

REPORT ON SHARED HDR ACTIVITY-BASED WORKSPACE

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Introduction

This report presents the findings of a small exploratory study on a shared activity-based workspace (further – the space) for Higher Degree Research (HDR) students. HDR students from the Faculty of Arts and Social Sciences (FASS), Faculty of Health (FoH) and Faculty of Engineering and Information Technology (FEIT) at the University of Technology Sydney (UTS) are the first trial group to use the space. This study aims to capture the experience of FASS HDR students using this space.

In March 2016, the innovative workspace was opened to HDR students from FASS. The space is the first of its kind in UTS at large and is based on recent research developments and practices about learning spaces. The new HDR space includes individual pods, collaborative spaces, quiet rooms, project spaces and is free of desktop computers.

FASS has requested a research study to investigate the first year experiences of HDR students who were allocated to use the new space. The study was funded by the FASS faculty fund.

Despite knowing that this type of space affects learning, there is limited

understanding on how the space impacts on HDR students work. This study is the first attempt to gather these experiences and insights. The results will provide feedback not only to the space planners and coordinators, but also HDR officers, supervisors, faculty and university members and scholars concerned with HDR working space.

The study used a mixed method approach that combined the conceptual frameworks of case study and hermeneutic phenomenology. The project aimed to contribute new knowledge about the space and how it can support, and constrain, the experiences of HDR students. It also aimed to add to an emerging body of research in understanding the expectations of HDR students for a provided working space.

LITERATURE ON SPACES

The way people work, play and learn is changing rapidly through new opportunities. Innovative learning and working spaces, mobile technologies, including smartphones and tablets, and opportunities to integrate the physical and virtual space are becoming increasingly common. Along with these changes, there is a growing interest amongst scholars about the use of innovative activity-based learning

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spaces (Strayer 2012) and multifunctional devices (Pegrum et al. 2013) that support student learning.

A dramatic shift has occurred in recent years with an increased emphasis being placed on the design of new learning spaces (De La Harpe & Mason 2014) and their impact on learning. The traditional idea of 'learning and working space' is shifting away from a familiar 'square room' space and is moving towards incorporating the needs and practices of the end-user (Lundström, Savolainen & Kostiainen 2016).

There is a consistent view that universities should be innovative and creative in the ways they build and use new learning spaces to meet the expectations of tomorrow's students (Willson & Randall 2012). While many innovative learning spaces have been built and used in universities globally, only a few formal studies have reported on how these spaces are used. Besides, the majority of this literature focuses on undergraduate student experiences, often leaving out HDR students (Larcombe & Malkin 2011).

The development of knowledge and the research processes are being radically transformed affecting the way in which HDR students undertake their research

(Marsh 2006). While many students have a good knowledge of how they learn and are able to use the available resources to optimise their research and learning, not all have the skills to do this effectively (Kitsantas & Dabbagh 2011).

Common actions and tasks HDR students involve managing the vast range of digital resources, integrating formal and informal learning, personalising and adapting spaces to their own needs (Keppell 2013). The learning space becomes an important factor for HDR students when dealing with challenges, among which loneliness (Janta, Lugosi, & Brown 2014), complexities of being a part-time student (Gardner & Gopaul 2012), interculturality (Holliday 2016) and relationships and networks (Mantai & Dowling 2015) are common.

A large scale study on graduate student spaces found that:

- When engaged in research or writing, graduate students are most successful when they work in a private space (76%) or alone (88%).
- 74% reported that they were most successful doing academic work in a quiet environment.
- Graduate students value graduate-only spaces and

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- express frustration with undergraduate-oriented spaces.
- Graduate students often work for long stretches of time and prefer spaces conducive to working long hours.
- More studies are needed to understand graduate student needs of space (Kinsley et al 2015).

The study

THE RESEARCH PROJECT

UTS is a research intensive university and FASS plays an important role in developing research capabilities relevant to academic, professional and arts and social sciences careers. FASS and UTS are committed to practical innovation to cater for HDR students and develop impact-driven research (University of Technology Sydney 2016).

This study focuses on an innovative HDR student workspace that was recently opened in FASS. The faculty

decided to investigate student experiences in the space through a research project. The research team involved Dr Sandris Zeivots (experience in educational research, experiential learning, engagement with learning) and supervisor Professor Sandra Schuck, Director of Research Training, FASS (experience in technology enhanced learning, learning spaces, STEM education).

The project was funded under the faculty HDR fund. It commenced in March 2016 and finished in December 2016. The project team followed this timeline:

Activity	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Project										
proposal										
Ethics approval										
Literature										
review on HDR										
spaces										
Survey										
In-depth										
interviews										
Transcribing										
Data analysis										
Summarising &										
reporting										

During the course of the project, the research team decided to present the findings in the New Generation Learning Space Design 2017 conference that takes place in March 2017.

THE STUDY SPACE

The new space was launched in March 2016. The space is a shared activity-based workspace and is the first of its kind at UTS. Initially it was built for HDR

students within FASS and FoH. Later in the year some FEIT students also started using the space on a temporary basis.

The space is unlike other HDR student spaces in FASS. The faculty used to allocate HDR students in the other rather traditional looking work spaces with a table, chair and desktop computer. One work station was allocated to each student. Availability of these spaces however was highly competitive and mostly offered to full-time and international students. The new space is open equally to full-time and part-time students.

Overall, the space aims to provide a diverse suite of spaces and is designed to support and enhance HDR students work. It is open 24 hours a day and is built to cater for the different needs of HDR students: reading and analysing, planning and writing, discussing and collaborating.

According to the welcome brochure (2016), the university hopes to introduce the following changes in the space:

- To move away from a 'onespace-suits-all' notion,
- To ensure that students can find a suitable space for different activities during the HDR project,

- To provide enough quiet and collaborative spaces,
- To accommodate the growing cohort of HDR students,
- To empower students to build a sense of community.

The space provides a series of workspaces (see the space map – Attachment 1, last page):

- Standard workstations. There are 82 workstations, 14 of which are height-adjustable. Each workstation features a monitor and power socket.
- Individual pods. There are 38 individual different colour pods. Each pod is equipped with a power socket and a whiteboard.
- Quiet rooms. There are 18 quiet rooms in all. 16 rooms are equipped with power sockets, 2 have desk phones while 2 other rooms feature full AV/IT, including a keyboard, hard drive, large screen and wall console. The rooms can be reserved via an online reservation system. Bookings are available for two hour, non-consecutive slots.
- Meeting pods. There are 5
 available pods. Each meeting
 pod is equipped with full AV/IT,
 including a large, wall-mounted
 screen, controlled via a table
 console.

- Project spaces. There are 2
 project spaces. One features
 seating of nine people around a
 table and a large screen with
 table console. The other has
 semi-circular bench, bar-style
 seating and a large interactive
 whiteboard.
- Collaborative group spaces. There
 is a cluster of 6 collaborative
 group spaces with a round table.
 The chairs and tables can be
 relocated, as needed.

The space includes various features and facilities. There are more than 250 banks of lockers and mobile drawers for secure storage. At the end of the workspace there is a large, modern kitchen with a glass-door fridge, microwave oven, dishwasher, chilled tap water, cutlery and crockery. Next to the kitchen there is a small utility area that includes a multi-function printer for printing, copying and scanning.

The space does not have desktop computers. Instead, the faculty offers UTS laptops to the trial group of students. The trial students can choose whether or not they wanted to use their own or faculty laptop.

METHODOLOGY

The research is built on a theoretical and methodological framework that

allows a close examination of HDR students' experiences. The investigative focus draws on the following two methodologies: case study and hermeneutic phenomenology.

