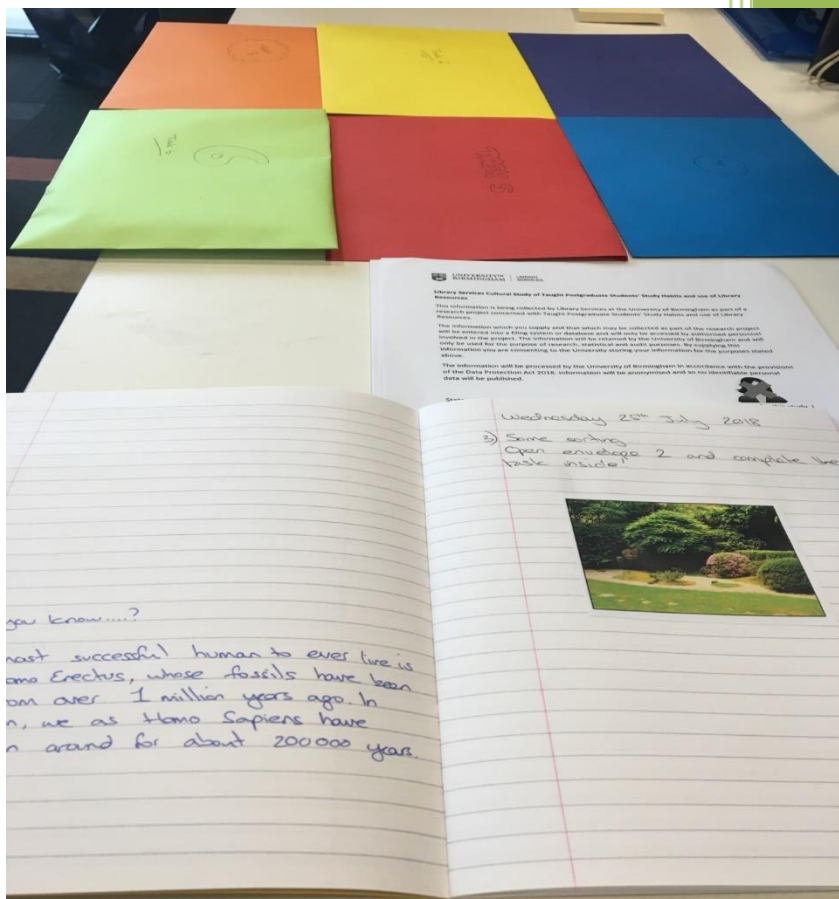


Analysis of UX Cultural Probe: Study of Postgraduate Taught Students, University of Birmingham



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EXECUTIVE SUMMARY

Cultural probe

This study was based on the production and analysis of a cultural probe research project that was completed by 10 Postgraduate Taught (PGT) students. This cultural probe, structured around a diary format, contained 10 tasks for participants to complete, each lasting under 30 minutes and to be completed over 10 days. The tasks were made as open as possible so that the data is user guided rather than entering the research project with any preconceptions or clear aims. This differs from common surveys that often have narrow questions. We can learn a huge amount about how our users experience (and feel about) services, spaces and products by adopting rich qualitative and quantitative research methods that come under the umbrella term 'UX' (User eXperience). Crucially UX research explores user behaviours and needs, not just what users say they want. UX research is becoming more important as higher education is being forced to adapt to the increased importance of students as high paying 'customers' of the university.

The central reason why a cultural probe was the best option we felt for our UX research project was because with a cultural probe you are able to test a huge variety of different UX techniques in one study. Being able to draw on a variety of research techniques, while comparing the success of each one in unearthing student issues, provided us with a huge amount of in depth data to be analysed. The study focused on PGT students as they are often under represented due to the amount of Undergraduates (UG) and the focus put on PG researchers as a Russell Group University. There was also a trend in this year's guild officer's successful manifestos with many referencing PGT students.

Findings from the cultural probe

The diary task answers and 1 hour debrief interview were coded and analysed to pick out key overarching themes for all 10 participants based on the consistency and importance of issues raised.

- 1) It is very important to socialise and take part in activities outside of your PGT course- All 10 participants within this study mentioned the importance of making friends at the university and especially within similar courses as a central support mechanism.
- 2) It is important to have a variety of bright study spaces- 7/10 participants said that their mood and the type of work decides what type of study space they use. 7/10 participants also said that the brightness of a study space is essential for their productivity in that space and so they choose spaces near windows.
- 3) The University of Birmingham has too many students and too little space/staff- 6/10 participants mentioned they had issues with study space or having too many students, but only 1 participant suggested a dedicated PGT space.
- 4) PGT course lacks organisation and had an unbalanced workload between terms- All 10 participants emphasized issues with course organisation centered on a lack of balance in termly workload and poor communication between lecturers and students.
- 5) Masters degrees involve a high level of stress and pressure compared to Undergraduate- 9/10 emphasized the level of pressure being a lot higher compared to UG relating to being expected to know information and an unbalanced workload.

- 6) Appreciates all of the library and university services that are available- 9/10 appreciated the library and it's services with 7/10 saying it is their preferred study space.
- 7) New University of Birmingham students who have not been here at undergraduate require extra support and especially if they are international students- 7/8 students who did not complete their UG at the University of Birmingham had issues relating to being new to the University and for the internationals they had issues with the British system. This relates to an expectation that PGT students know certain information.
- 8) Students find most information on university and library services online- 8/10 students and all of the students who were new to the university found most of their information regarding the library and university services online.
- 9) University services need to be better publicised and signposted earlier on- 6/10 participants emphasised that they found information about university services too late into the year. Responses tended to focus around library services like the Academic Skills Centre (ASC), Irecommend and Mysoftware as well as university services like the Careers Network and disability services.
- 10) A couple students believed the University is exclusionary to lower classes and is exploitative- This answer was focused on by two of the students with one being from a working class background and another planning on going into academia. This focused on the marketisation of Higher Education and lack of university diversity.
- 11) It is important to get to know lecturers and feel comfortable talking to them- 6/10 participants emphasized the importance of regular contact with lecturers and many wished they spoke to lecturers more, especially international students.

Suggestions from the cultural probe

In response to the overarching themes and issues, as well as individual problems students mentioned this report makes library recommendations:

- 1) Targeted and increased publicising- . There needs to be more of a focus upon online publicising of information and getting used to finding information surrounding university services. There needs to be more consistent emailing used by university services like the library targeting students at the start of the academic year with a summary of services.
- 2) Personal tutor importance- 4/10 of the participants noted that they didn't have a personal tutor and most didn't go to see their personal tutor more than once. Personal tutors need to be utilised better, standardizing the information that tutors provide tutees with. The main services publicised should be welfare services, careers network and library services.
- 3) International Student Support- This study showed international students struggled to adjust to a British university and so the library or BIA should have workshops for internationals to attend and voice their concerns as well as using these workshops to catch international students up with UK students explaining what is expected of students focusing information around issues highlighted in this study like research, plagiarism, oral English and essay argumentation.
- 4) Library Representatives- The library representatives could be used to publicise library services, help out in events, provide feedback and perform other functions to ensure that the library is student focused.

- 5) Group study rooms utilisation- This report suggests that it does not make sense to lock and close group study rooms after 10pm when the library is open 24 hours a day.
- 6) Roving ethnographic training- Rovers noting significant observations they make may help to uncover hidden issues students are facing due to how they use space, resources or services.

This report also makes recommendations to do with the wider university experience of participants:

- 1) School organise trips or events- This report suggests it is important to push schools to have events for PGT student's so that they are able to socialise outside of their course and make friends, while inviting lecturers to improve student-lecturer relations.
- 2) Course balance- 4 participants repeatedly complained that in their first term they had much less of a workload compared to term 2 and they would prefer a better balance of assignments and exams.
- 3) Early module information- This report suggest that courses have representatives whose job it is possibly once per week to respond to any hopeful students emails regarding the course and also that module handbooks or example lectures are uploaded so that students know more about the course and are able to prepare fully.
- 4) International student's issues- This report suggests further research needs to be taken to look at internationals and the largest demographics and their needs. This study shows there are many issues particularly individual to international students from different systems.
- 5) Assessment times- This report suggests PGT students should be given January exams for modules that end in December and this will also help for the course balance
- 6) Earlier course information- This report suggests having an earlier application deadline by around 2 weeks so that students can get their timetables, reading lists and modules a couple of weeks earlier for their course and this will allow them to do some preparation and plan their life around their university timetable.
- 7) Introductory lecture layout- This report suggests lectures should last no longer than 1 hour without a short 10 or 15 minute break in between as many students are unable to focus for such a large period of time.
- 8) Research skills modules- This report suggests that courses are encouraged to have research skills modules to enable new students to catch up and continuing university of Birmingham UG's to jog their memory as many students doing masters often have had breaks from education.

Findings regarding Methodology:

The response to the cultural probe was overwhelmingly positive with all 10 participants saying that they enjoyed completing the probe. The central issue highlighted in this study is that PGT students have a lack of information regarding the university and the combination of standardising personal tutor meeting information, increased early emailing, course reps early information, shorter introductory lectures, research skills modules and library representatives will help to inform students of university and library services.

This report suggests that further diversifying of feedback methods is vital for university services to be as user centered as possible and for students to be really listened to. There were many issues

raised throughout this study that were incredibly insightful and surprising and this is the main reason UX research is so useful. It provides user guided data.

1 INTRODUCTION

This report is based on the findings of a cultural probe study into how Postgraduate Taught students experience library and university services at the University of Birmingham. It will discuss the production of the probe, significant findings, and analysis of the probe tasks set to participants and recommendations for improvements based on the report findings.

The cultural probe is a UX (User Experience) research technique. UX research aims to gather information from users by way of a variety of qualitative and quantitative methods, including interviews, cultural probes, photo studies, card sorting, and usability testing. The focus is on the systematic approach to gathering and interpreting collected data. Due to this, UX research demands the structured and methodical selection and application of the most appropriate tools for information gathering. UX research helps inform the design of products and services, validates assumptions and provides a deeper understanding of users behaviours, needs and/or feelings.

2 IMPORTANCE OF USER RESEARCH

The NSS is the largest national effort to try to better understand the needs and wants of students, and is the focus of many departmental meetings. Surveys, though, are limited in what they can reveal and the library only takes up one question on the NSS. Today's libraries are far more complex and intricate than those of the past. Today with growing technologies, students/institution demands and increased levels of recruitment, libraries are under far more stress and pressure to deliver a higher number of quality services for users (Priestner & Borg, 2016, pp. 6-7).

The Vice Chancellor David Eastwood in 2017 noted that "The University of Birmingham has long recognised the importance of research-led teaching, independent study and peer-to-peer learning, which are central to our philosophy. Our graduates are among the most highly sought after in the world, which is testament to the quality of our teaching and extracurricular provision".

"Research-intensive universities such as Birmingham deliver an outstanding student experience in which excellent teaching is enhanced by world-class research and facilities. We put students at the heart of what we do and I am pleased that this has been recognised once again" (University of Birmingham, 2017). This was in response to the University of

Birmingham's 2017 gold award by the TEF. The Vice Chancellors emphasis on student experience again helps to indicate a growing trend as those at the top of the university ladder have come to recognise the now huge importance of student experience alongside innovation in research as the two key indicators of a successful and thriving university.

Research is still a key component of a successful and respected university, however it is being more and more challenged each year by student experience as a significant criterion indicating a top university. Research used to be the central outright focus for universities in order for them to build a positive reputation and now a second criterion of student experience is beginning to challenge the norm.

3 CULTURAL PROBE

The cultural probe method includes open-ended and evocative activities for participants to pursue in their own time to help narrate and depict their lives to researchers. Participants are provided with a mission pack of materials and tasks, they are asked to complete the various tasks within the pack over a defined period of time, before handing the completed pack into the researcher for analysis. The cultural probe can combine many different types of UX research techniques into one study such as love letters/break up letters, photo studies and cognitive maps.

The cultural probe typically involves a briefing meeting to build a relationship with participants and ensure they are engaged in this prolonged activity as well as providing initial brief information surrounding the probe. There is also often a half way email or message sent to participants in order to maintain engagement and gain initial feedback. Finally, there is a debriefing meeting in which participants are able to discuss their packs and talk through tasks with researchers so that deeper levels of analysis can be obtained. These debriefs are typically recorded so that they can be looked back on and so that the researcher can engage fully with the participant during the debriefing without having to make extensive notes.

