

## **Using ethnographic research techniques to find out the story behind international student library usage in the Library Impact Data Project**

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### **Abstract**

Phase two of the JISC funded Library Impact Data Project (LIDP) identified low usage amongst Chinese students. Further research was needed to help us delve deeper and find out the story behind the data. A questionnaire was distributed to all international students in the Business School to learn about their information retrieval behaviours. Response was high but the survey was deliberately designed to only produce quantitative data, and highlights the limitations of survey data. More research was needed to gather qualitative data to create a broader picture of student practice.

Students who responded to the questionnaire were asked to participate in the qualitative research with a promise of a reward. Methods utilised included the retrospective process interview and cognitive mapping (both as used by Andrew Asher in the ERIAL project). Questions from the survey were sometimes used as prompts in the qualitative process. The data is still to be coded and analysed but one of the main findings is that students are unaware of the research help that they can get from their academic library.

### **Introduction**

Research into library usage data at the University of Huddersfield found a direct correlation between library resource usage and final grades. Three main areas were investigated:

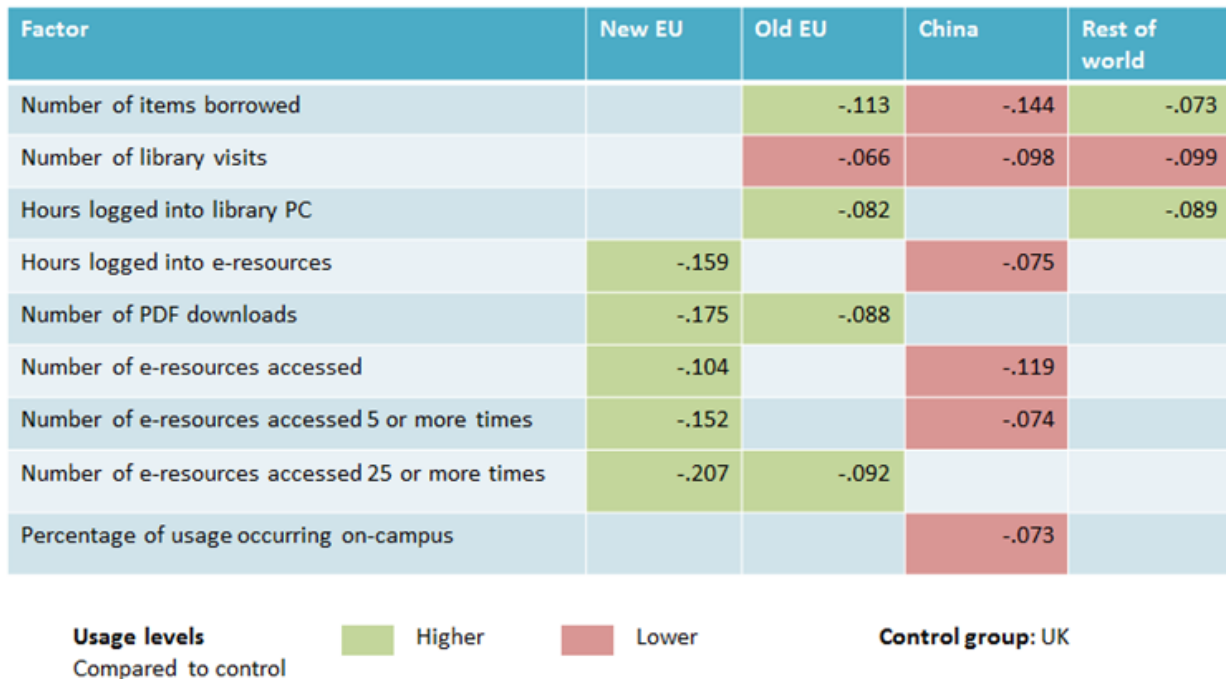
- e-resource usage (using click-throughs, e.g. EZProxy),
- book loans (using data from the Library Management System); and
- library visits (using gate entry statistics).

When usage data was matched against final grades the first two areas had a direct impact. However, there was limited correlation between library visits and grades (Stone and White, 2010).