On the one hand, a case study enables the close examination of the data within a specific context. Different aspects can characterise and define case studies. The most common aspects of case studies, including this study, involve analyses of events and experiences which are studied holistically by one or more methods and a commitment to study the complexity involved in real-life situations (Thomas 2011).

Hermeneutic phenomenology, on the other hand, has been selected as an overarching perspective and research method to understand the experiences of the students. It is defined as a discipline that aims to focus on human perceptions of the world in which they live and what it means to them (Langdridge 2007). Fundamentally, hermeneutic phenomenology is about "lived experience" or the life world as it is lived (van Manen 1997). Lived experience, according to Ellis & Flaherty (1992), highlights the importance of individual aspects of experience, meaning that everyone has their own unique experience.

A key principle informing this research approach was to focus on developing and understanding rich accounts of lived experience, recognising the dynamic, complex and situated experiences between the students and the learning space and how they make sense of the experiences. The rationale to use lived experience was to "give voice" to a certain group of people, HDR students, and illuminate certain perspectives, values and sociocultural aspects (Adams 2013).

RESEARCH DESIGN

Four key questions provided a framework for analysing the accounts of students in the context of the space.

The four questions were:

- 1. How does the new learning space support the experiences of HDR students?
- 2. How does the new learning space constrain the experiences of HDR students?
- 3. How did the ways of working change in the new learning space?
- 4. What are the HDR students' expectations of the provided learning space?

The research utilised a combination of qualitative and quantitative methods that were used to illuminate the experiences and reflections of students. Data used in the study consisted of three overlapping stages:

- Online survey. The survey was sent out to the students allocated to use the new space. It involved multiple choice, checkbox, Likert scale (Allen & Seaman 2007), multiple choice grid and open-ended questions. The survey was anonymous and circulated 3 months after the opening of the space.
- *In-depth interviews*. The students utilising the space received an email invitation to participate in the follow-up interview. The interview consisted of three parts: revisiting lived experiences, using the layout map and reflection. Firstly, the participants were asked to reflect on the learning space and its usage. Afterwards, they were invited to navigate their experiences using the space layout map. Finally, the participants were reflecting and making sense of their experiences.
- Feedback emails. The welcome brochure (Attachment 1) of the space was distributed individually to the students using the space. At the end of the brochure students were invited to share feedback with the

faculty through a specifically allocated email address.

PARTICIPANTS

FASS HDR students were involved in the study in a range of ways. The participants had three options to participate in the study and it is possible some students took part in more than one mode of data collection.

Altogether, the study involved between 19 and 26 FASS HDR students. The Online survey received 15 responses. 7 students participated in the in-depth interviews. 4 of them were full-time and 3 part-time students, while 5 were domestic and 2 international students. In addition, the faculty received 3 emails and 1 oral feedback regarding the space. The emails and feedback were shared with the researcher. The exact number of participants in the study is not known as the online survey was anonymous and it is possible that some people took part in multiple modes of data collection.

DATA ANALYSIS

The conceptual framework of the study consisted of both case study and hermeneutic phenomenology and, therefore, required a data analysis method that would suit both.

An Interpretative Phenomenological Analysis (IPA) 6-step approach by Smith, Flowers & Larkin (2009) was used to analyse data. The first step is reading and rereading and involves engaging with the original data. The second step includes initial noting which may be the most detailed and time consuming part. This resembles a free text analysis, as there are no rules or requirements. The third step deals with developing emergent themes and step four attempts to map connections and patterns between the notes. Finally, the last two steps involve moving to the next case and repeating these steps and, eventually, illuminating patterns across cases.

The IPA 6-step approach does not aim to gather direct, unproblematic or 'true' facts through the surveys, interviews and texts; the focus here is rather on understanding the students' perspective and to seriously consider their 'meaning-full' claims and concerns.

LIMITATIONS OF THE STUDY

It is important to acknowledge some limitations of the study; many of which are related to the selected methodology. The main limitations of this study are largely related to the use of the phenomenological and case study process. The nature of the

phenomenological process is to delve into the accounts of a group of people who have experiences of seemingly the same learning environment, which eventually assists with illustrating similarities and differences of an experience.

Students' accounts were self-reported based on memory and beliefs about what occurred in the space. Memory quite often is flawed and subject to fluctuations, while beliefs can limit which parts of an experience should be retained. Recounting the experience may have influenced which aspects the interviewee chose to focus on and what to disguise. In phenomenology and case study however these limitations are mitigated by interviewing many people and then analysing their stories separately and in concert.

Further, this research can be ongoing. Data was collected within four and six months of using the new office space. There is possibility that the data may differ with the next year's cohort, as

some practices may have changed. To reach a point of conclusion about lived experience, it is necessary to reach a saturation point in the data analysis where similar ideas or concepts emerge from multiple sources. In this study, the saturation point was an indication that a theme exists which forms the basis of the composite descriptions.

ETHICS

The project received approval from the UTS Human Research Ethics Committee in May 2016, Reference Number ETH16-0366. Particular care was taken throughout all stages of the project, including during the consenting process, data collection and reporting of the findings.

All students who participated in the interviews gave informed consent to participate in the study. Participants' names have been changed to enable de-identification of the data. The participants were informed that they could withdraw from the study at any stage.

Findings – HDR students and research space

This section presents lived accounts of HDR students and how they make sense of their experience in the space. The accounts have been collected through interviews, survey data and feedback that the faculty has received.

The findings have been sorted into four categories; each category representing one of four research questions:

- 1. How does the new learning space support the experiences of HDR students?
- 2. How does the new learning space constrain the experiences of HDR students?
- 3. How did the ways of working change in the new learning space?
- 4. What are the HDR students' expectations of the provided learning space?

HOW DOES THE NEW LEARNING SPACE SUPPORT THE EXPERIENCES OF HDR STUDENTS?

This section is concerned with the first research question, which focuses on aspects where the space supports the experiences and practices of HDR students. Six overarching themes were identified: Workspace on campus, Provided equipment and services, Quietness and privacy, Social interactions, Emotional attachment and Personalising the space. Each of these themes will be discussed further in the section.

Workspace on campus

The first theme and a noticeable thread observed across data is – students value having a physical space on campus where to pursue the research project. To understand how availability of space on campus can support student practices, this theme will be divided in three smaller subthemes, each illustrating salient features highlighted by students. The three subthemes are: Space on campus, Hybrid workspace and Work away from home.

Space on campus

Many refer to benefiting from having an office space at the university. It is highlighted by full-time and part-time students. Part-time students in particular appear to mention it more often as they were not previously eligible to have an office space on campus. Having a space on campus is presented both as a convenience and motivator to come to campus.

For a part-timer it is good to have a space to come to. I wasn't really pushing my candidature ahead because I felt I am out

there on my own. Once I reconnected with campus, I started coming in, became more accountable. This space gives me somewhere to go when I am here. It is that magnet maybe... there is a place where I can be.

Amelia

In similar terms, having a physical office space motivates students to engage with life on campus. That includes not only using one's desk or meeting supervisors, but also engaging with teaching, attending research related events and networking. Some, in fact, point out that they got teaching or other job opportunities because they were on campus.

If there would be any real reason I ever wanted a desk, it was for the networking and being a part of the department. I can be more involved in the life of the department rather than just sitting on my own, in my own head and writing my own PhD. It encourages me to get on campus more. It is enabling me to do more of connecting with people that I want. I just have to be around and that's how I got involved with more teaching and that's how I found out about workshops and conferences, which before I was really isolated.