4 CULTURAL PROBE PRODUCTION AND PREPARATION

The central reason why a cultural probe was the best option we felt for our UX research project was because with a cultural probe you are able to test a variety of different UX research techniques in one single research study. Within our cultural probe we included open ended questions, a card sorting task/matching task, a photo study, a love letter/break up letter, a semi-structured interview and a cognitive map. Being able to draw on a variety of research techniques and tasks, while comparing the success of each task in unearthing student issues, provided us with a huge amount of in depth and useful data to be analysed and drawn from. Our cultural probe included 10 tasks to be completed one a day (though this was not vital for the study) and each task lasted for a maximum of 30 minutes to ensure students weren't mentally fatigued or bored

- See Section 6 for a description of the tasks undertaken

Using a variety of tasks also meant that each task could be judged on its ability to encourage students to express themselves, so that for future research we were able to use the most helpful techniques. The cultural probe allowed for triangulation as we were able to draw on multiple data sources, research methods and participant data to ensure that the conclusions we reached were well supported and valid in helping us to improve library services to meet the needs of our PGT users.

Participants were recruited through social media and via a news story hosted on the student portal and they noted their interest in the study before being given more information about the specifics of the research. Participants were told that they would be given £75 worth of vouchers of their choosing upon completion of the cultural study. 10 participants were required and we decided that after 28 students had expressed interest applications for the study were stopped.

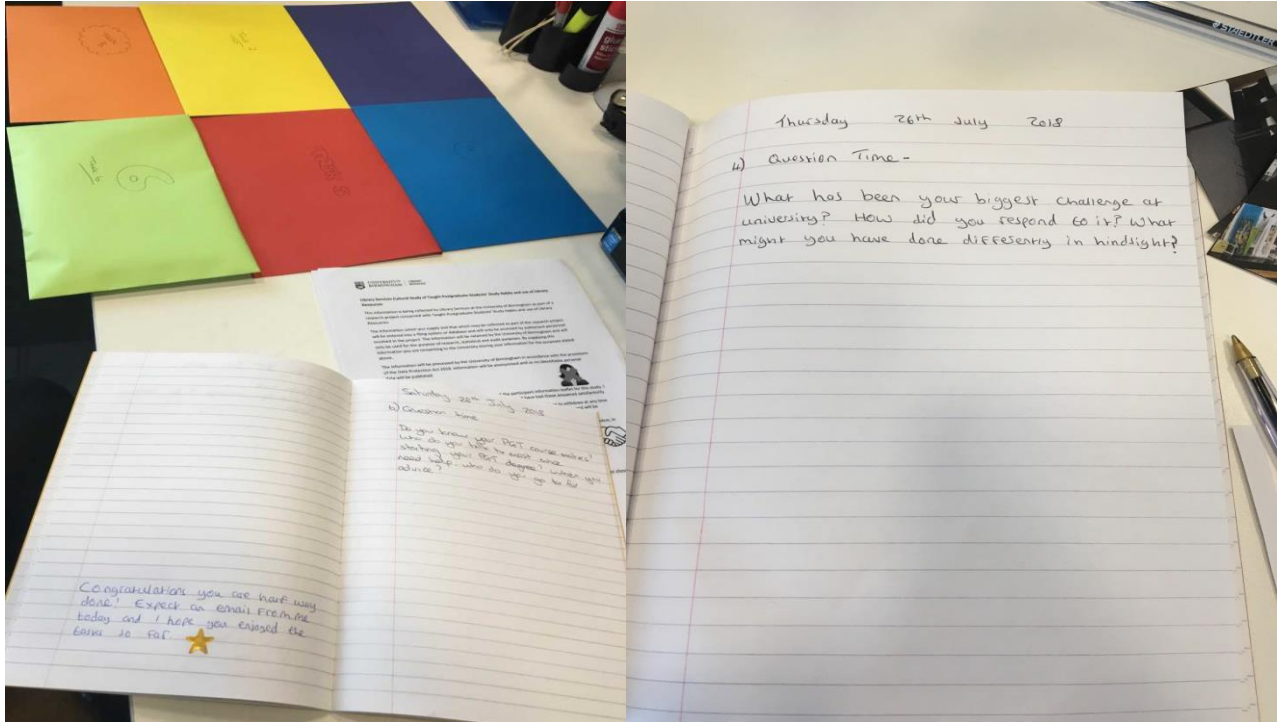
The cultural probe tasks were decided based on team meetings and what questions or tasks we thought would provide the best insights into the PGT student experience, while allowing participants to express themselves as freely and enjoyably as possible. Tasks were inspired by previous –ultural probes and UX research

The task packs contained a diary that the probe was centred around. The diary was the central place that participants answered questions and completed tasks. Some tasks such as the photo study and cognitive map did not require the diary as one was emailed and the other was completed on a separate provided piece of A4 paper, however most of the participant data was inputted into the diary.

The diaries were handwritten with each day having the date the task should be completed at the top followed by either a question to be answered for that day or a numbered task. The task was written onto a piece of card and put in an envelope with all the required materials for the completion of that task. The diary simply told participants what envelope to open e.g. open envelope 6 and complete the task inside. Each day had the date, the task/question and a daily message consisting of a fun fact,

a joke, a motivational message or a famous quote. The daily message was added to try to encourage engagement with the task and add a fun element to the completion of study.

The diaries were handwritten to add a personal touch and to ensure the participants knew how much work had gone into the packs. This was done in the hope that this would help maintain their engagement and in fact one participant in replying to their half way email noted "I'm getting on with the tasks very well. They're very thoughtful and really well-laid out so thank you very much. They must have taken a long time to make, particularly as it's mostly hand-written".



Each pack took around 1 hour to put together completely including the handwriting of the diary.

4.1 Postgraduate Taught Students

The study focused on Postgraduate Taught (PGT) students and the main reasoning behind this was that we felt they were the group of students that the least amount of data was held about. PGT students are often the least studied group of students as undergraduates take up the majority of the university's student population and complete most of the surveys or studies that the university conducts, while PGT research students get a lot of resource and help from the university such as their own area within the Library as this university being a Russell group member is research intensive.

Undergraduates have had more support from the Academic Skill Centre until last year when workshops and help were opened up to PGT students as well as undergraduates. These workshops and the types of help provided are still predominantly at undergraduate level due to the only recent opening up of this support and resource to PGT students. The Library Academic Engagement team also provides research skills resources, workshops and one to one appointments to Postgraduate

Research (PGR) students and academic staff. This means that there has been a lack of resources and focus put on PGT students. This research is part of a process in which more focus and support is given to PGT students.

We felt that more research and data regarding PGT taught students was required in order to ensure service development and maintenance was informed by the views of all students and not just a select group. We also found that there was a trend in many of the guild officers manifesto pledges that more focus and resources needed to be put into PGT students as many felt that PGT students had been focused on much less than other students. This means that there is also a student push for more research to be done into the needs and priorities of PGT students. This research is part of the growing efforts to better understand PGT students and cater for their specific needs as a distinct group of students with their own sets of needs and issues.

4.2 *Participants*

The central aim when choosing our participants, from the 28 that originally expressed an interest in taking part in the study, was diversity. We tried our best to get a variety of participants based on whether they were international or UK based students, Males or females, varying ethnicities, from varying colleges and courses, as well as being of different ages. The aim was to make the study as diverse and representative as possible with the 10 participants that we required. We were unable to do this due to some participants within the 28 expressing interest dropping out once they had received more information about the study and so our final cultural study consisted of:

- 8 females and 2 males
- 5 international students and 5 UK based
- 3 COSS (College of Social Sciences), 2 EPS (Engineering and Physical Sciences), 1 MDS (Medical and Dental Sciences), 2 CAL (College of Arts and Law), 2 LES (Life and Environmental Sciences)
- All of our participants were between 22 years old and 29 years old

4.3 *Ethical Considerations*

Because our study involved human participants, ethical approval from the University Ethics Review Committee was mandatory. The review committee required a detailed written submission which included the names and roles of the investigators, start and end dates for the study, funding for the research, a summary of the entire study, a research methodology, participant specifics, recruitment processes, a participant information sheet, a participant consent form, withdrawal procedures, data protection procedures, compensation for the study, significance of the research, risks and specific ethical considerations.

The process of completing the ethical-submission, responding to clarification requests and acquiring ethical approval was much larger than first anticipated and so it is very important when completing similar research to allow for enough time for the ethical approval process to take place.

5 BRIEFING, HALF-WAY AND DEBRIEFING

5.1 *Briefing*

All participants attended an individual briefing in the Library before starting the study. This was to introduce them to the research team; to explain the purpose of the study; to give them the task pack and to give them the opportunity to ask questions. At this meeting they also signed the participant consent form.

5.2 *Half-way Engagement*

Halfway through the tasks participants were sent an email asking how they were getting on and requesting initial reactions to the pack.

5.3 *Debriefing interview*

Shortly after completion of the final task, participants attended an individual one hour , semi structured debrief interview with two members of the researcher team. This interview was recorded. The focus of the debriefing was to gain an understanding of the participant's priorities, preferences, routines and values, by asking them to talk through and reflect on the tasks rather than asking them a defined set of questions.

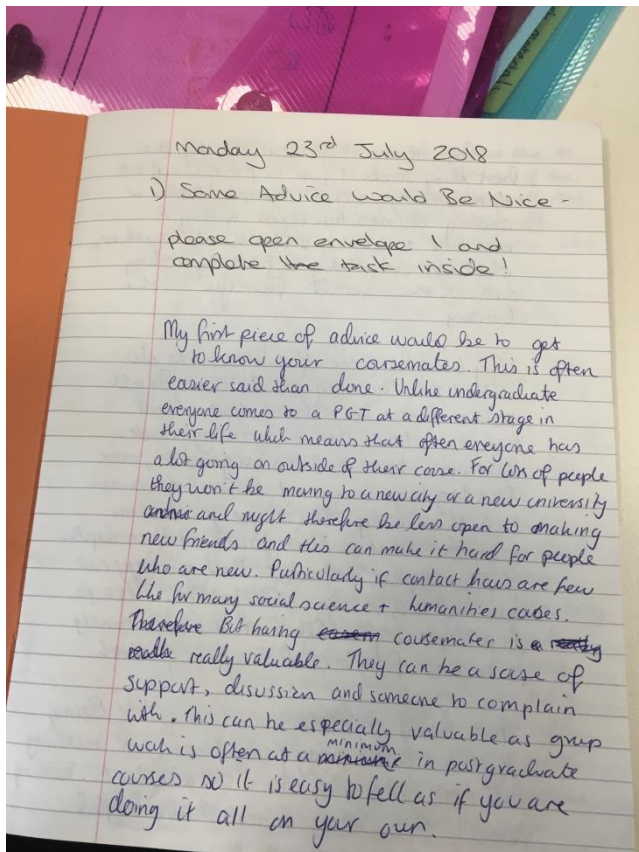
- See Appendix 1 for the briefing checklist, half-way email and debrief prompts

6 PARTICIPANT TASKS

Listed below are the individual tasks that participants were asked to complete as part of the cultural probe:

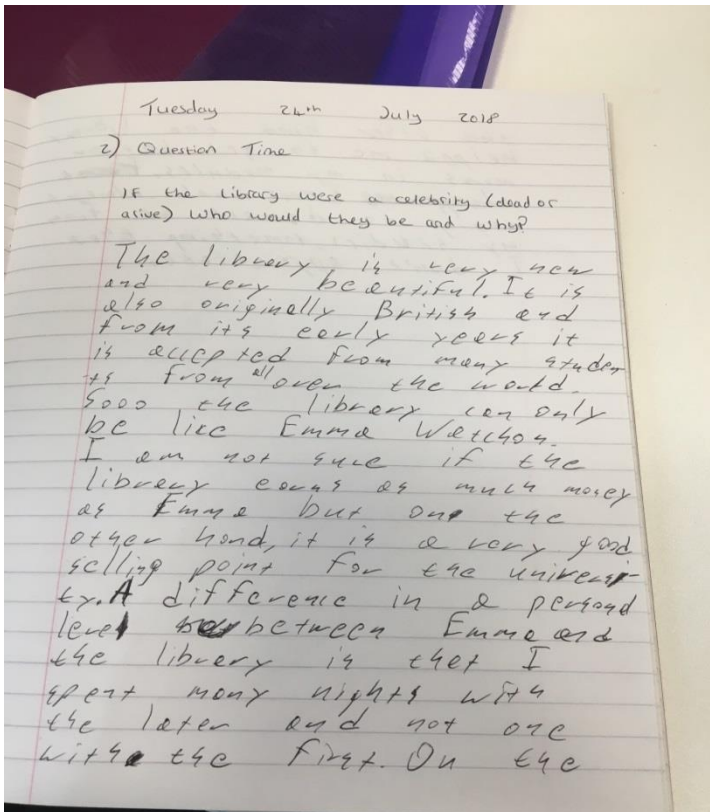
6.1 *Some advice would be nice*

Write a letter to someone in your diary who is about to embark on a PGT course. What would you tell them? What would you encourage them to do, what would you warn them about? What's the best advice you can give them to help them succeed?