More research was required to determine whether this correlation was peculiar just to the University of Huddersfield or a trend that was prevalent in other Higher Education Institutions. It was decided that to get a true picture, the University needed to benchmark its data with that of other UK university libraries and in 2010, Computing and Library Services (CLS) secured JISC funding to investigate the correlation between library resource usage and student attainment using data from eight other Universities (involving a total of 33,000 students) and a statistical significance was proved although it should be noted that it is not a cause and effect relationship and other factors such as student engagement, also have a direct effect on final grade (Stone and Ramsden, 2013).

Further JISC funding was received for phase two of the project which examined data from 2000 University of Huddersfield undergraduates to determine whether library usage was influenced by contributory factors such as demographics and subject discipline. For demographics, students were grouped into four categories which were then compared against the control group of UK students; new EU (including the newer member states from Eastern Europe), old EU, China and rest of the world. The Chinese were the largest international group at the time when the statistics were collected. The numbers for the rest of the world were too small to drill down. The research

highlighted the Chinese as being particular low library users and borrowed fewer items and used less e-resources than their UK counterparts (Stone and Collins, 2013). (Figure 1)



**Figure 1. Library Usage (Country of Domicile)**

For subject discipline, data gathered revealed that students from two of the seven Schools, Computing and Engineering and also Art, Design and Architecture exhibited low usage.

It was decided that the third phase of the Library Impact Data Project should unpick some of the data and findings from phases 1 and 2 with the aim of identifying interventions that would particularly benefit low library users from the two Schools mentioned above but that could be applied across the University whilst at the same time, recognising that there is no one-size-fits all, and a targeted approach tailored to particular student groups was required (Stone *et al*, 2015). For Chinese students, further research was required to delve deeper into the data to gain a better understanding of the reason behind poor library usage from this cohort of students. The ultimate aim was to drive up resource usage to improve student grades and improve retention.

This paper will document the research that was carried out to find out why Chinese students are poor library users when compared to their UK peers, making an argument for using ethnographic research methods to gain further insight into student behaviour.

### Literature Review

Ethnography is a range of a qualitative methods used by researchers to find out about social and cultural practices in a specific context. Researchers are active participants, working with and observing people as they carry out tasks in their everyday environment. (Asher *et al.*, 2012; Pashia and Critten, 2015). Methods employed include participant observations, mapping exercises, photo diaries, and semi-structured interviews.

Ethnography in libraries is a relatively new phenomenon. The first large-scale ethnographic research project was conducted by Nancy Fried Foster and Susan Gibbons in 2004-6 at the University of Rochester. They wanted to find out more about student research practices, how students go about writing their assignments and learn more about their library-related needs. The question they asked was “What do students *really* do when they write their research papers?” Their goal was to

provide student responsive library services that would fully support their students as they completed their education (Fried Foster and Gibbons, 2007, p.v). One of the research techniques used in this project was retrospective interviews, a method used by anthropological researchers Duke and Asher in the ERIAL project, a research initiative inspired by the work of Foster and Gibbons that took place at five large Illinois University Libraries. For this method “participants were asked to give a step-by-step account of how they completed a previous research assignment while drawing each step on a large sheet of paper, producing both a narrative and a visual account of the assignment from beginning to end” (Asher *et al.*, 2012, p.11).

Cognitive mapping was another technique used in the ERIAL project and was developed by Asher *et al.* (2012) and Asher (2013) based on the sketch map technique used by Kevin Lynch (1960) in his book “*The Image of the City*” to learn more about how people view and used their cities. Asher thought he was the first to use them in a library context but discovered a similar approach had been used by Mark Horan in 1999. Horan felt that sketch maps “can give librarians an opportunity to view what their patrons see and sketch maps can give patrons an opportunity to express things for which they perhaps do not have the words” (p.194). For the ERIAL Project Asher *et al.*, (2012) gave his students six minutes to sketch from memory a map of the library. In total, 137 students completed this exercise away from the library building to remove the possible visual clues. They were given a blank sheet of paper with instructions for the exercise presented at the top. Students had to change the colour of the pen every two minutes using them in the order of blue, green and red. They were then instructed to label the maps. The premise was that the students would draw the item that was the most important to them or that they had the strongest association with in the blue pen. Asher felt the exercise gave “both spatial and temporal data about how students conceptualized library spaces” (p.11). This mapping exercise was adapted by Donna Lanclos (2013) at UNC Charlotte. She asked students to draw maps of the places (both on and off campus) they go to study. She again gave the students six minutes and used coloured pens in a specific order. For undergraduates, she found locations to be a particularly importance.