Amelia

Hybrid workspace

Work space, office, hybrid space are among the common concepts used to describe the environment in which the students work. For many, especially full-

time students, the campus office is the main and the only working space. However, for many others, especially domestic and part-time students, the space is linked with, and extended to, other work spaces, like library, home, work or other campus office. For these students the workspace is one part of a connected, yet complex workspace network.

Although there are certain assumptions and expectations on how different students use the space, e.g. full-time students are on campus most weekdays and part-time time-students mostly when meeting supervisors, data shows that the real practices are far more intricate and fluid. For instance, some part-time students that were interviewed use the space several times a week, especially if they are in their final year, while some full-time students, according to the survey data, use the space once a month.

In terms of spacing, students appreciate the multipurpose space where one can work on different parts of their research. At some point the student may need a space for reading and concentrating, at another they need to interview and collaborate with others and, sometimes – have a quiet area where to write. Gabriel, for instance, shares that the space is designed for all

sorts of activities - different spaces for different activities. They are purposeful and well demarcated.

Some students observe that the space comes across as a work environment. This seems to have several benefits. For many (e.g. Amelia) the notion of being in a workspace helps to shift her mindset. Being in a work environment appears to be conducive to doing work (Gabriel) and helps with being productive, concentration and focus (Mira). "It feels like a work environment and it gets me in the right zone," notes Gabriel.

Being in a workspace at times can have unexpected implications. It appears to induce certain behavioural norms and expectations in several students; most of them seem to be beneficial for research work.

I almost find myself putting my phone on the silent mode when I work in here. There is something that is very rigid and disciplined about this space. Sometimes I almost feel like it makes me be that way.

Mira

Work away from home

The final subtheme that relates to the benefits of having a workspace on campus is an opportunity to work away from home. This subtheme differs from other themes and subthemes as it is not

linked to students' preferences. Instead, it illustrates an aspect that many HDR students attempt to avoid – working at home.

Home for many is mentioned as an important workspace for the research project. In fact, for many students it is the main space to work. On the one hand, working from home can save time on the commute and is often used as a space for last minute writing, especially before meetings with supervisors and conferences.

On the other hand, six out of seven interviewed students explicitly point out that working from home is challenging, at times impossible. As a result, they prefer having a work space that is away from home. While Chloe wants to distance herself from working from home, Gabriel indicates that there are far more distractions at home and he finds it difficult to focus.

Even though I like the idea of not doing my doctoral work at home, I prefer to keep that space for non-work, non-study. If I didn't have this [office] space, I would be needing to find something. I don't really want to be doing this at home.

Chloe

Getting away from the home environment and having somewhere like that [office space] focuses you in a way. As a part time

student, I do a lot of my stuff at home or at work. There are too many distractions at home. I can get distracted and not achieve anything in the comfort of my own home.

Gabriel

Other students (e.g. Ryka, Sameer) mention that coming to campus and not working from home can help them to avoid being alone and lonely. They both come to campus most days as meeting, and being surrounded by, other people can be encouraging and motivating.

The final aspect that supports HDR students when they work away from home is having a clean and wellorganised office space. According to several students, maintaining a neat home office can be challenging, at times not possible. Many indicate that it is often due to their family situation and living arrangements. Cooper explains that he shares a home office with his wife. The problem is not so much to do with the messiness; it is more that it is "intermingled with private, business and kids' stuff". Others showcase different layers of complexity which are present when working from home. At times, working from home appears to take away concentration from the research project.

I prefer a tidier workspace, but that is not physically possible in my house. There is a

lot of negotiating about who is working when and can I move that... Here [at university] it is cleaner, feels more work oriented. It is like I'm doing something with a bit more gravitas. I can leave all the piles of paper and crap at home and deal with them later. It helps de-clutter my thinking.

Amelia

Provided equipment and services

The second theme that students perceive as supportive to their work is related to equipment and services that are provided in the space. There are many individual aspects that students mention as important for their project, for instance, having a wall space in individual pods to map things out (Cooper), comfortable chair (Chloe) or have a space for occasional nap (Ryka).

While routines, working preferences and practices of the students can differ significantly, this theme will highlight aspects that at least a few students have mentioned as supporting their HDR work. This theme includes five subthemes: Lockers, Quiet rooms, Kitchen, Extra monitor and Printer and IT services.

Lockers

Lockers appear to be among the most important equipment students use and it is highlighted as important for their work. The survey shows that 50% of students use lockers every time they are

on campus or regularly. All interview participants stated that they use lockers regularly and they assist their work. Each student can choose either a locker from the bank of lockers or a mobile locker.

The main purpose for using the locker is to store things related to the HDR project, teaching or private matters. This includes electronic equipment, like laptops and cables, documents, files, stationery and personal items, like wallets and other valuables. Ryka shares that all of her necessary things are on campus, which makes the working process easy and convenient.

The benefit of using the locker, Mira points out, is that one can lock away items in the morning and pick them up in the evening. That allows the student to use the office space, have meetings elsewhere and not to worry about valuables on campus.

Quiet rooms

In terms of specific areas, quiet rooms appear to be among the most used and appreciated working areas. According to the survey, approximately 35% show that they use quiet rooms always when on campus or regularly, while 74% indicate that access to quiet space is

important to be productive. The rest of 26% see that as 'Somewhat important'. 100% of the interviewed participants identify quiet rooms as very important for doing research and refer to them multiple times during their reflection.

Quiet rooms are commonly used for quiet reading and talking on the phone. Some students, like Ryka and Sameer, use quiet rooms when the noise level goes up and they seek quiet place to go. For others it is important to shut the door as it refers to leaving distractions behind the door.

Access to really private, quiet space, being able to go and sit comfortably and close the door in order to read and concentrate. It is really important for doing research.

Chloe

A common practice appears to be using the quiet room for phone calls. Interestingly, many admit that they leave the quiet room after the phone calls or other brief chats are over. They do not seem to use the room to "hang out and keep writing" (Amelia).

The aspects of quietness and privacy that are related to quiet rooms will be discussed in the next theme 'Quietness and privacy'.

Kitchen

The kitchen is another space that is highly referenced across narratives. It is possibly the single most used space in the area and, interestingly, one of very few areas that does not have an explicit connection with research. 94% of survey participants claim to be using kitchen every time when they are on campus or regularly. On the same note, 80% indicate that having access to kitchen in the space assists them to be productive. The rest 20% see that as 'Somewhat important'.

The kitchen is claimed to provide both practical and social benefits. In a practical sense, kitchen equipment allows food and drinks to be prepared. A toaster, sandwich maker, microwave, big fridge, sink, dishwasher and, very importantly, water are the most frequently mentioned items that are available to students.

At times the kitchen provides a space where students can get away from their desks, walk to the kitchen, drink a glass of water, go back and continue working. Sameer refers to these moments which help him to think outside the box.

In terms of social sense, kitchen is commonly used as a space to bond and connect, in particular, at lunchtimes. The social aspect will be further discussed in the 'Social interactions' theme.

Extra monitor

Another piece of beneficial equipment is the stand-alone monitor that is available at standard workstations. When students connect the monitor to their laptop, they are able to look at a 'decent size monitor' (Chloe).

The provision of an extra monitor seems to be an essential option for a few students who mention that they not only prefer, or are used to, but have to work with two or more screens. Gabriel, for instance, mentions that being restricted to use only one screen would restrict him from using the space and, thus, be required to look for other office options.

Printer & IT support services

The printer is the single, most used piece of shared equipment, according to the survey. 57% state that they use the printer always when on campus or regularly. This number increases to 70% of students who have used the space 10 times or more.