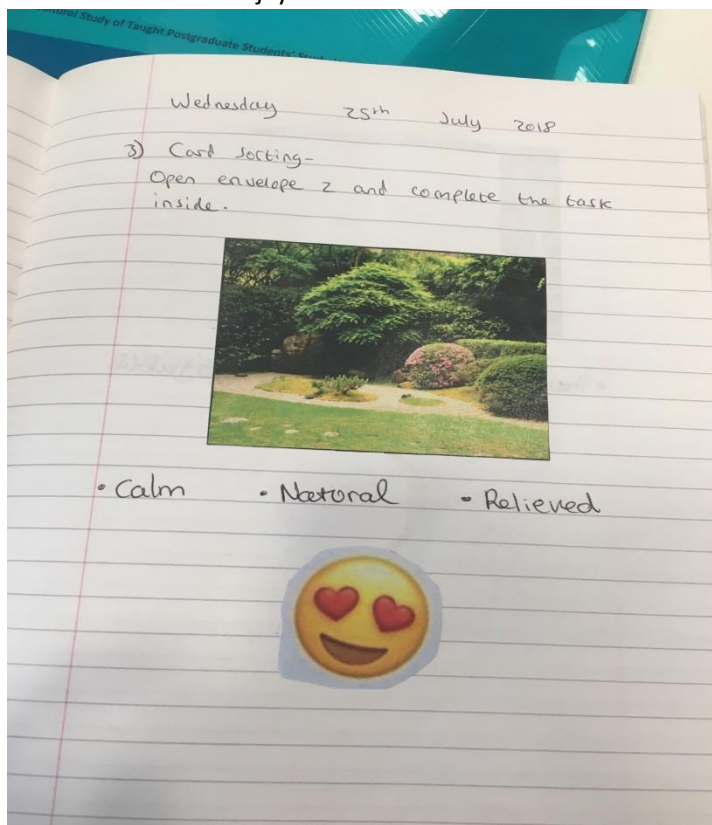
6.2 *Celebrity question time*

If the library were a celebrity (dead or alive) who would they be and why?



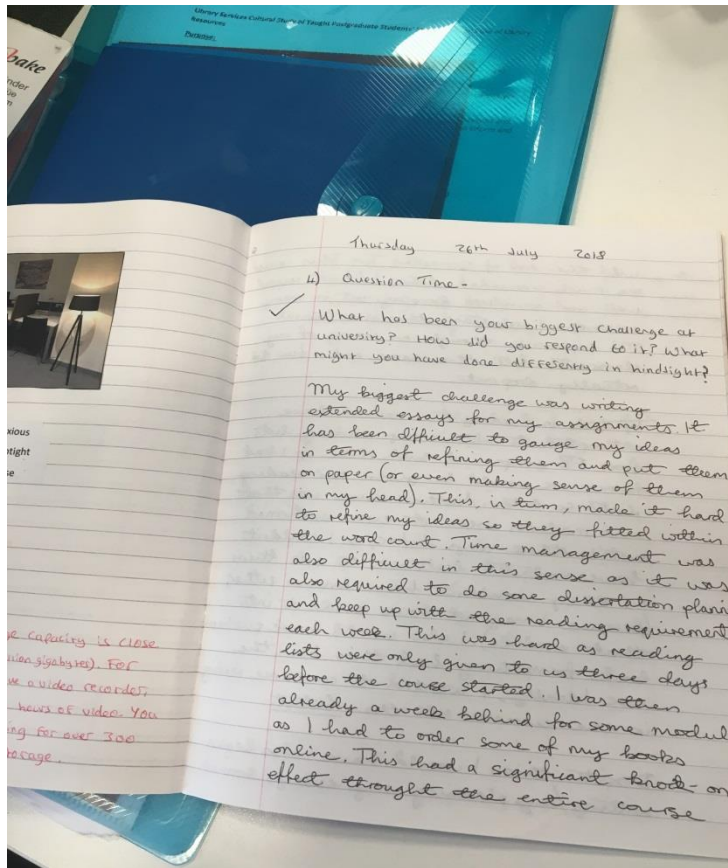
6.3 Card Sorting

Look at the 6 images in your diary for today. Choose three words from the list and an emoji to explain your feelings and describe each image. Note the words down under the image and cut out and stick in the emoji you have chosen.



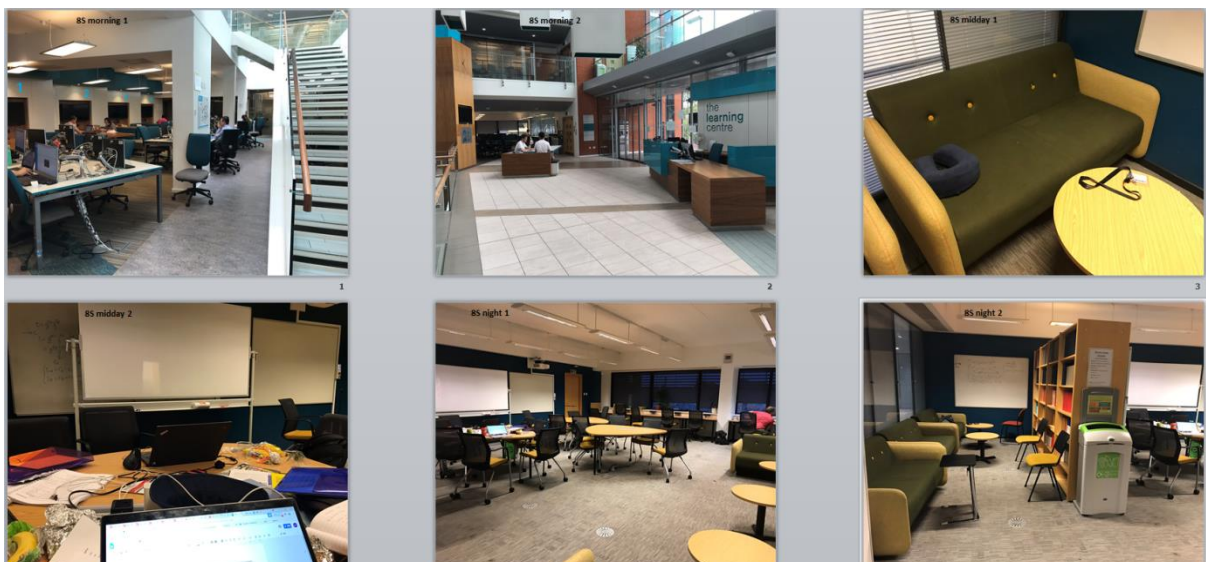
6.4 Biggest challenge question time

What has been your biggest challenge at University? How did you respond to it? What might you have done differently in hindsight?



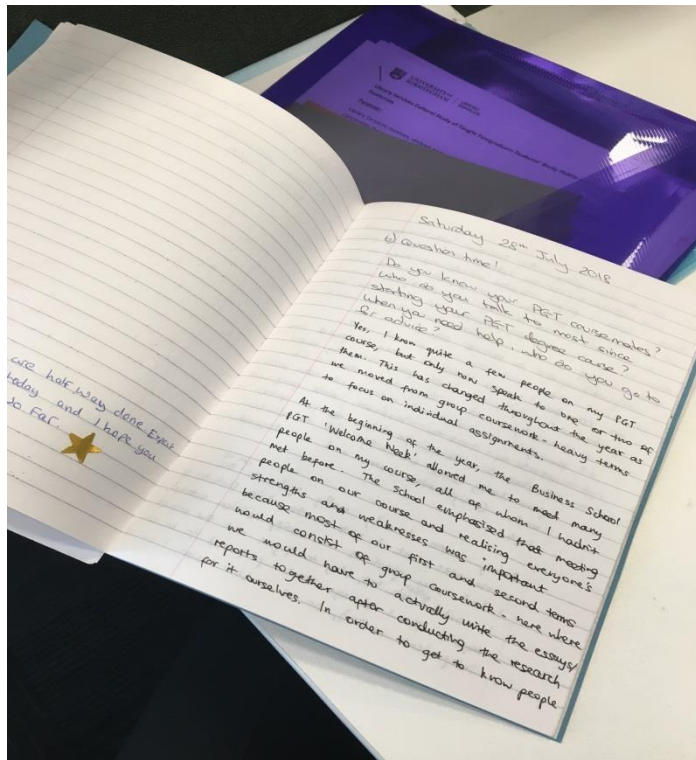
6.5 Photo Study

Over the course of the day, take 6 photos to "diarise" your day - 2 in the morning, 2 in the afternoon and 2 on the evening/night. Don't worry about a theme; it can be your breakfast, taking kids to school, working on your dissertation, meeting friends for coffee etc. At the end, email your 6 actual size images to...



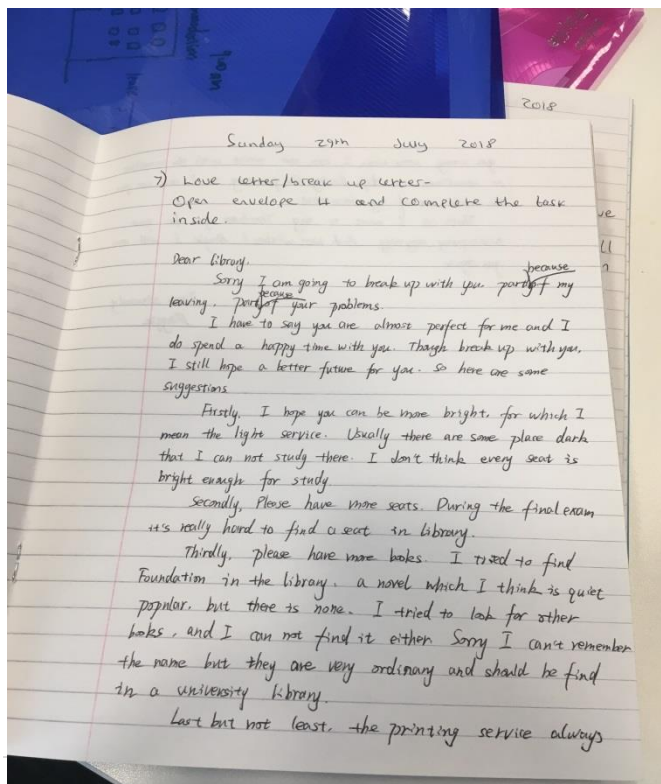
6.6 PGT course mates question time

Do you know your PGT course mates? Who do you talk to most since starting your PGT? When you need help who do you go to for advice or guidance?



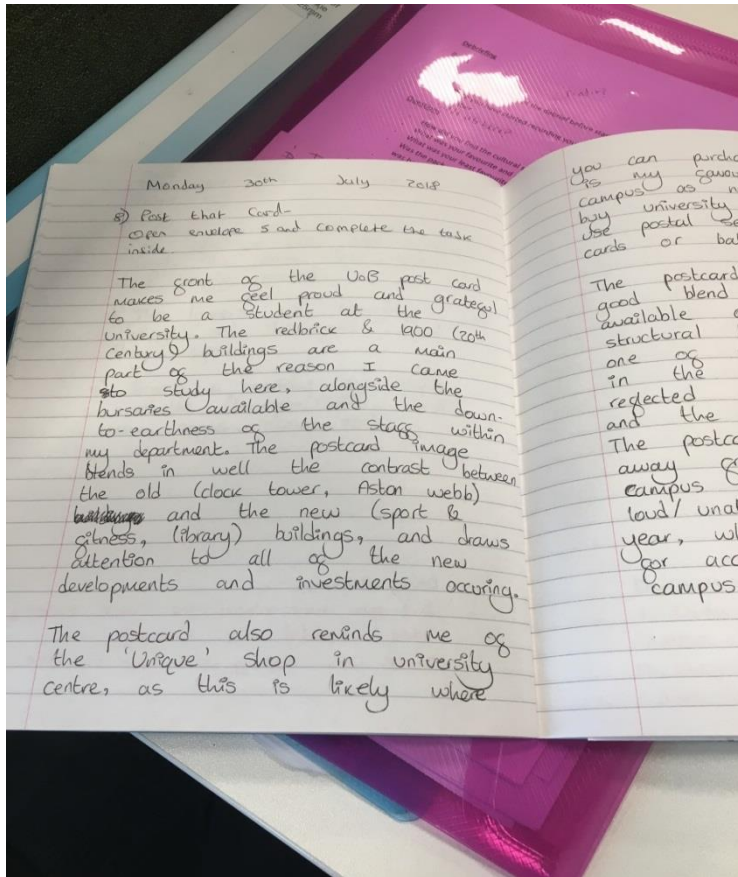
6.7 love letter/break up letter

Write either a love letter or a break up letter to the library. Dear library.... If you choose to write a break up letter please be as honest as possible - negative feedback is often the most valuable to us in terms of designing and improving our services for you.