Why use these research techniques in libraries? What benefit do they have? In the past, libraries have tended to rely on gathering quantitative data in the form of surveys, or running focus groups to gather qualitative feedback on a particular service, encouraging users to articulate their needs in relation to the library and then come up with solutions to meet those needs. These are attitudinal research methods used to gather attitudes and opinions (Schmidt and Etches, 2014). Responses to surveys/focus groups can often be inaccurate as the respondent may misremember details or give an answer that presents a more positive self-portrayal (Pashia and Critten, 2015). To find out how library users truly interact with the library, using ethnographic research tools with its behaviour research methods can shed light on how people are truly using library services (Schmidt and Etches, 2014). Lanclos (2016) claims ethnographic practices help with “...eliciting qualitative data about user behaviour, and more importantly as an avenue to transforming institutional practice and in increasing the role of library voices in shaping such practices” (p.21). She makes the case for libraries employing ethnographers or anthropologists as permanent members of staff rather than bringing them in as consultants for a short term project where because they are paid by the organisation may be under pressure to please the purse holders. Also she argues that there is merit in observing customers over a period of time, being allowed to fail, challenging the status quo, influencing strategic decision and bringing in resources. It is important to remember, however, not to over generalise the findings generated by ethnographic methods as they are likely to be relevant to a local situation or even an individual but probably not representative of students in general (Asher *et al.*, 2012; Pashia and Critten, 2015).

## Methodology

It was decided to use a two pronged approach to gather both qualitative and quantitative data about the Chinese students. The first step was to devise a questionnaire to find out what resources the students were using, whether they stuck to items on their reading list or if they engaged in further research to find alternative sources, and who they went to for help. To make the questionnaire quick and easy to analyse, all of the questions were closed. Students were given a range of possible answers and had to select one. The questionnaire was devised using Google docs but was printed out and delivered by hand to tutorials run by the International Learning Development Group. These were compulsory classes attended by international students mainly from the Business School but also from the School of Education and Professional Development. All of the international students attending the last weekly class of the year, completed the questionnaire to give further insight into library usage by all international students. Respondents were also asked to write down their country of origin so that the responses from the Chinese could easily be identified. We were also interested to find out usage by all international students. Library staff, with the support of the tutor, introduced the questionnaire at the start of classes, allowed the students time to complete them before collecting them in. The questionnaire was also placed online by one of the tutors.

In addition to collecting quantitative data through the questionnaire, it was decided to gather some qualitative data in the form of interviews. To select students for the interviews, questionnaire respondents were asked at the end of the questionnaire to include their name and contact details. They were promised a £10 Amazon voucher if they decided to take part. If enough students volunteered, the sample of students selected was to be representative, that is including postgraduates as well as undergraduates, include students who were 26 and over as well as the other identified age ranges (18-21; 22-25) and finally students who had been living/studying in Huddersfield for three or more years as well as those who had been present for less time. Students who indicated they relied solely on reading list items were also to be selected to find out why they chose not to search for items beyond the list. Interviews were the preferred method of data collection. The alternative was to run focus groups which would have been less staff intensive. However, when running a focus group with Chinese students as part of the second project phase, it was felt that the students told staff what they thought they wanted to hear or what they assumed was the correct answer. A range of questions were to be devised using some of the key findings from the questionnaire. Questions were also asked to find out the students' preferred way of working - was it in groups or individually?