The interviews however demonstrate that the printer is used most days the students are on campus. Typically, the printer is used for printing, copying and

scanning. Several students highlight that printing is free of charge, which is not only 'fantastic' (Chloe), but also significantly helps the research process.

For some students (e.g. Gabriel) reading and using print-out documents and articles is their preferred way of working. The documents the students claim to work with are mostly electronic, which is why at times they appreciate having it on paper. For other students (e.g. Sameer) printing allows them to take some materials, especially journal articles, home.

Before I go, I make sure that I've got the papers I need printed. I carry them in my bag so that I can read them in the evening, if I feel like.

Sameer

Both survey and interview participants demonstrate an appreciation for the IT support services at UTS. Firstly, the trial students were offered to use their own or faculty laptops. Many students opted to use the latter option. Survey shows that more than 70% always use the faculty laptops. This number may be higher as the responses were collected from all students, including the ones using their own laptops, and, thus, their responses were irrelevant. Overall, students are positive about the faculty offer of new laptops.

UTS provides us with laptops, which is wonderful. I'm using a MacBook Air for the first time in my life and feeling cutting edge.

Chloe

Secondly, students value UTS IT support services to fix IT and technology problems, when they arise. This is noted and appreciated by the most students, in particular, part-time students. They share that it is crucial to have their technical difficulties fixed fast as their time on campus is limited and precious. "It was really good that they set my laptop up with Dropbox and all that sort of stuff," deems Amelia.

On the same note, HDR students require that the physical and virtual space match. The survey, for instance, indicates that access to technology, internet and electronic library services, all asked in separate questions, are unanimously important for the HDR students to be productive. In fact, these were the only questions in the survey that got 100% response rate for the same response 'Important'. Amelia says that "the physical space and the virtual space - they need to work really well together" and, fortunately, this works out well in the new HDR space.

Quietness and privacy

According to the data, quietness and need for privacy are regularly

mentioned aspects of the space for students to be productive. 93% of survey participants perceive quietness as essential to be productive, while the rest (7%) see it as 'somewhat important'. No participants see quietness as unimportant or somewhat unimportant. There were no exceptions across the interviews – all participants referred to quietness multiple times; at times that was the most discussed aspect of the space.

The way students discuss quietness in the space, a seemingly straight forward concept, appears to be somewhat complex and fluid. For some students quiet space is referred to as the opposite to noisy space, almost a complete silence. For some it is a space where they can contemplate, concentrate and focus, while for others – it is a synonym for no or little distraction. The latter is often referred to as the number of people in the room.

Ryka is one of a few students who claims that the office should have complete silence at all times. However, when she discusses the quietness, certain conditions appear as to what should and should not be allowed in the UTS space.

There should be silence, except for occasional talking in the kitchen during the lunch hour or coffee time. That's acceptable. Phone ringing occasionally and occasional conversations in the cubicles here or there. That's just a part of a normal kind of life in an office space.

Ryka

Similarly, Gabriel demonstrates that he values the quietness in the space as it helps to maintain discipline. "If there were lots of people that I knew and it was very noisy, I would probably be tempted to join in," he claims. From that point of view, it is helpful that the space does not get too loud as it allows students to study and focus. "It is good that there is that discipline about the space," he concludes.

Some students, on the other hand, admit that they cannot work in complete silence. Amelia, for instance, shares that she could not work in her previous work office – it was too quiet. When discussing the noise level in the new space, she says that "it is just the right amount of background hum". One of the reasons, she continues, it does not get louder is that students in the space are 'very respectful'.

When students discuss quietness, they explicitly or implicitly tend to refer to privacy. Privacy comes up in the most of

the interviews and is regarded as supportive of research work.

Participants tend to discuss privacy in the space in two ways. The first one is having a locked space where only HDR students are allowed. The survey shows that 87% perceive locked access to premises as important to be productive. Some of the interviewees discuss that it is nice that only HDR students get access to the space; nobody else can come in (Amelia).

The second way the privacy is discussed is more personal. It refers to being seen and surrounded by other people. There seems to be a consent among many students that being observed can be distracting (Chloe). Privacy seems to matter significantly, especially when students look for a workstation to use. Some try to go as far from others as possible, while others mention how a wall around the pod desks is helping them to hide away (Cooper).

Both quietness and privacy frequently come across the survey when the students are asked what they require to be productive. The responses include, but are not limited to, 'silence', 'quiet and friendly atmosphere', 'shared work ethic, respectful social conventions', 'mindfulness of others', 'sound proof private pods'.

These survey responses as well as interview narratives indicate that quietness and privacy should be available, yet not necessarily permanently present. The space is designed for students to be flexible to move around different zones of the space depending on the activity and needs. The zoning allows some areas to be more quiet and private than others. It means that students can still collaborate with others, when needed, and at the same time find a quiet space. This is why students regard zoning in the space as supportive and purposeful.

Social interactions

While quietness and privacy are important for HDR students, so are social interactions. Students use different wording when referring to social interactions, for instance, have a chat, bonding with colleagues, getting feedback.

Social interactions appear to be highly valued, although appear difficult to achieve. That is mostly due to isolation, research being a 'lonely journey' and not being understood by friends and family. They are common experiences for HDR students.

Your PhD is kind of a lonely thing. Nobody gets why you are doing it or what the hell it is. I keep coming back to being isolated at

home, just me. Talking to other grownups here [in the space] is nice. You feel less alone.

Amelia

Most of the social interactions do not appear to be full conversations. Rather, they are labelled as 'brief chats', 'just a hello' or 'purely professional conversation'. Despite not having deep relationships with each other, most of the students still value any level of the social aspect.

Social interactions tend not only to be pleasant, but also beneficial for work. Some of the main benefits, according to the students, are receiving help, sharing literature, equipment, reflecting on individual experience, escaping loneliness and getting a different perspective.

We don't talk as much, but we talk during lunch and we walk together to the station in the evenings. If you have a confusion, you can go and ask people, especially to those working in the same area. If you like to read a book and you don't have it, you can go, borrow it and talk to each other about those things. That's very necessary to go through the PhD journey.

Sameer

I don't think they are deep relationships in the sense that you would hang out with them. We do speak and interact, but it is all about work. It is not really about going beyond that and sharing personal life. They are all extremely helpful in terms of sharing information about various administrative things that need to be done or speaking about how far they have gone in their project.

Mira

This social dimension can also motivate students to use the workspace more frequently. Gabriel, for instance, is a part-time student whose friend is about to start using the new office space. He is considering coming to the office on the days when his friend comes. "It will also be a reason to go," he concludes by considering how it could help his candidature, "I would actually know someone. We could help each other to focus and work."

When it comes to social interactions, the participants recognise and appreciate the benefits of the space layout and zoning. Students observe that interactions and bonding typically happen around the kitchen area, which is at the end of the space (space map available in Attachment 1, last page). When students discuss their social encounters in the space, the kitchen is referred to by many as a synonym for meeting others. On the other hand, students who require quietness, focus and intense thinking tend to work further away from kitchen. Often this happens in the opposite side of the space or in quiet rooms.

If I'm in the middle of something, I would hardly want to chat. Whereas, if I've just finished something, then I would definitely want to have an in-depth chat with someone. Kind of relax or have my coffee in the kitchen and talk to a couple of other people.

Ryka

Another aspect of how social interactions can support students work is in the promotion of inclusion and belonging. The belonging here is felt as being a part of a group who share similar practices. This can include others who pursue research or academics in general. The survey shows that the people in the space are what make this community unique – they are mature and they have a purpose. It is often stressed that an important aspect is to have people around who can understand and relate to, at least partly, what the HDR student goes through, as friends and family often cannot do it.

