Iowa. *Journal of Learning Spaces*, *1*(2).

Vygotsky, L. (1925/1979). Consciousness as a problem of psychology of behaviour. *Soviet Psychology*, *17,* 5–35.

Zainuddin, N., Idrus, R. M., & Mohd, A. F. (2018). Designing learning spaces for effective learning. *The Maldives National Journal of Research*, *6*(1), 7–18.

Corresponding Author

Katie Power
Lecturer in Law
Munster Technological University
Cork, Ireland
KatiePower@ucc.ie