However, the author attended the UX in Libraries Conference held in Cambridge in March 2015 and was introduced to a range of ethnographic research techniques and immediately grasped how they could be effectively used to gather much more informative data from the Chinese community. She had a chance to interview a Chinese post-graduate MBA student using the Retrospective Process interview format taught by Andrew Asher. The interviewee was asked to describe their assignment, starting with when they were given the question to the moment they handed it in. They were also asked to draw every step as they discussed them. It seemed to be a very effective method of eliciting information from the Cambridge student and it was thought this technique could also be effectively used with the Huddersfield Chinese students. Additional questions were also to be asked about where students sought help for their research; whether they stuck to using items on their reading list; did they use the electronic databases subscribed to by the library; and did they use eBooks.

To supplement the data gathered through this technique, it was also decided to use the cognitive mapping technique with the students. This had been effectively used for a Huddersfield pilot-project in a similar way to how Lanclos used them at UNC Charlotte, to find out more about what spaces students use for their academic work and how they use them (Ramsden *et al.*, 2015). Students were

to be given six minutes to draw a map of where they go to learn or study either formal or informal space located on or off campus using different coloured pens for a set duration of time and in a prescribed order. It was stressed to the student that there is no correct way of doing this exercise and that they do not have to draw but can create a mind map or simply list the places they usually visit. As well as giving a verbal explanation to the student, the instructions were written down for the students to read and follow. This was particularly important to this research as some Chinese students may have language difficulties. When the six minutes were up, to gain more detailed information about the drawings, the students were interviewed to help the researcher gain an understanding of the items drawn in the map and confirm various issues that may not have been addressed or answered. Each student was asked to describe what they had drawn. Prompts were then used to find out what they included and what was left out, whether they worked in groups in the space or on their own and finally if they have a favourite place to go. Students were also asked to compare their experience of studying in Huddersfield, UK to their academic experience in China. The interview was fairly flexible giving the interviewer an opportunity to ask any questions they deemed were important or of interest to the research.

It was intended to host three scheduled sessions, and ask students to participate in the cognitive mapping exercise and do the drawing part of the retrospective process interviews whilst in the same room and then to be taken to a private room by one of the librarians who would ask the follow-up questions. The reason for this decision was that the help of a Chinese placement student currently working for the International Office had been secured and her role was to translate the instructions re the drawing exercises to the students.

### **Findings**

There were 277 responses to the paper questionnaire administered by library staff through the timetabled classes. A further 95 responses were received online. Just under 70% of the responses were received from Chinese students. So what did it tell us?

- The majority of students when doing their assignments, did their own research as well as using reading list material (81.7%).
- They most obtained their books from the library (77%) and a high percentage (73%) used eBooks through Summon.
- 89.6% of students surveyed said they used eBooks as they could be accessed off campus (59.7 %) and they can search using keywords within the book (47%), a popular feature of eBooks that is available in most of the packages.
- Students don't like eBooks as they could not make notes of them (19.4%) (it is possible that students are unaware of the note-taking feature) and they are difficult to read on a computer screen (18.9%).
- 93.4% of respondents used journals. When asked how they accessed them the majority of students selected Summon (85%) the next popular answer was almost a tie between Google (37.8%) and Google Scholar (36.7%).
- They used journal articles as they are more up-to-date than books (57.5%) and they are shorter in length than books (47.6%). The answer which was anticipated to be the most popular, that they were told by their tutor to use journal articles, came third (34.7%).
- When asked what other resources the students used, Google came in first (51.7%), followed by Google Scholar (45.2%) with newspapers in third place (35%). The subject databases, of which there are many for Business, were sadly only used by 22.4% of respondents.
- The final question was where do the students go for library help. 62.4% indicated that they came to the Library Help Centre (help desk located on the entrance floor to the library), the second most popular answer was their friends (36.1%) followed by email (32.8%) and the

fourth most popular question was the student library helpers who shelve the books and answer IT enquiries (30.4%).