Sometimes it is just nice to know other people who do the same thing. They kind of get it. It is like we are all in it together. It is nice that it's called the HDR Students Space. The naming is quite inclusive.

Amelia

Interestingly, the social belonging to the same space and community, does not necessarily have to be socially active. Even passive social encounters appear to be beneficial and valued. The very fact that I am going into a space where there are other students. We don't go and have a coffee, but at least we say hello. There is that contact, whereas before I may have seen them once a year.

Gabriel

The way students interact in the space differs from person to person and from day to day. However, both interviews and surveys demonstrate some common interaction practices. Overall, full-time and international students are more inclined to look for socialisation opportunities, whereas part-time, domestic and final year students are less likely to engage with long social interactions, mostly due to time pressure and other commitments.

The most useful thing - it puts me in touch with other people who are also doing this very solitary exercise of PhD. It is nice to be among them.

Mira (international, full-time student)

I've got some tasks that I need to achieve. I got to tick some boxes. I'm not really here to chat. For me it's okay that I come here and not really talk to people.

Chloe (domestic, part-time student)

Another benefit of being surrounded by HDR students is that it allows them to see the potential of how the space is, and can be, used. Mira, for instance, reveals that she is not used to spaces like this. After using the space for

several months, it is still a new concept for her. "I am still figuring out how best to use a space like this," she adds.
Seeing others using the space in their own unique ways is crucial for students to consider the scope of available opportunities. In particular, this matters when the space is rather an innovative concept. Several interviews showcase the social learning possibilities and shared practices.

I actually just figured that out when I saw somebody using it [sit & stand desk] last

week. I didn't actually know that they raised up until recently.

Cooper

Emotional attachment

The emotional attachment to the space is another aspect that, often overlooked, appears to be supporting HDR students' work. The survey shows that 79% of students are satisfied with the workspace. These students have given the rating of 5, 6 or 7 in the Likert scale of 1 – 7 where 1 is 'very unsatisfied' and 7 'very satisfied'. Out of 79%, 50% have opted for the highest rating 7 (see Figure 1).

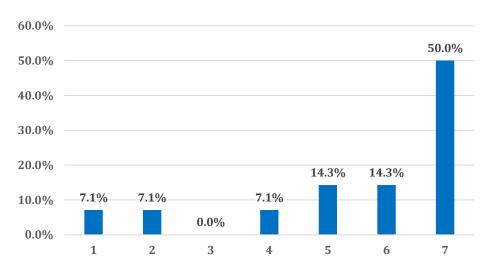


Figure 1: Responses for the survey question 'Overall, how satisfied are you with the new study space?'

The attachment to the space is described differently by different students. According to the interviews, the relationship with the space matters and can affect their working experience. The space is commonly described as a 'productive', 'welcoming space' (Gabriel), it has a 'soft and mossy feel',

'the colours are soothing and calming' (Cooper). For others it is a space where to come and where they belong (Amelia, Mira). "It is a space that, I think, everyone feels is theirs," Mira concludes.

Different equipment also appears to generate numerous emotions and feelings. At times it can engage the person to use particular equipment. "I have never had a mobile locker. It's fun!" Mira shares.

Personalising the space

The final theme that supports HDR students' work is possibility to personalise the space. This theme is rather fluid and can include, but is not limited to, implementing changes and integrating personal items in the workspace, having a choice and flexibility regarding the space.

Students value that they are given a chance in regards to different aspects of the space. They can choose: a workstation, a faculty laptop (Windows laptop or Macbook), and a locker (mobile or bank of locker). Others point out the benefits of flexibility regarding their working schedule, in particular part-time students. Some come to the office in evenings, others afterhours or in weekends.

In my work environment I'm conscious of being seen. I don't have that scare of coming in here. It's just good not to worry about what other people might be thinking of you. That's a waste of mental space.

Chloe

Amelia also adds that she was happy when the faculty sent out a student survey about the experiences in the space. Sharing her feedback made her feel heard and contribute to maintenance and improvement of the space.

Personalising the space also comes across through a possibility to coparticipate in the creation of the space. This can include bringing personal items from home, putting up flowers or showcasing photos with family or friends.

Several narratives illustrate that the need to personalise comes across almost as owning certain elements of the space. One of them is related to so called 'hot desking'. One aspect of the space is that students are able to move around and choose different study spaces, however some students have decided to claim a particular station. That, according to them, supports their work.

The reasons to occupy a specific desk differ from person to person. For some,

they need somewhere to put their books and files (Sameer), for others it is about convenience to start where they left the previous day (Mira). Similarly, Cooper shares that he has commandeered an individual pod. Using the same space helps him to "put stuff up on the wall so I can refer back to notes and map things out".

Among those who have occupied a particular workstation, there appears to be a common theme - need to spread out, need for a space where to 'put stuff' (Gabriel). At this stage the space is considered to be underutilised and it can accommodate it (Chloe). However, it is likely that occupying a particular space will not be possible, if more people start using the space.

At the moment it is possible to do that here because there aren't too many people working in this space, but I can't imagine being able to do that if this was being used to full capacity.

Mira

Although some students opt to use a particular workstation, some of them acknowledge that other people may use the same space. Interview narratives showcase something that comes across as a shared ownership of the space and specific workstations.

Other people use it [quiet room] as well, but I'm the person who dragged the chair in there.

Chloe

Sometimes you don't really end up making that space your own because you also know that it could be space that someone else comes and uses later on.

Mira

HOW DOES THE NEW LEARNING SPACE CONSTRAIN THE PRACTICES OF HDR STUDENTS?

The second section is concerned with the second research question which looks at the constraints HDR students have in the new learning space. Overall, there were comparatively few references to what constrains the students' experiences in the space. Half of the survey participants state that there is nothing that constrains their work.

2 out of 15 survey participants mentioned that they have used the space less than 6 times. Both participants indicated that the distance from campus limits their usage of campus space. One student is a distant student, while the other lives 2.5 hours away from Sydney city and attends the campus mostly during supervisory meetings and organised HDR activities. The participants, as well as the authors of the study did not perceive this as a

constraint which is why it was not included in the six themes. In future studies, however, the 'distance from campus' aspect could be studied as one of the participating factors.

This section will discuss six themes that were common in constraining in HDR students' work. The themes are: Lack of natural light, Detachment from nature, Limited number of adjustable desks, Hot desking, Sterile space and Temperature. The first four themes (Lack of natural light, Detachment from nature, Limited number of adjustable desks, Hot desking) were mentioned by approximately a third of the survey and interview participants, while the last two themes (Sterile space, Temperature) - by around 2 - 3 students. Each of the six themes will be discussed further in the section.

Lack of natural light

Neon lights or no access to natural light were among the most common constraints in the space. Although one person mentions that the space is well lit (Gabriel), some argue that it is not a pleasant experience to be in a neon lit room (Chloe). Ryka agrees and adds that it is rather challenging for the eyes to spend the whole day in the neon light. "It restricts the amount of time I can spend in this space, because the

artificial glare really affects me," she concludes.

On a similar note, some students mention that the space does not have access to natural light, especially the back area (Sameer). At times some students (e.g. Ryka, Sameer, Cooper) who are affected by the neon light prefer to work some of the time in the library that has less harsh, and more natural, light.

Detachment from nature

Being detached from nature comes across as another constraint. Not being able to look outside to a natural environment, like a park or tress, or to check the current weather, comes across several narratives. Ryka points out that HDR students who do intense mind work and spend long hours in an office require more access to nature for their mental health and general wellbeing.