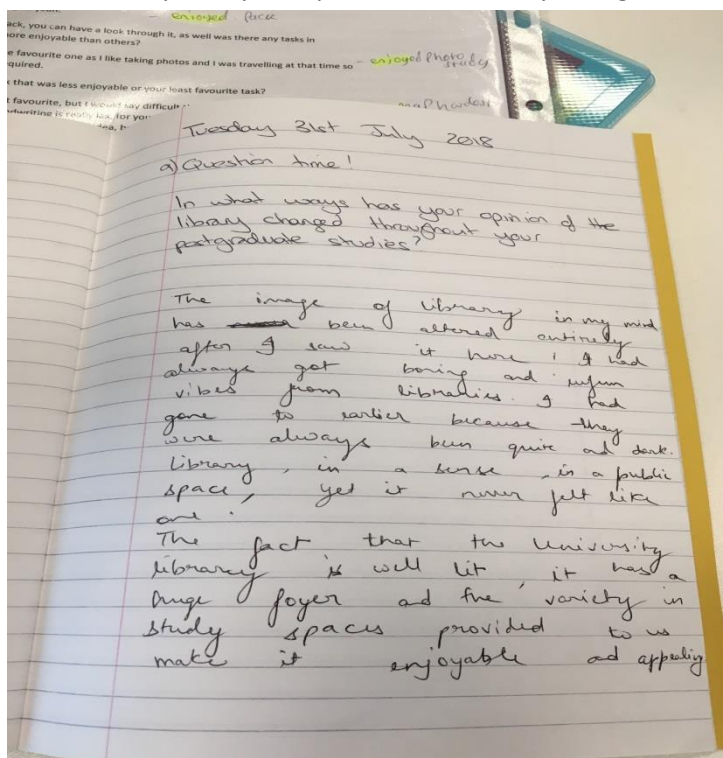
6.8 Post that card

Have a look at the picture on the front of the postcard. In your diary write how it makes you feel/what emotions it evokes, thoughts you have. Write a quick message on the back of the postcard and pop it in the post to us today



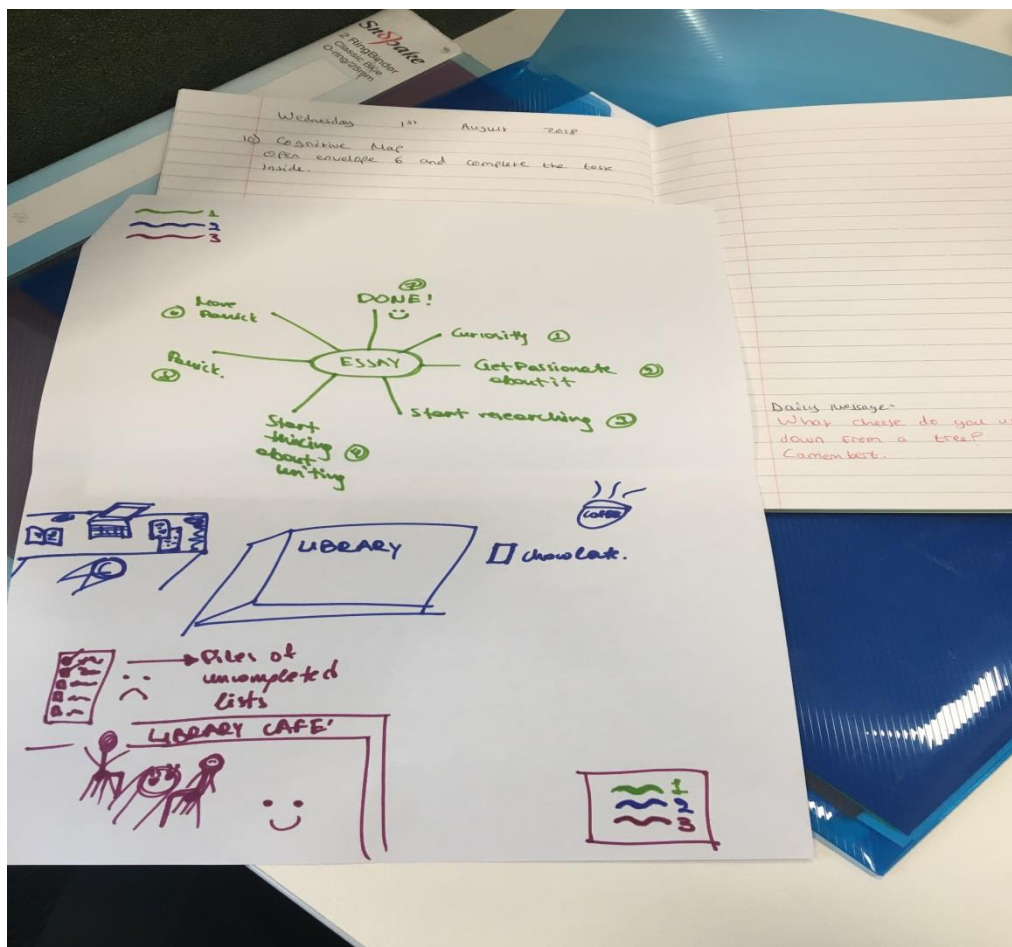
6.9 Opinion changed question time

In what ways has your opinion of the library changed throughout your Post-graduate studies?



6.10 Cognitive map

On a piece of A4, We would like you to draw a cognitive map of 'Your personal experience of completing a University assignment' e.g. the services and spaces you use, the people involved in your working life, your daily learning routine. Give yourself 6 minutes to draw a map of your normal working activity. Every two minutes you should change the colour of pen you use. On the bottom, right hand corner of your map please give each colour pen a number in the order you use them. Please bring the map with you to your debrief. Don't think about what you should draw too much. Ideally your drawing should be created instinctively and immediately without any preparation time and it is not an artistic exercise.



7 ISSUES WITH THE CULTURAL PROBE

This section will address some of the issues surrounding UX research in general and more specifically the cultural probe, before focusing on how these issues affected our cultural probe and how we tried to tackle them.

7.1 *Time Consuming*

UX research often takes a lot of time and hard work to not only produce and prepare the needed materials, participants and environment, but it also takes a large amount of time to analyse the findings produced from the research as qualitative data is much more difficult to analyse and find underlying patterns when compared to more quantitative survey data.

The Cultural Probe task for example took over two weeks to find the required diverse number of participants, decide on the best tasks and questions to use for the research and decide the layout of the cultural probe in terms of the diary and tasks. It then took around an hour to put together and handwrite each cultural probe pack with envelopes, diaries and various information forms. The choice was taken to handwrite much of the diary in order to add that personal touch for participants and so they see how much hard work has gone into producing the study and so appreciate this allowing for better engagement with the study. Once the packs had been put together, participants found and liaised with in order for them to know the demands of the study and the requirements in terms of contact, it was then required to meet to hand over the packs and have a 30 minute briefing meeting about the study as well as to ensure participants could put a face to a name allowing for better engagement with the study as participants had built a relationship with the researchers. Once the briefing was complete the next task in terms of the study was to send a half way email to organise debriefing times, voucher reward choices and various other individual issues with participants, while also asking how the participants were finding the packs so far to get some initial feedback. Finally once the participants have completed the packs it is time for the final debrief meeting lasting around an hour to ask individual questions about the pack and how they found the study as well as some clarification questions based around the completed tasks. Now all the data had been collected and clarifications made so it is time to spend a number of weeks analysing, affinity mapping and looking through the data to find common responses and trends. Once trends had then been found it was time to provide possible solutions to issues and trends found from the data so that recommendations could be made to library services on how to improve their provisions so that students are best catered for.

This process is far longer than the time it would take to create, conduct and analyse quantitative survey results. However, although the UX research and more specifically the cultural probe takes much more effort, time and resources than normal surveys, they provide far more in depth data. The key issue with surveys is that questions are asked based on the survey conductors chosen parameters, whereas UX research enables answers to be provided to questions researchers may never to have thought to ask. The open nature of responses and data mean that new issues can be

unearthed and completely hidden problems come to light so that Library services can best understand students and innovate in providing the best possible services for students.

7.2 Recruitment

Recruitment for UX research can be difficult especially in the case of cultural probes. This is largely due to the looking into more private aspects of individual's lives that UX research requires as you have to observe and study participants in their daily lives and try to truly understand their values/priorities to gain useful results.

There is also an issue in relation to the cultural probe as it is such a large study with there being 10 tasks that each takes around 30 minutes and to be completed over a 10 day period. This is much more demanding than say a 15 minute survey. Most students struggle to find the time or simply do not complete surveys even when rewards are on offer so trying to get students to get involved in such a demanding study is always going to be difficult. In this case -we did not find this too big of an issue, but that may have largely been due to the Library Services ability to provide a significant reward of £75 in vouchers for students who took part in the study. There must likely be great incentives on offer to entice students to get involved with such invading and demanding research. This therefore means that the expense of the research again is increased. The level of engagement the cultural probe requires alongside the need for participants to reflect on their own actions and be able to freely express themselves makes recruitment difficult and the tasks quite demanding compared to other research methods.

For the cultural probe we found that we had more than enough PGT students volunteering to take part in the study and the study was simply advertised through social media. In fact one of the participants in the briefing did not even know that there were vouchers on offer for completion of the study. Another participant seemed much more enthused about providing feedback on library services and being free to have their voice heard (specifically about the library website) rather than focused on the vouchers. Most participants did not come to the briefing with an idea of what vouchers they wanted and they seemed rather put on the spot when asked what types of vouchers they wanted and so this suggests the reward incentive for our study specifically was not incredibly important though of course it was likely a key factor. The issue of recruitment may be a perceived issue in practice, but we found there were little issues in this area with this study. In regards to the demands of the study being an issue we found that while more than enough people volunteered for the study, once these volunteers found out a little more about the demanding and time consuming nature of the study some of them backed out. This reflects the difficulty of recruiting for such an in depth and demanding type of research.

We also found it difficult to recruit the diverse level of participants that we hoped for. We managed to get a 5/5 divide in international students to UK students. However, the male and female divide was difficult to accomplish and we only managed to get 2 males compared to 8 females. We also found it difficult to recruit older PGT students with all of the participants being under 30 years old, this may be because older students have far less time on their hands to complete the study e.g. in regards to having a family of their own or demanding jobs. Therefore, in regards to recruitment although we were able to get our 10 participants fairly comfortably, the diversity of participants was

not perfect and improvements for next time will be required in terms of how we recruit, incentives and information to potential participants about the study (See section 14.3).

7.3 Open answers

The benefits of closed answers and more quantitative data is that it is in comparison so easy to analyse and compare to other institutions or libraries for example, while also being easy to analyse huge data sets. However, open answers require far more thought being put into analysis of results and often it is much more difficult to compare findings with other institutions as participants may perceive a task, question or activity completely differently depending on the individual. The difficulty of comparisons and analysis make open answers and data very difficult and time consuming to analyse.

This is certainly the case, however it is the individuality of open answers and perceptions of participants in how they answer tasks, questions or activities that enables such in depth, detailed and unique results to be found and acted upon. The unique nature of each individual tasks data means that every answer helps one by one to build a bigger picture of user's experiences and values so that Library Services can better provide and cater for each student based on their own individual needs and priorities rather than simple agree-neutral-disagree collective data.

7.4 Engagement

Another issue, alongside recruitment, with such in depth research is the need to maintain engagement from participants throughout the study so that people do not pull out half-way through research or before the research begins. Students are especially busy individuals with a myriad of different activities to prioritise throughout their days from work experience and sports to societies, friends, family and their studies. Asking individuals to commit to a ten day study may often be very difficult and so may lead to a lack of engagement with the study.

While, this is certainly an issue there are key actions that can be put in place to reduce the chance of participants pulling out and to maintain engagement throughout the study. I will outline some of the steps we took with the cultural probe in order to maintain engagement. It is vital for the main researcher or point of contact for the study to build a relationship with participants and put a friendly face to a name. The briefing was essential for this and the aim of the briefing meeting was to build a relationship with participants, make them feel comfortable and ensure an element of fun/mystery in regards to the study. Conversations during the briefing were informal with a lot of small talk and getting to know one another before moving onto the study. In conjunction to the steps taken in the briefing there was active steps taken to make cultural probe diary more fun, enjoyable and light hearted than more formal question and answer surveys. Throughout the diary there were cheesy jokes, fun facts, motivational messages and famous quotes to maintain engagement and add an incentive to turn the page over to the next day. The pack was also created purposefully to be bright and colourful to invoke happy thoughts and remove the black and white professionalism of formal text. Finally, half way emails were sent out to ensure participants knew we

were checking up on them and to see how they progressed. The emails were light-hearted asking how they were getting on, if they were enjoying the tasks and to organise debriefing times. This keeps the participants on task knowing someone is checking on them, enables for initial feedback to be received and for a continued building of a relationship with participants.