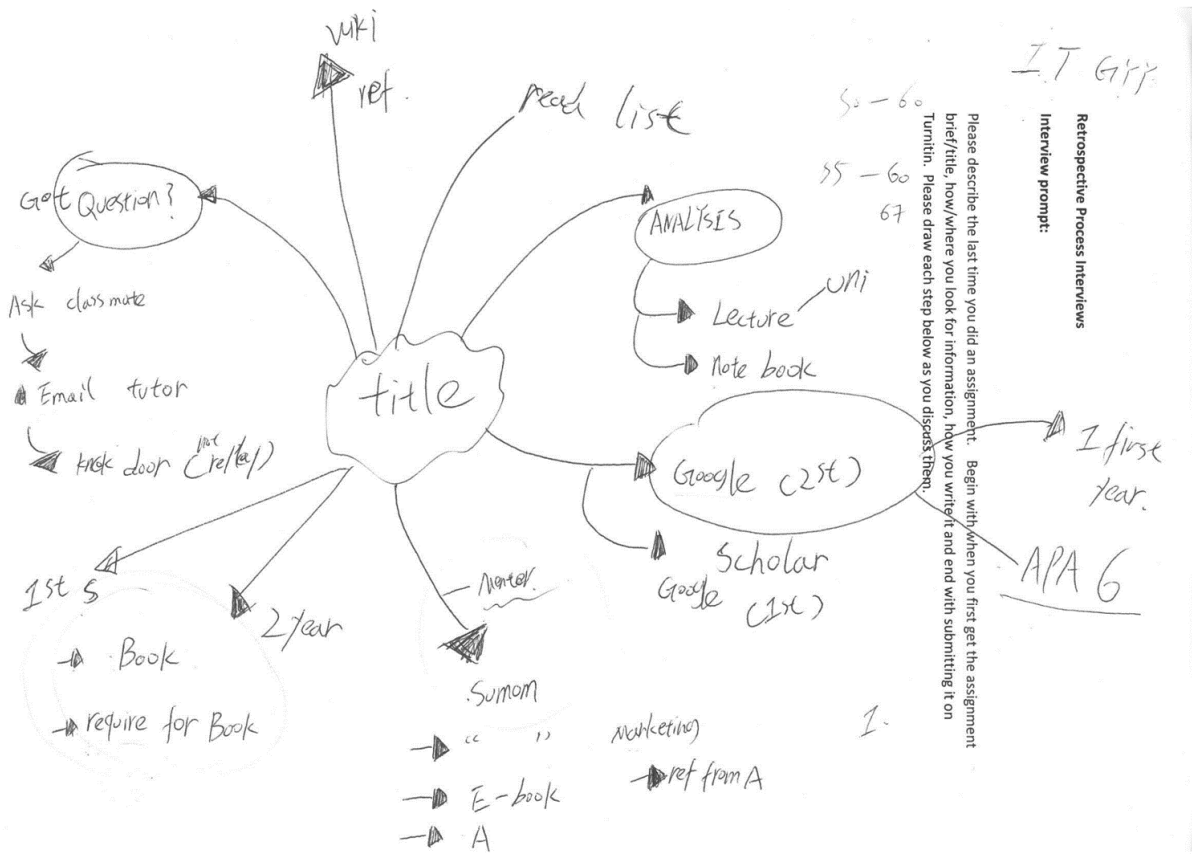
The results from the questionnaire were interesting and whilst they gave us a rough idea of the resources international students were using and where they were going for help, the information it gave was fairly limited and needed further investigation. For example, it did not tell us why students relied so much on their peers or why some students stuck to books on their reading list without doing further research. Also, the response that showed the numbers using Google Scholar were not so different to those using Google needed validating and explaining. In hindsight, despite adding a complexity to the data, giving students an opportunity to suggest other reasons behind their use/dislike of eBooks and their reason for using journal articles, would have given us more insight into resources usage. Also, some of the questions were badly worded. For example, the question re library help was very ambiguous. The Help Centre offers lots of library help (IT, help with binding, library accounts, finding books on the shelf as well as offering help with research) but the questionnaire did not ask what type of help they sought from this service point. The response of "email" for the same question was also confusing. The researchers meant emails to library staff but equally to students answering the questionnaire, it could have meant emails to friends or tutors.