80% of survey participants state that a green area and plants are important in the HDR workspace to be productive. Consequently, the majority of interview participants recommend the faculty to organise more indoor plants, general greenery or flowers. This recommendation is raised equally by male and female participants.

Hot desking

One of the major changes that the space provides is the introduction of 'hot desking' or ability for students to choose a different study space every day. There are some who support this idea and others who would rather have a standard desk.

On the one hand, some prefer the hot desking idea as it means less people have traditional office spaces than other office spaces in the faculty (Chloe). Part-time students, especially, highlight that having a workstation allows them to be a part of the university and at the same time not feel guilty about taking away the space from others.

It is no one's space. You can just take whatever desk you like. For me that's a much better thing because I don't feel like I'm taking anything away from anyone else. I get the benefit of actually using a space.

Gabriel

On the other hand, some people indicate the constraints behind 'hot desking'. Chloe shares two main arguments of not preferring the concept. Firstly, it is easier to come in the morning and have the desk set up in the way it was left the previous night. Setting up the desk every morning can be a barrier to get into the research project. Secondly, HDR students tend to accumulate many things over a period

of time. It is preferable to leave some of these things on the desk.

Interestingly, when asked how long it takes to pack and unpack, Chloe responds "Well, I don't really do it. I just pack away my laptop. But I would find that a pain in the butt to do so". A similar response comes from another student, Sameer, who is not fond of the concept, so he does not observe the 'hot desking' protocol. This indicates that students who dislike the 'hot desking' idea often are not fond of the concept, however practically it may not affect them as much.

Behind the discussion of whether hot desking is supporting or restraining students work, there is an increasing problem that comes across in several narratives. It is related to the students who have already occupied a particular desk and use it when on campus. Sophia, a part-time student, has sent an email to the faculty sharing her thoughts of feeling a vagrant in the space. Although there are many workstations available, more and more are being taken permanently. At times, she notes, no students are seen to use the occupied desk.

I want to pass on my concern about "settlers vs vagrants" social structure which I experience when working there. Each week I

find more and more "occupied" desks which are unavailable for me to use. When I say "occupied" I mean that they are covered with objects. In some instances it is a lot of objects such as piles of books, flowers and photos. In other instances it is something as simple as a locked mobile desk unit which has not been returned home. These items say "go away, this space is being used". Frustratingly, however, the users are rarely seen

Sophia

Sophia is addressing the faculty by questioning if this space is consistent with the ethos of the space. She wonders if the policy of "putting away your items if you are away from your desk for an extended length of time" may be too open for interpretation. Although not necessarily being indicated as constraints, similar remarks are voiced by other students across the interviews.

Several students seem to take one step back and reflect on the changing practices in the space. Ryka shares that at times it takes time for her to get used to new practices, especially they are new and unfamiliar. Gabriel agrees and concludes that "moving to a space like this is a change that some people will adapt to easily and others won't".

Limited number of adjustable desks

More than half of the interviewed participants indicate that they would

prefer having more adjustable sit & stand desks. Currently, 14 tables can be raised for the students to stand and work (Brochure 2016). The problem with the tables, according to Cooper, Sameer and Chloe, is that all adjustable tables are positioned in one location which is near the kitchen. The kitchen however is considered to be more social and distractive area.

The location appears to be the reason why they avoid using these tables. Chloe, for instance, reflects that "it's more important to me to be away from the action than it is for me to have a sitstand desk". Sameer, on the other hand, points out that he would prefer to use an adjustable desk if it were in a pod.

Students who have used the sit & stand desks in other office spaces, share some of the ways they supported their work. Cooper, for instance, mentions that being able to stand and work is important to keep him energetic and productive.

If I come in-between classes and sit down, I am usually less energetic. But if I am standing, I can fly in and 'crack out' a bit of work. I know I am much more productive standing up than sitting down.

Cooper

Sterile space

Three participants have made brief references that the space comes across

as 'too sterile' and 'is missing a vibe'. Chloe shares that her research project is about people, relationships and feelings and questions if the "sterile and neon lit" environment can be limiting it. Mira, on the other hand, observes that the space is too much about the structure. At times she opts to go to the library that has posters and is more lively. Another person, who has given oral feedback to the faculty manager, notes that the space is missing a vibe. No further details were shared with the research team.

Temperature

While a couple of students (e.g. Gabriel) mention that it is good to have an airconditioned space, some of the students experience issues with the temperature in the room. The air conditioning does not seem to be working right; it is claimed to be either too cold or airless.

Chloe reveals that HDR work is a fairly sedentary activity with a lot of reading and writing. In these cases the normal office temperature may get too low and it can get cold. Sameer adds that it gets so cold that "I'm used to come with 3 and 4 layers of clothes. Some students even come with their heater and blanket".

Sameer refers to an incident when he called the maintenance unit in the university and found that the temperature in the space was 19.5 C. After several requests the temperature was not changed. Students conclude that more climate control in the space would be appreciated. Both students who shared their experiences about temperature were interviewed in late winter, early spring.

HOW DID THE WAYS OF WORKING CHANGE IN THE NEW LEARNING SPACE?

The third section corresponds the third research question and is interested in understanding the ways of working that have changed in the new space. Initially, this question was aimed to focus on the second year HDR students and above. The collected data, however, involved many first year students (87% in surveys, 57% in interviews) and final year part-time students (7% in surveys, 29% in interviews) who previously have not had a desk. Therefore, the idea to focus on particular years was dismissed. Instead, most of the participants have had previous office or study spaces and they were asked to compare their experiences with them.

Some aspects relevant to the third question were partly covered, or touched upon, in the previous two

sections. Only parts and information relevant to this question will be covered here.

While two interviewed students, both first year, full-time students, note that their practices have not changed in the new space, the majority of students demonstrate change in their research practices. The most apparent changes have been noticed by part-time students. Among the most important change for part-time students is considered the eligibility and opportunity to have an office space on campus. Before the opening of the space, it was extremely difficult for a part-time student to get a permanent office space. Mostly it was due to desk allocation priorities that were not favourable to part-time and/or domestic students.

The launch of the space appeared to provide more workstations and an opportunity to reconsider eligibility criteria for HDR students. A part-time student Amelia, for instance, observes that having an office space has made "a huge difference". She pinpoints several changes in her candidature after being able to work in the space:

- She became more accountable;
- It gives her impetus and helps to push the candidature ahead.
 After starting to use the new

- office space, she believes she can finish the thesis by the end of year;
- More teaching engagements;
- More random information about workshops and conferences on campus
- It encourages her to get more on campus;
- It enables her to connect more with people;
- Not feeling left out, as this space does not differentiate whether one is a part-time or full-time student.

Another part-time student Gabriel comments that having an office space on campus has given him more predictability; there always be a space for him.

Other changes have been observed regarding the hot-desking. One of the main changes, noted by several students, is being more mobile.

This space has pushed me into being mobile. Even though I have commandeered a cubicle and I have a locker here, it is not enough space for me to really set up a shop, like to put out my books, files or papers. That idea of being more mobile is compelling me to not to have piles of papers sitting on my desk. I also carry less. I have stuff in my locker.

Cooper

Some students note that not being able to spread out too much has triggered them to become more focussed. Amelia and Gabriel, for instance, mention that before coming in they make sure that they are clear on what they are going to do on the day. Based on the plan, they decide on whether there are documents they need to bring in. Also, both add that being away from home can take them away from distractions occurring at home.