8 METHODOLOGY OF DATA ANALYSIS

In order to code and analyse the data from the cultural probe, two methods were used; thematic network analysis and grounded theory. Grounded theory ensures that the data results and themes produced will be grounded in the views of participants. Thematic network analysis enables the data to be fully analysed and ordered according to themes that arise throughout the coding process, with no pre-determined framework. This allows for hidden, unknown or new topics to arise from the data, without holding the data back in its ability to provide insights into PGT students working lives.

During the data analysis coding was focussed on topics relating to students working lives so that, after coding was completed, key themes could be identified in this area and any issues arising (for the university and academic services) can be addressed.

The coding of the diary placed data into three categories; positive topics, neutral topics and negative topics. These topics were colour coded.

Some of the questions from the debriefing were also targeted in order to gain more feedback surrounding the pack and this information was coded and analysed separately (at first) from the codes that focused on aspects of students working lives. The information regarding the pack itself (and methodology of the UX techniques) was also analysed for use with any future cultural probes.

After coding all of the information from the diary pack tasks and the debrief interview, all of the codes were input into an excel spreadsheet. A further spreadsheet was created to list the positives, negatives and neutral codes from the coding process for each task and to develop a set of overarching themes. These are discussed in Section 9.

9 OVERARCHING THEMES

The coding activity identified a number of key themes

9.1 It is very important to socialise and take part in activities outside of your PGT course

All 10 participants within this study mentioned the importance of making friends at the university and especially within similar courses as a central support mechanism. There was a trend within the participants in that the students who seemed to mention that they enjoyed their course and time at university more tended to mention their friends a lot and often liked to work collaboratively. This was especially the case for participants 2G and 7R who repeatedly mentioned how they studied with their friends, went to their friends always for academic and other support and also how they found PGT quite a social experience.

- “That is very important actually especially if you are not social, I don’t face the problem normally because I talk to people easily, but I know some people are not like that so the fact that now they have more friends than they did is very important for the course.” 2G
- “I would have gone to my friends in the uni like not in my course as well, outside the course as well so I would just discuss my problems like let’s just say my rent or tenure for the house is getting expired by the end of this month so I need a new place to rent. I would just ask my friend how to do this stuff and since my deadline of dissertation is also due this month so a couple of things that I would get my help from my friends a lot” 7R
- “My roommate is the one I talk most with. Since we live together we have a lot of chance to chat, we often cook together and eat together, and have a chat. She is also the one I will go for advice or guidance”. 9Z

9.2 It is important to have a variety of bright study spaces

Participants emphasized how what type of study space they use depends on the mood that they are in and the type of work that they are doing. As a result of this 7/10 of the students appreciated the variety of study spaces within the library and the university as a whole. If participants have to complete intense work such as long individual essays and have a short period of time then they prefer to use silent, formal and more closed off study spaces so that they can focus with little distractions. Participants in these scenarios particularly liked the dividers study spaces in the silent study rooms.

However, if participants are completing group work and are working collaboratively on this then they like the group study rooms or the sofas with desks so that they are more comfortable, casual and able to move more freely to look at peers screens or chat. More casual and comfortable study spaces are often preferred also when students are completing less intense work like lecture notes and so do not need to focus so intensely.

7/10 of participants also said that one of the key aspects of a study space being productive is the brightness within the space and so students far prefer working near large windows compared to anywhere else.

- “I would probably try and work in the library I think like the amount of like natural light in the windows in here, say the geography masters room it is good because nobody ever comes in there, but you have these tiny windows and it is always really dark in there and I get really tired if I work in there just cause it’s so dark” 1A
- “I think that when I want to study, I don’t like there it is so dark, I want more light” 8S
- “From the moment I first set foot on your doorstep and looked around, I knew you would be special to me. You had so many different spaces, large tables, booths” 10Z

9.3 The University of Birmingham has too many students and too little space/staff

6/10 participants mentioned that one of the key issues they faced was a lack of study space or the university having too many students. Some as a result of this had to change their study space and stop studying in the library even though they felt that was where they were most productive. Others said that the high numbers of students meant that they were less able to connect with lecturers and it felt like less of a community.

- “loads of people it like it just you can’t function when you have got that many people, you need to have like a structure in place or whatever, whereas if there’s less people you have got more freedom to like have the time”. 4K
- “Maybe less students in our course because usually we will have over 200 students in a class room and if you arrive late you can’t sit in the front chair, maybe you even can’t see the blackboard clearly that is quite not maybe helpful for you study”. 9Z
- “I do like the library it has a lot of computer space it is just really difficult to find s a space in term time”

9.4 PGT course lacks organisation and had an unbalanced workload between terms

All 10 participants emphasized issues with course organisation in various different ways and they felt this badly affected their experience at the university. The most common complaint by the participants in terms of poor course organisation was a lack of balance within the course. 4 participants repeatedly complained about the lack of work in term 1 and intense workload in term 2. Students felt that their course should have been more balanced in terms of assignments as in term 2

as well as completing the assignments, reading for lectures and preparing for exams; they also had to start planning their dissertations.

Secondly, participants mentioned was that they would complete a module in December when the first term ended and then have to take the exam in May or June meaning that they had to remember lectures and course material from months ago.

Thirdly, there were also 4 participants who did not receive a personal tutor on their course and so lacked a clear academic support contact throughout their year.

Fourthly, assignment deadlines for some students changed throughout the year and participant 5M mentioned her dissertation deadline changing three separate times, while also having incorrect information on the module handbook telling students that they must hand in hard copies when in person the module convener told her that really they needed to submit online.

Finally, students mentioned a lack of communication within some of their modules, especially where they were being lectured by more than one person. In these cases students would go and see their different lecturers to ask for assignment and course advice, and would often get different answers from different lecturers leaving them understandably confused.

- “I think it is better to put some exams in the first semester, because 10 exams for 1 month is kind of hard for me” 8S.
- “We had this module Maths from September to December then the exam was in June so it was such a long gap that you don’t study maths in that time you are doing all your other modules so then it comes round to the exam and you start revising and it is too late to go and get help because it is so close to the exam and it was out of term time. Yeah I am annoyed at my course for that we should have sat that exam in winter” 6M
- “Actually no that is one thing that I found really bad this year so we haven’t had a personal tutor which I assumed we would. But, no, no personal tutors even like if I had, had a problem with my health or mental health or anything” 5M.
- “Communication like our dissertation deadline got moved I mean it has been happening throughout really. Our dissertation deadline originally was the 5th of September then it got moved to the 29th of August and just recently like maybe last week we got told that it got moved to the 17th of September and I knew that for a while, because I had asked in May when our actual dissertation deadline was, but they only told everyone just now, and they haven’t still told us that it is only online submission, but I only still now that because I asked them. But, people think that because it says in the dissertation handbook that we have to give in 2 hard copies to the office, but we don’t” 5M
- “Right now we weren’t told anything about when to hand in our dissertation, what time and things like that. My dissertation supervisor is the head of the course as well and he is on holiday so I had to ask him the date before he left like ‘no one has told us anything about hand in and you are going on holiday’ (laugh). He is going on holiday until after our hand in date so it was kind of like we had to ask them when are we handing in? What time? Who to? Do we need a physical copy? All these kind of really basic things like we got told when I was doing my undergrad we got given like a booklet with everything like that and so I was really surprised that we hadn’t been told anything like that” 3H.

- “Every week had a different topic, well one thing that I don’t know if it is an organisational issue, but I don’t think you could tackle all of this information in one course, it was impossible. So we basically had to understand all the historical theory and knowledge that has been produced in the last century or so which was weird. And, I would say that there wasn’t a common consensus about what we were expected to do in this course. Yeah so different people ask different lecturers and different answers and then we would talk with each other and would be like yes, but I wasn’t told that this would be what we are going to do so it was a mess”. 10Z

9.5 A master’s degree involves a high level of stress and pressure compared to Undergraduate

9/10 participants emphasized the level of pressure, stress and workload being a lot higher at Postgraduate compared to Undergraduate. This for some led to them having to go to welfare services for help and advice. Some participants believed that as Postgraduates they were expected to know a lot already and be automatically able to hit the ground running. However, for new students this was much more difficult.

- “I did not manage my time well throughout the year and still don’t, but I have tried to create more to-do lists and plan ahead as much as possible. In order to hand in my assignments in time, I literally worked to the last moment, worked at night, lost my sleep- not only because of work, but also because I was too stressed to sleep. Eventually, I did make it, but I would have enjoyed the process so much more if I had handled it differently”
- “I do get the feeling that that is an assumption in my course like we all studied here before so we already know and if we don’t know then too bad” 4K.
- “My greatest challenge at university has been my Master’s thesis. I always work to the best of my ability so this leads to a permanent added level of pressure upon myself. However my thesis has coincided now with a number of other issues which has led to me being under such a level of stress that it has made me emotionally (and physically) ill” 6M.

9.6 Appreciates all of the library and university services that are available

9/10 participants said that they appreciated the library and their service with most students saying it is their preferred place to study. The participants mostly had a positive view of the library and its staff, only really being negative about the lack of knowledge early on about all the library has to offer.

- “The explanations of the ways of researching by the librarians made it simpler for me to develop my skills in data hunting. I had not known any search engines apart from google engines. The databases that were introduced were life savers”. 7R
- “As all of the undergraduates left I came back to an amazingly quiet and lovely library. I developed a very productive routine 9-5 again and really loved the library as a space to work. I found myself treating the library like it was my office/ workspace so only really

worked when I'm there. I think this really helped my stress and productivity levels as I found myself thinking of the library as my productive space" 1A.

- "I immediately fell in love with the self-service book borrowing system and the fact that I could return books so easily. Most importantly, though I loved the fact that you are a real temple of knowledge" 10Z.

9.7 New University of Birmingham students who have not been here at undergraduate require extra support and especially if they are international students.

7 out of the 8 students who did not complete their undergraduate at the University of Birmingham, had issues relating to being new to the University and for the internationals the British system.

2 of the UK students who came to the university for the first time in their masters emphasised how they were expected to know a lot of information from their undergraduates. This ranged from being expected to have knowledge of statistical software systems like SPSS to a lack of information regarding where to go for disability services.

5 of the international students also had issues relating to a wider variety of issues often to do with adjusting to the British university system. Participant 10Z said they had issues being able to speak in their first term due to their nerves and information overload, which meant they were unable to talk to lecturers or speak up in class as much of their lunch time English classes focused more on writing and little on oral skills. 7R mentioned that in India they didn't have to do anywhere near the level of research they had to do here and instead just had to use a textbook for their course, 8S and 9Z had plagiarism issues as in their Chinese system there is a completely different view of plagiarism and participant 10Z also said how they struggled to get used to British argumentation as in Greece they were not used to criticising authors.

- "I think with a lot of students, like one of my course mates. She told me that they taught her how to use SPSS in her undergrad so I think maybe the uni has this perception that everyone can use SPSS from their undergrad, but I never got taught SPSS in my undergrad" 3H.
- "We do have a plagiarism system, but I guess it is only about submitting our final dissertation it will not be used in our term time work and also maybe the definition of plagiarism is a little bit different from here, because here I have to do a lot of citation, but in china we don't have to do much citation" 9Z.
- "I wasn't able to express my thoughts the way I wanted prevented me from thinking if it makes sense so everything was a mess in my head from the simplest things to the most complicated ones and then I was expected in the seminars to speak. I was worried to speak and I felt completely stupid so then I was ashamed and the first term wasn't great" 10Z.
- "Here you were supposed to criticise authors and in Greece you weren't supposed to criticise authors. He is a professor and you are not, you don't know what you are talking about so yes this was something I found very different" 10Z.

9.8 *Students find most information on university and library services online*

8/10 students and all of the students who were new to the university found most of their information regarding the library and university services online through either portals or intranet pages.

- “I checked online and I found the services and so I went to see her” 10Z.
- “I would just look online for the thing they told me about and try and find it online” 4K.
- “So when I wanted something I just went to the library website and I searched” 2G.

9.9 *University services need to be better publicised and signposted earlier on*

6/10 participants specifically emphasised that they felt they found information about library and university services too late into the year for it to be of real benefit to them. Responses tended to focus around library services like the Academic Skills Centre (ASC), Irecommend and Mysoftware as well as university services like the Careers Network and disability services. Students felt there was a lack of signposting about information especially from lecturers in courses where certain expensive software had to be used and students didn't know they could get this for free.