The positive point about the questionnaire was quite a few of the questionnaire respondents gave their name and contact details in the box when asked about participating in a follow-up interview. In total, 12 students were selected using the criteria cited above. They were invited to attend one of three scheduled sessions. However, for the first session no-one turned up. Some of the librarians who had volunteered as would-be researchers were new to the ethnography techniques. The decision was therefore taken to practice on the Chinese placement student from the International Office and also the marketing placement student, a home student who was spending her year working on Library marketing activities and it was she who had done the data inputting of the questionnaire into an Excel spreadsheet and produced corresponding tables and graphs. Rather than being taken to an individual interview room, they were interviewed together so that the librarians could see the techniques working in practice. The findings were interesting as it was the UK student who worked closely with a fellow student, the Chinese student preferred to work on her own. What really stood out, however, was that when questioned about using the librarians for help with their research, the Chinese student, despite having studied at the University for two years, had absolutely no comprehension that she could receive this type of help from the librarians whereas the student who had spent her placement year working for CLS now knew that this help was available to students and said she intended to make use of it during her final year.

For the remaining two sessions, only two students turned up! This sample was so small, however, it felt that it wasn't representative and therefore the data was discarded. It was decided to repeat the exercise the following year. Instead of selecting students from a questionnaire, students were approached by tutors from the International Learning Development Group and asked to write their name against an identified slot. Also instead of having group drawing sessions, it was decided to interview the students on their own and not to involve the services of a Chinese translator. In total, 11 students volunteered to be interviewed. The sample was probably not as representative as the first sample would have been, had they all attended, but of the 11 students, 8 of them did appear for their interview. Half of them were Chinese students but there was also an Iraqi, Thai, Vietnamese and Moroccan student. The only problem was that they were asked by mistake to attend a 30 minute interview, when in reality the exercises could take from 45 to 60 minutes depending upon how much the students had to say. This was only an issue for one of the students, however, who had mistakenly misunderstood 30 minutes to be 13 minutes! He did stay for 30 minutes but only had time to complete the retrospective process interviews. However, the

information he revealed during that time made it a very interesting and worthwhile for the researcher.

The information is currently being coded. However, the data gathered using the ethnographic research methods gave a much fuller picture of how students went about their work at the University of Huddersfield when compared to the findings of the questionnaire. The exercises were very effective and served as a useful prompt to elicit useful information from the students. A highlight for the author was an interview with a Marketing student from China who was in his third year of study at the University. By using the retrospective process interview (Figure 2) he was able to talk the researcher through his academic journey that saw him changing from a reliance on Google in his first year to using physical books in his second year to graduating to using journals and eBooks in his third year, getting to trips with using the library search engine, Summon and academic referencing which he had never used before.



**Figure 2.** The drawing made by a Chinese Marketing student during his retrospective process interview

It would have been hard to have discovered this level of detail through a questionnaire or even a focus group/general interview. It also highlighted differences between the study culture encountered at their home institutions and what was expected in the UK. Early preliminary findings are that none of the students interviewed were aware of the research help they can receive from librarians. The reaction of most students to this news was one of astonishment. Further research should be carried out with home and EU students to find out if this is something peculiar to all students. It is intended that strategies will be put in place to promote this underused source of help to all students, e.g. better signage, promotion to academic staff, etc. The Google Scholar/Google issue was also followed up with students and revealed that as part of the International Learning Development curriculum, students were being taught by tutors to use not only Summon but also Google Scholar which links to many of the library resources and is preferable to using Google.

The study underlined the need for persistence on behalf of the librarians to get the ethnographic research off the ground. Since this research started, a UX research group endorsed by the Senior Management team has been established within CLS. This includes a core group of people familiar with the benefits of many of the ethnography techniques and engaged in carrying out this qualitative research. However, similar to most libraries who are dabbling in using these research methods, there is no formal resourcing for this activity. Staff have to fit it in and around their existing day job. If libraries want to see the full benefit and gain this detailed information about their users' experience, then such research practices should as Lanclos (2016) asserts be embedded with the library team with an accompanying resource allocation.

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