Others state that they can concentrate better in the new space. Chloe shares that in the previous work space she needed to wear earplugs and earphones to cut out the noise. In the UTS space, she does not have to. The availability of quiet rooms may be one of the reasons for the change. Whenever someone calls, students seem to take the call in the quiet rooms. Most of the people appear to be aware of the practice which provides more suitable space for concentration.

Being less alone and more socially engaged is another change observed across narratives. This is particularly true for those who have previously intensively worked from home. "I am just sick of doing this alone," comments Amelia. Other students, like Sameer, show that the facility provides the

opportunity to discuss their individual studies. This possibly is one of very few places where that is possible. When confused, Sameer goes and asks other students about possible solutions. Other students, he adds, do the same. Importantly, those coffee break conversations for some will be their only social interaction of the day.

Another changed practice that can be implicitly observed is that students can see how other people use the innovative space. Previously, using standard workstations that might not have been possible. However, being in the new space with innovative quiet and collaborative spaces, equipment and overall transparency and openness, there are more options to observe practices. Cooper, for instance, shares that he observed someone using the adjustable table that he was not aware was there. He claims he will try out the adjustable desk in the coming weeks.

Finally, spending long working hours in the space, mostly passively sitting, has made some more conscious of health and general wellbeing. A first-year student observes that she sits for a long time and is not sure how it will affect her spine in a long term. The space is also noted to be quite dehydrating which affects the skin and thirst (Mira).

Similarly, some claim that neon light and having not enough natural light may affect their general health (Sameer). Ryka spends less time on campus due to unnatural conditions, e.g. no natural light, not enough plants. "In the first semester I spent the entire day here, but then in the second semester I tend to come in at lunchtime rather than spend the whole day," concludes Ryka.

Ryka also shares that, similar to many HDR students, she often works unreasonable hours which in this space is particularly easy. Quite often she would like to have a nap during the day in a dedicated area. At this stage, however, a daybed option is not available.

WHAT ARE THE HDR STUDENTS' EXPECTATIONS OF THE PROVIDED LEARNING SPACE?

This fourth section will focus on the aspects that HDR students expect and need from the working space in answer to the final research question.

Based on the variety of responses, some students found it rather difficult to discuss their expectations of the working space. They often came up with one or two aspects, however found it challenging to provide explicit detail.

On the other hand, expectations regarding the space often came across when sharing lived experience in the space. These types of responses appeared to be relevant and useful in understanding the HDR student expectations from the space. Consequently, this section is based on data that has been collected from two types of responses: firstly, direct survey and interview questions about HDR students' needs and expectations of the space and, secondly, references and reflections about the requirements of the space when students discussed their lived experience.

The expectations of the provided learning space are summarised across the four themes: Physical, virtual space and equipment, Space free off distractions, Ability to personalise space and Belonging to, and interaction with, university community. The themes will be discussed further in the section.

Physical, virtual space and equipment

The most common need regarding the work space is a physical place where students can work. Ability to study on campus comes across most narratives. It assists with working not only on the research project, but also encourages attending events and networking.

The preferred physical place is often referenced as a space where one can sit and stand while working. A few narratives show that an established workspace is needed, while others mention that comfort is important due to long working hours that are spent without active movement.

Being able to spread out and have access to place where to 'put things' come across several narratives. For some that is related to easy and safe storage available in the space. "No matter how paperless you are, there is stuff that you have. That needs a home," reflects Amelia.

The working space should involve a computer, preferably with available multiple bigger screens, adjustable table and comfortable chair. This does not mean that every space has to have these elements; rather, they should be available if needed.

Environment and aesthetics matter.
Although these aspects often are implicit and they differ from person to person. Common elements that students need are a well lit environment, preferably light that is not too harsh on one's eyes. Access to natural light, plants and greenery are increasingly important.

Physical space should work well together with virtual space. That should include access to a stable internet connection, technology, like a printer and scanner, and a library, both physical and electronic.

Students should be able to spend long hours without disturbance. Flexibility to use the workspace is a must due to different working schedules. The space should be locked and available to a certain number of HDR students.

Access to a kitchen and, especially, drinkable water, tea and coffee is often mentioned as important. Keeping it rather distant from the workspace may be important as it allows the students to briefly leave the desk and escape their work. Using the kitchen for occasional 'lift conversations', when needed, is also valued.

Space free of distractions

Quietness is the most mentioned and required aspect in terms of HDR students' needs. Quietness is needed for concentration. This means being free of auditory and visual distractions, for instance, people passing by, loud background conversations. Interestingly, students seem to require relative quietness, not complete and constant silence. The right amount of background hum is acceptable. They

should be able to access the quiet area at any point in time.

Privacy is also mentioned as important for research work. This can involve space where one can be alone, can close the door from unwanted distractions and passing people.

To avoid distractions in the space, several students point out that respect, shared work ethic and mindfulness of others are important. The management of the workspace can co-participate and encourage these and similar values.

Most students value the possibility of being in an environment with different zoning. In some cases they need quiet space, other times a more social environment is needed for chat or collaborative work with another student. Importantly, quiet space that is free of distractions should be seen as the most important type of space for research work.

Ability to personalise space

The need and opportunity to personalise space often comes across in the data. HDR projects are rather individual and lengthy endeavours and students make multiple references to the need to have a choice and flexibility in regard to their work space. This mostly refers to integrating individual

preferences, for instance, occupying and personalising a space.

At times personalisation can include an opportunity to control the environment. The ability to adjust the table, climate or light in the room are perceived as strongly preferred options.

Belonging to, and interaction with, university community

Students see the need to be a part of the university life and want to belong to the university campus. This comes across particularly from the part-time students. Interviews with all part-time and domestic students illustrate situations where they would like to feel more connected with the campus and university community. In practice, however this, they reflect, can be challenging. At times, they struggle to come to university. Alternatively, international students tend to be mostly full-time students and, thus, they do connect themselves more with the university.

The benefit of physically being on campus in this case is not limited to a space where the student has a workstation. It also comes across through accessing teaching jobs, meeting other students and academics, supervisors, benefiting from the library and events. One of the students points

out that she was keen to get an office space on campus not so much for the physical desk, but more for networking opportunities and being surrounded by people from the department (Amelia).

Social interactions in the university at large appear to be essential. Many students refer to doctoral study being excessively individual, at times "very, very lonely" (Sameer), and, therefore, interactions, although not always available, are valued. "I am kind of used to doing it [PhD] on my own, but it would be nice if I didn't have to all the time", indicates Gabriel.

Opportunities to interact with other HDR students are mentioned as helping not only with belonging to academia, but also one's sanity and general wellbeing. "Having that opportunity to talk to someone who also is undergoing the same journey, I think it helps you to share and reduce your stress," illustrates Sameer. Cooper continues that sharing everyday chats, especially frustrations, with other students have helped him as a PhD student and as an individual. Consequently, HDR students need a platform and space where to socialise.

For some students the social interactions are more active, while for others – more passive. Even being

surrounded by other HDR students appear to be beneficial.

Several differences can be noticed between social practices and preferences of individual students. Full-time and international students appear to value more interactions with other students than part-time and domestic students. Social practices by full-time and international students appear to be regular, mostly professionally driven and often used to help or being helped with advice, literature and general support. These students tend to create regular routines, for instance, having lunch or walking together to the station in the evenings (Sameer).

Part-time and domestic students, on the other hand, appear to be less likely engaged in social interactions, mostly due to time limitations, other commitments or coming to the space with specific tasks. The part-time and domestic students still value social interactions, however they tend to be more limited to practice them. "I always say hello to them, but I don't really chat," explains Chloe. The accounts show that part-time and domestic students use the space more regularly in alternative times, for instance, evening or weekends, and they tend to have specific tasks in mind.