- “if you have had a condition for over 12 months then it is classed as a ‘disability’ in air quotes, which I didn't know and he said that there is like help for you with things and this was like when semester 2 had ended so this was like May, so like my course had practically finished then” 4K.
- Talking about Irecommend “Okay yeah, yeah, yeah no I didn't know about this service, if I knew that then I would have done it” 2G.
- “Especially about the mysoftware bit, I don't know if that is through library services but yeah because we have had to use SPSS and Nvivo and some people were actually willing to pay for it and I was like no you can actually get it for free through mysoftware and no one knew that and we weren't told that during the lecturers” 5M.

9.10 *A couple students believed the University is exclusionary to lower classes and is exploitative*

This answer was focused on by two of the students with one being from a working class background and another planning on going into academia. These students felt quite passionate about this topic. Participant 4K argued there was a working class and upper class divide at the University and that she felt like she did not belong here. Participant 1A spoke about the marketisation of Higher Education (HE) looking at short term contracts given to academics and the continually increased levels of students as well as talking about the lack of diversity in academia.

- “applying for the course is really late I suppose because the uni want to get as much money as possible so they are just taking as many people on as possible so I think if the deadline was earlier then they would be able to allocate people to their modules, which would then mean we would get the reading lists and things, I think that was the problem, greed was the problem and it was at our expense” 4K.
- “if you are always being taught by white men like you are going to feel like these people don’t understand me, don’t understand my experience like I am not being taught by people that are like me so why would I aspire to be in a place like this” 1A.
- “With the increasing marketisation of higher education lifting caps on student numbers it’s all about who can have the prettiest and shiniest campuses to attract more students (or more accurately their fees). All the while actual student services are being cut, the workforce is increasingly in casual contracts, workloads are unmanageable and teaching standards suffer” 1A.

9.11 It is important to get to know lecturers and feel comfortable talking to them

International students tended to be less likely to go and talk to lecturers about course issues for a variety of reasons including in their home countries lecturers are regarded as unapproachable and their positions are more hierarchical as well as being nervous of not being able to explain their problems in English. 6/10 of the participants though emphasized how important it was for them to have regular contact with lecturers and many wished they spoke to lecturers more often to clarify issues.

- “I would expect that it would be a bit awkward to sit with your teachers and professors to have drinks I wouldn’t do it. Again I come from a system that the teacher is not very approachable to you” 10Z.
- “There are lots of things on campus I haven’t try, or even know about. I want to explore more of it, and talk to the professor more” 9Z.
- “I definitely got support, but from my like supervisor, which was fine because that was kind of the only person who would be supporting me in that so he was really good” 1A.

10 PROBE RECOMMENDATIONS FOR THE LIBRARY

10.1 *Targeted and increased publicising*

Many of the participants emphasized that they felt that they didn't have enough or sufficient information at the start of their year in order to really utilize the university and library services. Issues centered on a lack of knowledge of the requests and Irecommend service as there were common complaints of a lack of certain books in the library. There were also many who said that they even found out basic things too late like checking out or renewing books or being aware of the Academic Skills Centre.

Many said introductory lectures, although useful, are too long and it is hard to pay attention or attend all of the various lectures that talk about everything from university welfare services to course modules. Most people said they found their information about library or university services online through websites or emails throughout the year. There needs to be more of a focus placed upon online based publicising of information and focus put upon students using the intranet and getting used to finding information surrounding university services. There needs to be more focused and consistent emailing used by university services as a collective targeting students at the start of the academic year. Participant 10Z emphasized how careers network 'spamming' through emails alerted her to CV and cover letter workshops. Emails do not need to be every day, but once a week especially at the start of term with either a link to the intranet page, some important information on or with an attached library/university services leaflet document.

Signposting to the intranet and publicising of key library services needs to be increased as most participants said how they found out about various library services too late and wished they knew about services like Irecommend, requesting books, mysoftware, Justask and ASC sooner.

10.2 *Personal tutor importance*

One of the most shocking discoveries from this study was that 4/10 of the participants noted that they didn't have a personal tutor. The University of Birmingham guidelines for personal tutoring says that, as a minimum, schools must provide every taught student with a personal tutor and yet almost half of our PGT participants didn't have a personal tutor. Most also said they rarely met their personal tutor and this report suggests that personal tutors need to be utilized far more effectively in order to ensure all students have an obvious point of contact for any and all issues they may have. Personal tutors are vital for signposting and advice. Library services need to work with schools more to ensure personal tutors are aware of various library services or at least signpost all students on where to find information on library or university services through the intranet website.

Personal tutors can be a valuable asset to the library in publicising their services so that students can get the most out of their time at university and the lack of a personal tutor as well as lack of utilizing personal tutors shows a missed opportunity for the library and an area that needs improvement. All

students need at least one obvious point of contact that they are comfortable with to ask for advice and guidance with any issues.

Many participants made references to having issues with welfare and a lack of information about it especially earlier on in the year. 4 out of 10 of the participants said that they did not know about welfare tutors for their course or school and so struggled to know where to go for welfare help. There needs to be a specific document comprising of key information and signposting for personal tutors to address in their first compulsory meetings with students. This report suggests that the key services that need signposting by personal tutors are library services, careers network and welfare services. The standardizing of personal tutoring requirements will help students get the knowledge they need regarding the university and its services to ensure that they have a happy and successful time at the University. Sufficient personal tutoring for example would have helped participant 4K find their disability services earlier reducing the stress put upon them and meaning they can focus more on their wellbeing and work.

This report also suggests that to ensure engagement with personal tutors and so that students are comfortable with their personal tutors, that tutors should take part in some activities with tutees in a more casual setting. This may be a tour of campus, the library or something completely different.

10.3 International Student Support

As section 10.11, 10.9 and 10.7 shows international students in this study have seemingly struggled to adjust to the British system and coming to a new university. Many had issues with finding information late, but even deeper than that they had issues understanding what was expected of them when working in the British system and where to find help with this. Some of the key issues were more cultural and systemic with things like plagiarism systems, English language skills, insufficient facilities and essay writing.

International students had issues, especially Chinese students, with plagiarism and understanding how to reference, there were also issues in approaching lecturers due to academics being unapproachable in different countries systems, many found it difficult to formulate essays and get used to criticising authors, there was a fear of being unable to verbally explain their problems, an Indian student found it difficult to adjust to doing their own research compared to using a textbook and many felt they were expected to know a lot.

This report suggests the library or BIA should have workshops for international students to attend and voice their concerns as well as using these workshops to catch international students up with UK based students explaining what is expected of students in UK universities and focusing information around the issues international students highlighted in this study like research, plagiarism, oral English and essay argumentation. The focus of these workshops should be based on research like this study and further studies into the main issues different international students face coming from different systems.

10.4 *Library Representatives*

This study found that a lot of students want library services to be better publicised, often went to their friends or course mates for help and also misconstrued #Stopdeskhogging services that was supposed to help students (see sections 10.1 and 10.9). This report supports a solution that was suggested by participant 6M “One recommendation I would make is that you could employ/co-ordinate a student representative for UG, PGT and PGR students (one per cohort), to regularly feedback and be responsible for collecting student opinions on changes being made. This will ensure library services are always acting in the best interests of students when they are planning new services/initiatives for students. For example, I think the #Stopdeskhogging program could have been tailored to better suit the needs of students”.

The library representative could also be used to publicise library services, help out in events, provide feedback and perform other functions to ensure that the library is as student focused as possible and always reacting to the changing student situations. The number or level of library representative should depend on the level of volunteers. If there is a high level of applicants then there should be more positions at college, school or course level.

10.5 *Group study rooms utilisation*

Participant 2G noted when talking about group study rooms “I would prefer, especially for the second semester, to be able to stay and study after 10pm, but I think that this is a personal thing, I mean I could see that the majority of the rooms were not full, but yeah the kind guy was always saying like yeah 5 minutes please come on everyday he was like the same guy, the same people there, I think that this is the main thing”.

This report suggests that it does not make sense to lock and close group study rooms when the library is open 24 hours a day. These rooms could be utilized by groups who want to work collaboratively through the night for course group work or even individual work. The group study rooms could be utilised far better by students who like to work later at night like participant 2G if they remained open.

This action is something that costs nothing and yet provides students with extra study space and a rare collaborative working space in the library. This will provide students with more study spaces throughout the entire day in term time and also provides more varied spaces as mentioned in section 10.2 and section 10.3.

10.6 *Roving ethnographic training*

Observational ethnography is an incredibly useful method of UX research and can help to provide deep insights into how users experience library services, spaces and equipment. Ethnography is studying people in their natural environment to better try to understand their needs. As students

and all humans' complete tasks repeatedly much of what we do becomes invisible to us and it is just what we do. However, if you watch people and especially if the person watching students is an open minded, knowledgeable library staff member this may help to uncover hidden issues students are facing due simply to the way they use space, resources or services. Issues such as the positioning of signs and information or how people use study space could be helped by ethnography. Any issues or interesting insights roving staff find can be added to a google sheets document or question point for further analysis. Roving staff already note what queries they have to deal with and so this is a simple and cost effective way to get further insights into users' needs and behavior.

11 UNIVERSITY RECOMMENDED IMPROVEMENTS

11.1 *School organise trips or events*

Participants consistently mentioned the importance of socialising during your PGT course, doing things outside of your course and making a good group of friends for support. It is important for the University and different courses to facilitate this. Participants who had their course or school organise events especially at the start of their course felt that it helped them get to know their course mates better and build stronger relationships to support them through their university life and course. This report suggests it is important to push schools to have events for PGT student's especially international and new students so that they are able to socialise outside of their course. 3 of the 11 overarching themes the study produced have the possibility of being improved through early course or school based events (see sections 10.1, 10.10, 10.11). This will also allow international students, who often said they were less comfortable talking to academics, to get more comfortable with lecturers if these events also involved academics.

Events such as lunches with lecturers, pub events with lecturers or trips to places like the Lake District with lecturers can help students make friends and socialise with others on the same or similar courses so that they have a significant friend's support structure. Participant 2G noted "That is very important actually especially if you are not social, I don't face the problem normally because I talk to people easily, but I know some people are not like that so the fact that now they have more friends than they did is very important for the course" and participant 6M mentioned how her friends made the course "far less lonely than undergraduate. I'm not giving them enough credit as they are the only reason I have had such a good time on the course this year". Most participants said that their friends were their first point of contact with most issues from academic to welfare and so it is important for the university to help students get to know one another in less study focused environments.

Events with course mates and lecturers also help students get to know their lecturers better and understand that they are just people too and are not to be feared or afraid of. Many internationals especially said they rarely went to their lecturers It is important for students to feel confident talking with lecturers and comfortable to ask questions when they have any issues.

Finally, events with course mates and lecturers helps to ensure students are more comfortable at the university and feel that they belong here. Positive student and lecturer relationships help students feel less intimidated at university or out of place. Participant 4K said they felt like "just a number here" at the University of Birmingham whereas "at Worcester I was like a person and like 'I was a person', like even now I still speak to my lecturers from Worcester and we go to the pub and things and there's that really nice close atmosphere".

11.2 *Course balance*

A lot of participants complained about the lack of balance and level of pressure on their course. Many said that in their first term they had much less of a workload compared to term 2 and they would prefer a better balance of assignments and exams. Participants often felt in first term they had time to go to societies, take part in sport and do various things outside of their course; however in second term they had to stop due to a concentration of assignments, exams, seminar readings and dissertation planning.

Participant 2G said that “the first semester was much more relaxed than the second and the second at some point we were just working, we were just running through deadline basically all semester, which was kind of exhausting”. 2G also said they struggled to manage their time and even mentioned that they didn’t have time to go to time management ASC workshops. 9/10 of the participants mentioned the workload and time pressures at PGT being high and it is important for the university to do all they can to spread out the workload and reduce the time pressure on students so that they can produce their best work.

11.3 Early module information

Many participants mentioned that before starting their course or even applying they searched for past students through social media to get some first-hand information about the course and its workload. Students should not have to traipse through different types of social media to get information from past students about the course. There needs to be more past or current students providing information regarding courses and modules and this is why this report suggests that courses have and use current representatives to possibly once per week respond to any hopeful students emails regarding the course. These representatives should be volunteers and their email addresses should be put on online course pages as a point of contact for information about the course.

There should also be more transparency regarding what is involved in the course in terms of week by week topics and readings, students said that even past reading lists, module handbooks or example lectures would be incredibly helpful. Participant 4K mentioned that they felt they were playing catch-up through their course due to getting reading lists 3 days before starting and so they advised prospective students to “use FB uni groups to locate people who are on your course or have studied it before, and get the lists from them” so that stress is reduced. Participant 2G also said how they “contacted previous students mainly through social media and I asked them like how was the course, what happened? And this is basically the best thing that I could do. I got the most information there and it’s amazing how many people will be willing to help like a lot with extremely detailed emails with like how difficult it was or what they like and didn’t like it was very good”.

It is important for students to have all the information they need and to not feel as though they are playing catch up throughout the year in order to be fully prepared and to minimise the stress on the course that 9/10 participants mentioned more than once was often very high and intense often damaging their PGT experience. Participant 3H emphasised how she didn’t have time to read everything she wanted to and that “it would have been nice to have the time, to spend more time working on my assignments because like there was loads of great things to read, but I just never had the time to read them”.

11.4 International student's issues

The University should attempt to make international students as comfortable and happy as possible in their new environment as moving to a new country to study is an immense challenge. This report suggests further research needs to be taken to look at international students and the largest national demographics and their wants or needs. There are many issues particularly individual to international students from different systems and although the Birmingham International Academy is a fantastic service that helps international students greatly, there still needs to be more done to support international students.

This may be small things like having kettles or boiling water taps in the library for East Asian students to study more happily or nap rooms for Chinese students who seem to work best when they have a nap half way through their day. There are further differences specific to international students that this study fails to touch on and more research needs to be put into this essential issue to ensure all students are catered for.

11.5 Assessment times

Some participants were confused by the layout of their course as they would complete all of the lectures for a module in December and then take the exam in May or June (see section 10.4). This meant that students often had forgotten a lot of what they were taught and were forced to re-learn certain modules in second term, while learning new ones.

PGT students should be given January exams for modules that end in December and this will also help for the course balance. Semesterisation will help this, but in the meantime courses need to improve their organisation as it makes no sense completing a module and then having to wait 5 or 6 months to complete the assessment on that module.

11.6 Earlier course information

Participant 4K said they were particularly frustrated during their Masters course due to getting information about their course modules, handbooks, reading lists and timetables so late. They emphasized how they had hoped to do some preparatory reading for their course, but didn't get the reading lists until 3 days before the course started. They then felt that they were playing catch up all year due to not having sufficient information about the course early enough. This report suggests having an earlier application deadline so that students can get their timetables, reading lists and modules a couple of weeks earlier for their course and this will allow them to do some preparation and plan their life around their university timetable.

The lateness of timetables was also focused on by participant 4K as they argued "you are paying all this money for a course, and you are having to like skip bits because some person somewhere couldn't be bothered to give you the reading lists and whatever, and then it got to the end of

semester 1 and we were given our semester 2 timetable and given our reading lists and things, but that is like 2 weeks and people are like working and have kids and things like we need the whole timetable so we can plan the year, we need to plan our life around it and it was just really hard to like figure all of that out”.

11.7 Introductory lecture layout

4/10 participants mentioned how introductory lectures are far too long and how they position them poorly with so many in such a short time period. Participants suggested having more breaks between lectures with participant 9Z emphasising that it “is very difficult to keep your concentrate I think for such a long time. But when I was doing my bachelor’s degree we will have 1 hour or 50 minutes a course and then take a ten minute break”.

This report suggests lectures should last no longer than 1 hour without a short 10 or 15 minute break in between as students will be unable to focus for such a large period of time.

11.8 Research skills modules

Some participants mentioned how for their course they had a research skills module that was helpful for learning about the university’s academic support, especially in relation to the library’s ASC and also just using the library in general to find the information that you need. It is rather unfair that for some courses students get this research help and others they do not. This valuable module is vital for new students and especially international students to catch up to UK students. Participant 4K had this module and mentioned “in research skills, we had like a session on how to use the library but that was like 4 weeks in and we were already thinking about like essays and reading and planning for essays and things and I think that kind of thing is alright if you are already a student here and I do get the feeling that that is an assumption in my course like we all studied here before so we already know and if we don’t know then too bad”.

This report suggests that courses are encouraged to have research skills modules to enable new students to catch up and continuing university of Birmingham undergraduates to jog their memory as many students doing masters often have had breaks from education. Research skills modules enable students to learn about university services and also put students on more of a level playing field regarding their knowledge of British higher education expectations (see section 10.9 and 10.7).

12 CULTURAL PROBE DATA ANALYSIS

The response to the cultural probe was overwhelmingly positive with 10/10 participants saying that they enjoyed completing the study. Participant 4K said “when you get the surveys through like in the emails or your lectures, they say do the survey and they give you the forms in class and stuff, like the questions are very narrow and they don’t give you a chance to talk about other things”. Participant 2G said that when completing the cultural probe “you could be more creative which I liked”.

All 10 participants engaged fully with the study completing all of the tasks and attending both the briefing and debriefing. Participants said that all of the tasks on average took less than 30 minutes, which was a good and manageable amount of time. The participants also appreciated the half-way email and the clear explanation of the pack throughout the study and said that the probe was self-explanatory and easy to understand. In the debrief interviews it was mentioned 21 times that participants enjoyed the pack and the tasks within it.

	A	B	C	D
1	codes	Organised themes	Tally	Locating numbers
2	Enjoyed pack1	Enjoyed the pack overall	21	1
3	daily messages good8	Clear and self-explanatory pack/emails	12	2
4	enjoyed the love letter the most3	Enjoyed the love letter	4	3
5	didn't like the card sort11	Enjoyed the PGT advice letter	6	4
6	didn't like the celebrity one7	Cognitive map took around 6 minutes	8	5
7	pack was self-explanatory 2	Didn't stick to cognitive map 6 mins	3	6
8	tasks too around 30 mins9	Didn't like celebrity task	7	7
9	cog map took 6 mins5	Daily messages good	2	8
10	Pack enjoyable and interesting1	tasks individually took no more than 30 mins	12	9
11	liked the PGT letter4	liked the photo study	3	10
12	liked the love letter3	Didn't like card sort	3	11
13	photo study least favourable	Cognitive map is interesting	4	12
14	around 30 mins per task9	Liked the uni biggest challenge task	2	13
15	6 mins on cognitive map5	Didn't like opinion change question, 9	4	14
16	Enjoyed pack and was interesting1		91	
17	likes the letter task4	8 comments were miscellaneous and individual		
18	likes the love letter task3			
19	didn't like opinion changed task14			
20	tasks took under 30 mins9			
21	tasks took around 20 mins9			

12.1 Least favourable tasks

Through analysing participant’s responses in debriefs when talking about the probe we found that the least favourite tasks within the pack were the Celebrity question and the opinion changed question (see *section 6*). During the debriefs with the 10 participants, it was mentioned 7 times that the celebrity question was the least enjoyable task and 4 times that the opinion changed question was the least enjoyable task.

12.2 Most favourable tasks

It was mentioned 6 times during the debrief interviews that the 1st task of the PGT advice letter was the most enjoyable and interesting task out of the 10. It was also mentioned 4 times that the cognitive map was an interesting task to complete during the study.

12.3 Diary codes analysis

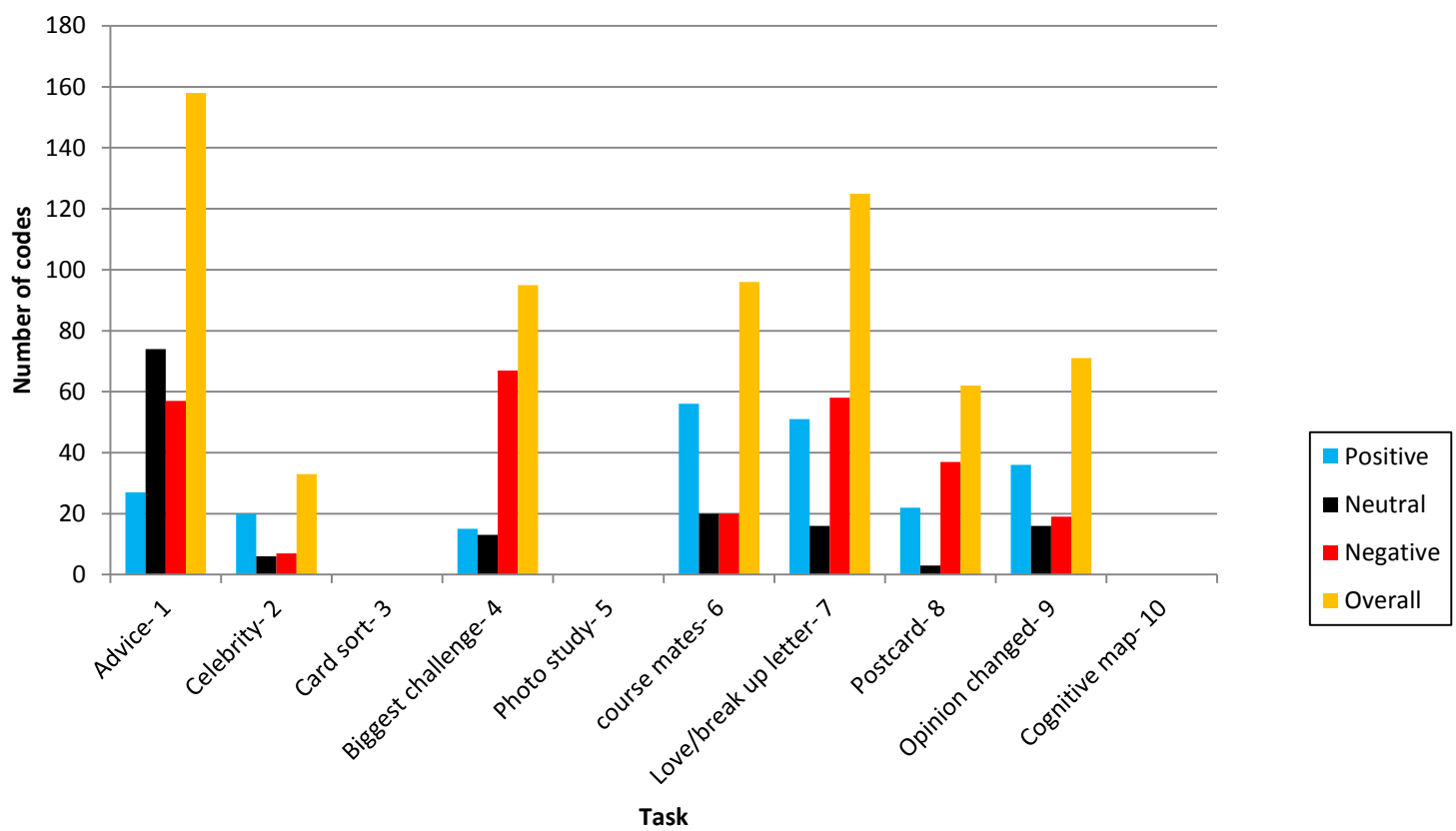
In order to assess the effectiveness of each activity within the probe, each task was analysed for the amount of useful data, or codes, it produced.

The number of codes produced by a task provides an insight into how useful the task is at encouraging participants to delve deeper in how they feel about various topics. It also is a great indicator for future probes, telling us what tasks are best to use to enable participants to fully express their feelings and beliefs.

The number of codes per task:

- 1) Some advice would be nice had 158 codes
- 2) Celebrity question had 33 codes
- 3) Card sorting analysed in the debrief
- 4) Biggest challenge question had 95 codes
- 5) Photo study analysed in the debrief
- 6) PGT course mates question had 96 codes
- 7) Love/break up letter had 125 codes
- 8) Postcard task had 62 codes
- 9) Changed opinion question 71 codes
- 10) Cognitive map analysed in the debrief

Analysing the diary from the packs based on the number of codes tasks produce corroborates with participants responses in the debrief interviews as it shows that the celebrity question provided the lowest number of codes at just 33 compared to an average of 91 codes per task. It also showed that the opinion changed question had the third lowest amount of codes at just 71. The postcard task had fewer codes than the opinion changed task; however one participant misunderstood this task and only wrote on the postcard rather than writing on the postcard and in the diary. For the postcard task one participant said they enjoyed it due to the novelty of the task. There were also no negative comments made about the postcard task in the debrief interview.



13 FUTURE CULTURAL PROBES

13.1 *Lessons from the cultural probe data analysis*

The cultural probe data analysis in *section 13* shows that in future probes it would be best to replace the celebrity question and opinion changed question in order to try other UX techniques or more possible questions.

13.2 *Earlier materials arrival*

When putting together the cultural probe we received all of the needed materials for the pack just 2 days before the briefing meetings. This meant we had to rush putting the packs together so that they were ready for the participant's arrival for the briefing meeting. I would suggest having the packs completed and put together at least a day in advance of the meetings with participant's and the handing over of the packs. This gives you time to check over the packs and ensure all of the packs are correctly and accurately put together.