Part-time and domestic students admit that they wish to engage more with other students, however it can be challenging due to the ways they use the space. Some would need to use the space more routinely to engage with others in more depth (Chloe).

CONCLUSION

Conclusion

This exploratory study was concerned with understanding the experiences of HDR students in a shared activity-based workspace that was launched for in 2016. The space was the first of its kind in the faculty and was based on recent research and learning space practices. The new space offers a variety of zones which ranges from individual pods and quiet rooms to collaborative and project spaces.

This study aimed to investigate the experiences of HDR students who were allocated to the new learning space. The conceptual framework of the study consisted of a case study, hermeneutic phenomenology and a focus on four core questions:

- 1. How does the new learning space support the experiences of HDR students?
- 2. How does the new learning space constrain the experiences of HDR students?
- 3. How did the ways of working change in the new learning space?
- 4. What are the HDR students' expectations of the provided learning space?

The collected data showed that space plays a crucial and often

underestimated role in the HDR students' work. It can motivate and engage. It can distract and exclude. The study highlighted the current experience of the students in the space.

Although the research projects and practices can differ from student to student, there were common themes that illustrate how the space can support and constrain their practices.

The main aspects that supported HDR students were: Workspace on campus, Provided equipment and services, Quietness and privacy, Social interactions, Emotional attachment and Personalising the space. Quiet rooms and kitchen, for instance, were among the most used zones in the space, yet used for different purposes. Quiet rooms provided more space for concentration and sound isolation while kitchen was used for socialisation and breaks. Students indicated that a guiet and private space could be as supportive to their work as social spaces. Being flexible and have a choice in terms of using the space were also common features that supported the experiences.

Although many students indicated that there were no constraints in the space, around half of the participants shared aspects that limited their work. The

CONCLUSION

most common ones were: Lack of natural light, Detachment from nature, Limited number of adjustable desks, Hot desking, Sterile space and Temperature.

Data also showed that the new space triggered some changes in HDR students' work. The most important change was noted by the part-time students – they can get an office space on campus which is perceived as a 'huge difference'. The other change related to the introduction of hot desking workstations. The change had prompted the students to become more mobile and often more concentrated, focused and less distracted. Students also claimed to feel less isolated and more socially engaged. Seeing different students using the space at times had changed the practices of how others use the space, for instance, in learning how to use adjustable desks.

The expectations HDR students have from the provided learning space seemed to concentrate around four major elements:

- 1. Physical, virtual space and suitable equipment.
- 2. Space free of distractions.
- 3. Ability to personalise space.
- 4. Belonging to, and interaction with, university community.

Data also illustrated different social practices between full-time and part-time students. Full-time students, for instance, were more inclined to socialise, whereas part-time students were less likely to engage in social interactions, mostly due to time limitations and other commitments.

Research shows that changing the environment can change student practices (Guardino & Fullerton 2010). This study confirms it by showcasing some supportive changed practices, especially for part-time HDR students. Overall, students have showed happiness and support for the new learning space. It motivated many students to come more often to campus and assisted with their diverse needs and expectations, for instance, by providing a mix of quiet and collaborative spaces.

It is necessary to recognise that student relationships with the space are constantly developing (Ryka) and moving to a new space is a change that some people will adapt to easily and others will not (Gabriel). By the same token, the faculty needs to stay attentive and responsive. It is essential to be aware of ongoing and preferred practices of students who use the space. At times, just being heard is considered as important aspect.

CONCLUSION

Likewise, the faculty should coparticipate in co-creating shared values in the space to encourage respectful and ethical practices and to avoid confrontations. This should be taken into account when considering further actions and policies regarding the new HDR student space.

This study also observes that more research is needed in understanding

the needs and practices in different schools in FASS. The students from the School of Education, School of Communication and School of International studies appear to use the space differently, however not enough data was collected to study it. Similarly, it would be useful to consider ways to better engage and support distant students.

References

Allen, I. E., & Seaman, C. A. (2007). Likert scales and data analyses. *Quality progress*, *40*(7), 64-5.

Brochure (2016). Shared HDR Activity-based Workspace. Faculty of Arts and Social Sciences, Faculty of Health. Sydney: University of Technology Sydney.

de la Harpe, B., & Mason, T. (2014). A new approach to professional learning for academics teaching in next generation learning spaces. The future of learning and teaching in next generation learning spaces, 219-39.

Gardner, S. K., & Gopaul, B. (2012). The part-time doctoral student experience. *International Journal of Doctoral Studies*, *7*(12), 63-78.

Guardino, C. A., & Fullerton, E. (2010). Changing behaviors by changing the classroom environment. *Teaching Exceptional Children*, *42*(6), 8-13.

Holliday, A. (2016). PhD students, interculturality, reflexivity, community and internationalisation. *Journal of Multilingual and Multicultural Development*, 1-13.

Janta, H., Lugosi, P., & Brown, L. (2014). Coping with loneliness: A netnographic study of doctoral

students. *Journal of further and Higher Education*, *38*(4), 553-571.

Keppell, M. (2013). New Generation Learners: Personalised Learning in a Digital Age, 33rd Annual Seminar, International Society for Teacher Education, Hong Kong.

Kinsley, K., Besara, R., Scheel, A., Colvin, G., Brady, J. E., & Burel, M. (2015). Graduate conversations:
Assessing the space needs of graduate students. *College & Research Libraries*, 76(6), 756-770.

Kitsantas, A., & Dabbagh, N. (2011). The role of Web 2.0 technologies in self-regulated learning. *New Directions for Teaching and Learning*, 2011(126), 99-106.

Langdridge, D. (2007). *Phenomenological psychology: Theory, research and method*. Pearson, Harlow, Essex.

Larcombe, W., & Malkin, I. (2011). JD First Year Experience: Design Issues and Strategies, *The Legal Education Review*, *21*, 1-22.

Lundström, A., Savolainen, J., & Kostiainen, E. (2016). Case study: developing campus spaces through cocreation. *Architectural Engineering and Design Management*, *12*(6), 409-426.

Mantai, L., & Dowling, R. (2015). Supporting the PhD journey: insights from acknowledgements. *International*

REFERENCES

Journal for Researcher Development, 6(2), 106-121.

Marsh, H. (2006). University Industry Links: The Big Picture. In: C. Denholm, T. Evans (Editor) *Doctorates downunder: keys to successful doctoral study in Australia and New Zealand*, Camberwell, 60-7.

Pegrum, M., Oakley, G., & Faulkner, R. (2013). Schools going mobile: A study of the adoption of mobile handheld technologies in Western Australian independent schools. *Australasian Journal of Educational Technology*, 29(1), 66-81.

Smith, J. A. Flowers, & Larkin (2009). Interpretative Phenomenological Analysis. Theory, method and research. Sage, London.

Strayer, J. F. (2012). How learning in an inverted classroom influences cooperation, innovation and task orientation. *Learning Environments Research*, 15(2), 171-193.

Thomas, G. (2011). A typology for the case study in social science following a review of definition, discourse, and structure. *Qualitative inquiry*, *17*(6), 511-521.

University of Technology Sydney (2016). UTS Higher Degree Research guide 2016/2017, Sydney.

Wilson, G. and Randall, M. (2012). The implementation and evaluation of a new learning space: a pilot study. *Research in Learning Technology*, 20(2), 1-17.

ATTACHMENTS

Attachments

Attachment 1: 'Shared HDR Activity-based workspace' brochure