13.3 *Recruitment issues*

More targeted recruitment for future projects specifically looking for older students, male students or other categories of students would help to increase the diversity of participants and improve recruitment from groups that were underrepresented in our study . This may include sending targeted emails, attending certain events or positioning posters in certain areas like the male toilets.

During recruitment there was also a lot of initial interest shown by students, but once more information was given about the demanding nature of the study many dropped out. The study would have been more representative if we did not cut of our possible participants at 28 as this constrained us on who we could choose to take part in the study and meant it became difficult when people began to drop out. It would be better to have a pool of around 50 potential participants guaranteed before closing entry into the study.



13.4 *Voucher choices*

During this cultural probe study we allowed participants to choose their own vouchers. This was a mistake as it meant getting these vouchers in time for the debrief meeting was difficult and it also led

to many participants changing their minds and being left disappointed. It would have been far better to give them a choice of around 5 different and popular outlets to choose their vouchers from. This study suggests Amazon must be an option as it was the overwhelming majority choice for most students.

13.5 Ethics

It is important to establish ethical requirements well in advance of the study to allow sufficient time for ethical approval to be granted if necessary.

13.6 Academic study

A similar study, focussed on academic staff, would help us to better understand the needs, behaviours and feelings towards University services of this group, who can be powerful influencers in shaping the attitude of students and colleagues to the Library.

13.7 International language barrier

For some of the international students there were obvious moments in the debrief interview in which they were unable to properly express their thoughts and feelings surrounding an issue due to a lack of English skills. In these scenarios it may have been helpful to have a translator who speaks the first language of the international students so that their true thoughts can be recorded. There was also a few times international students used numbers incorrectly and produced incoherent answers to questions.

Some of the international students struggled to understand a few of the tasks including the postcard task and the photo study. In the future it may be helpful to go over in a bit more detail with international students what is expected within each individual task and activity.

13.8 Mood varies

Student's feelings towards the university and the library often changed depending on their mood on the particular day a task was completed and so this is another argument in support of cultural probes over surveys. With surveys a participant's mood on a single day dictates their answers, however with the cultural probe being over a 10 day period it is more representative of their true feelings rather than their current emotions.

14 CONCLUSION

User experience research has a vital role to play in the future of user research and in just this study it has provided insights that simple surveys would not have uncovered. This cultural probe has been a resounding success uncovering issues relating to course organisation and the importance of socialising in your PGT course, to specific international students issues and problems in the expectations put onto PGT students. UX research helps the library better understand students as well as making students feel that they are being heard more as they are able to fully express themselves when providing feedback. The information that users provide is not excessively narrow or constrained to agree, neutral or disagree. Participants can take questions and tasks into an infinite amount of directions so that they can really express their thoughts, behaviors and feelings. UX research is more time consuming, costly and demanding, but the insights it provides are unique and can help the university improve its student experience so that it continues to rank highly in TEF's, the NSS and university league tables.

It is not the intention of this report to suggest that UX research should be used in isolation. A small sample size is effective when used in conjunction with quantitative data. It is important to use both together; a preliminary qualitative UX research project, before conducting wider spread surveys, can help guide the survey to provide the best possible and most useful feedback for library services, while also checking for the widespread validity of the UX research outcomes.

Some UX research techniques are time consuming and produce a huge variety of in depth data and so it is difficult to conduct and analyse UX research on a mass scale. It is best to focus UX research on a small number of participants that can then be analysed in depth. This UX research data and outcomes can then be checked in terms of its validity for a larger sample group by producing and conducting a quantitative survey to question the outcomes of the UX research. For the 2018 University of Birmingham cultural probe to ensure that the overarching themes are accurately representative of the wider PGT cohort I would encourage Library services to produce a survey querying some of the key issues this study has raised to ensure that the policy suggestions and overarching themes are representative and indicative of the wider student populace. The combination of quantitative widespread research and qualitative in-depth research is formidable in unearthing user issues and it will enable library services to be as user centered as possible going into the future.

Studies in the US especially have emphasized the use of both research techniques together rather than one or the other (Foster & Gibbons, 2007). This study does not conclusively show the only significant issues students are facing, but it does indicate some of the key issues that require further more quantitative and widespread research.

BIBLIOGRAPHY

- Becker, S., Bryman, A., & Ferguson, H. (2012). *Understanding research for social policy and social work: Themes, methods and approaches* (2nd ed.). Bristol: The Policy Press.
- Bhardwa, S. (2018, June 7). *What is the TEF? Results of the teaching excellence framework 2018*. Retrieved July 16, 2018, from Times Higher Education: <https://www.timeshighereducation.com/student/news/what-tef-results-teaching-excellence-framework>
- Cosco, N. G., Moore, R. C., & Islam, M. Z. (2010). Behavior Mapping: A Method for Linking Preschool Physical Activity and Outdoor Design. *Medicine & Science in Sports & Exercise*, 42(3), 513-520.
- Eden, C., Jones, S., & Simms, D. (1983). *Messing About in Problems*. Oxford: Pergamon.
- Foster, N. F., & Gibbons, S. (2007). *Studying Students: The Undergraduate Research Project at The University of Rochester*. Chicago: Association of College and Research Libraries.
- Gaver, W., Dunne, T., & Pacenti, E. (1999). Design: Cultural Probes. *Interactions*, 1(Jan/Feb), 21-29.
- Guardian. (2018). *University league tables 2019*. Retrieved July 16, 2018, from Guardian: <https://www.theguardian.com/education/ng-interactive/2018/may/29/university-league-tables-2019>
- Kim Wu, S., & Lanclos, D. (2011). Re-imagining the users' experience. *Reference Services Review*, 39(3), 369-389.
- Magnusson, E., & Marecek, J. (2015). *Doing interview-based qualitative research: A learner's guide*. Cambridge: Cambridge University Press.
- May, T. (2018, March 2). *In full: Theresa May's speech on future UK-EU relations*. Retrieved September 19, 2018, from BBC: <https://www.bbc.co.uk/news/uk-politics-43256183>
- McCluskey, C. (2015, February 12). *USER EXPERIENCE (UX)*. Retrieved September 19, 2018, from #UKANTHROLIB: a blog exploring ethnography, usability and user experience in libraries: <https://ukanthrolib.wordpress.com/>
- Northcott, N. (1996). Cognitive mapping: An approach to qualitative data analysis. *Journal of Research in Nursing*, 1(6), 456-463.
- Plumplot. (No Date). *Birmingham antisocial behaviour crime statistics*. Retrieved September 19, 2018, from Plumplot: <https://www.plumplot.co.uk/Birmingham-antisocial-behaviour-crime-statistics.html>

- Pope, C., Ziebland, S., & Mays, N. (2000). Analysing qualitative data. *British Medical Journal*, 320, 114-116.
- Priestner, A., & Borg, M. (2016). *User Experience in Libraries: Applying Ethnography and Human-Centred Design*. New York: Routledge.
- Priestner, A., & Marshall, D. (2016, September). *Snapshot: A cultural probe study exploring the research and information behaviour of postdocs and PhD students at the University of Cambridge*. Retrieved July 24, 2018, from Futurelib:
<https://futurelib.files.wordpress.com/2016/09/the-snapshot-project.pdf>
- Ramsden, B. (2016). Ethnographic Methods in Academic Libraries: A Review. *New Review of Academic Librarianship*, 355-369.
- Save The Children. (no date). *6 Methods of data collection and analysis*. Retrieved July 23, 2018, from The Open University:
<file:///adf/corp/LIB/USERS/HiltonLE/Cultural%20Study/resources/6%20methods%20of%20data%20collection.pdf>
- Stemler, S. (2001). An Overview of Content Analysis. *Practical assessment, research and evaluation*, 7(17), 1-6.
- TEDx Talks. (2013, March 1). *Ethnography: Ellen Isaacs at TEDxBroadway*. Retrieved July 16, 2018, from Youtube: <https://www.youtube.com/watch?v=nV0jY5VgymI>
- University of Birmingham. (2017, June 22). *University of Birmingham awarded Gold in national teaching assessment*. Retrieved July 16, 2018, from University of Birmingham:
<https://www.birmingham.ac.uk/news/latest/2017/06/national-teaching-assessment.aspx>

APPENDIX 1

Introductory Briefing checklist:

Must ask in cultural probe briefing-

- Ask what vouchers they want £75 worth at the end of the study
- Make sure they know they will get vouchers after they attend the debrief final meeting
- Tell them about the timescale 10 days, a task a day, 30 mins each task, initial and end meetings
- Photo task will need a camera, phone, tablet to take images
- Remind of debrief august 9th or 10th and sort debrief time
- Remind must start photo task in the morning of 27th July
- The purpose of the study and tasks
- Aims of the tasks in terms of delving deeper, take the tasks as you like etc.
- Going over the consent and leaflet forms
- Data will be anonymised
- Consent form signing two copies one for me and one for them
- Give them their diary and packs for cultural study
- Ask if can drop diaries and tasks back on Thursday 2nd August or Friday 3rd August
- Remind them they can email anytime

One of the single most important aspects of the briefing is building a relationship with participants, in order to secure participant engagement with the study.

- Encourage commitment to the study and the 30 minute max time on each task so that participants understand the demands asked of them
- Emphasise to the participants that if they have any issues or worries whatsoever they can at any point day or night email their library contact (important for their library contact to build a relationship with participants so that they feel comfortable emailing even for the smallest of issues)
- Important to demonstrate our huge interest in their experiences at the university and throughout their postgraduate studies and how we want to ensure they are catered for and happy with their university experience (we value them)
- Emphasise the importance of being as in depth, expressive and creative as possible. Do not be afraid of being silly or strange, just make sure all your feelings and experiences that any specific task engages with are noted down and expressed thoroughly. Do not be afraid as you will be anonymised before any data is shown outside of our small 4 person team.
- Explain what the research will be used for in terms of improving university services for PGT students and to better understand the lives of our students so that we can best cater for

them. Their data will directly feed into the design of future university and specifically library services.

- The key aim of this research project is to transform and diversify research insights and feedback methods, so that the university can better understand the needs/priorities of its students.

Engaging, encouraging and positive email reminders should be sent to participants at the half way stage and possibly at certain key points through the study (though not too often as this may make participants feel annoyed, 2/3 times max)

- Ask the participants possibly how they are finding it or how they are progressing to get some initial feedback on the tasks we have set and their success or failure
- Remind them of their vouchers possibly and the final debriefing date and time

An example half way email:

Hi (Name)

This is just an email to ask how you are getting on with the tasks and to clear up some information.

Firstly, congratulations you are half way through the study I hope you are enjoying the tasks and questions so far and have found the packs thought-provoking. Don't forget to open today's task in the morning and in relation to the final task in the cultural study involving envelope 6, please do not take this task too seriously or overthink it. It is important to be instinctive and try your best to stick to the time limits on the task.

How are you finding the packs and how have you progressed so far?

Secondly, your £75 worth of (shop) vouchers have been applied for and we are aiming to give them to you at your debrief once the meeting has ended and the study is complete to say thank you for all your work.

Thirdly, are you able to drop the packs off on the 2nd/3rd August? If you could then please leave them at the library desk and tell staff they are for the PGT study, that would be really helpful for us to have a look at before our debrief meeting.

Finally, the debrief will last for around 1 hour and will be on either the 8th 9th, or 10th of August between 9am and 5pm. I am proposing that we meet on (date) at (time) if that is okay with you?

Best wishes, (name).

Debriefing interview prompts

Aims

The single most important aspect of the debriefing is to gain an understanding of the participant's priorities, preferences, routines and values through questioning and analysing key pieces of data derived from the cultural study tasks. During the debrief focus was put on the three main tasks that

were more down to visual interpretation and required clarification than any others. This was the photo study, card sort and cognitive map.

- Try and receive and quickly analyse study packs for key information or confusing data before the debrief so that participants can clarify or go into more detail on their responses
- Ask for some final feedback on the pack and the tasks for future analysis on the research techniques and tasks used e.g. what task they most or least enjoyed or found the most insightful/thought-provoking
- Audio record the interviews so that little notes have to be taken and you can be focused on the participant, possibly make notes on body language or the way they react to certain questions or topics for future analysis and help in understanding data collected. Taking notes may make the participant feel they are being tested, so they may be less comfortable.
- Have a list of various questions that you would like answers to, but make sure it is not too extensive so that there is time for asking for more depth on answers and follow up questions.
- Make sure to interrupt as little as possible, put the onus on the participant and let them go where they choose to when answering different questions. If prompts are needed to gain further depth try and make them brief
- Make sure they reflect on what they had learned from the tasks, about them, their university experience etc.
- What insights stood out to them, what did they find the most difficult task to complete
- Let them lead the conversation in talking about their research diary and their completing of tasks