

# Getting started with **UX + ETHNOGRAPHY**

A horizontal banner image showing the dark silhouettes of several people sitting around a table, engaged in a meeting or discussion. The background is a light gray, and the silhouettes are in black and dark gray.

@ned\_potter

# THE PLAN FOR THIS WORKSHOP

- 1) What is UX?
- 2) Key techniques
- 3) Recruitment
- 4) Analysis and Design techniques
- 5) Questions and ideas

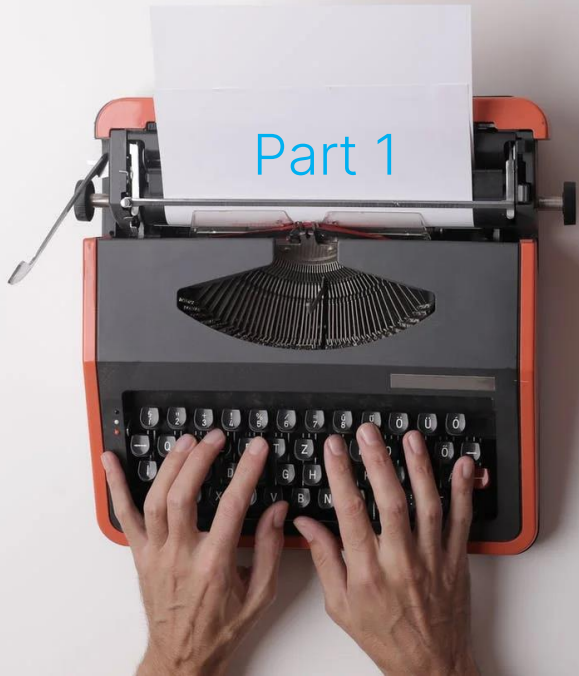
**I would like to be interrupted as often as possible! All questions and comments welcome in the Chat **throughout**.**

---



## Can you introduce yourselves in the Chat?

I'd like to know two things in particular: **what sort of library service** you work in, and whether you have any **experience of trying out UX** techniques?



# WHAT IS UX?

**User eXperience**, or **UX**, has become an umbrella term to cover a suite of techniques for understanding user behaviour.

They can be divided roughly into two parts: **ethnography** and **design**.





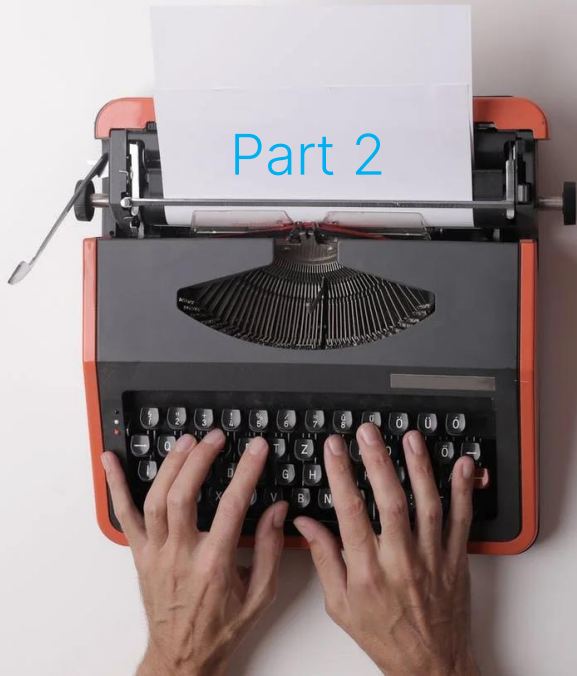
**Ethnographic techniques** and observation lead to a deeper and more complex understanding of user needs and behaviour than traditional data gather methods normally allow.

**Human Centred Design** prioritises the end user, their needs, and their behaviour, at every stage of the design process, with an aim to making several small changes to improve the user experience...

**UX:** is qualitative, & on a much smaller scale than e.g. surveys  
(a rule of thumb is you can learn 80% of the data from 15 people)  
**provides incredibly rich data from a small sample size**  
attempts to look at behaviour more than attitude  
**mitigates some of the problems with traditional data gathering methods like surveys and focus groups**  
often catalyses properly impactful change

**..and it's fun.**





# KEY TECHNIQUES



## Some key Ethnographic Techniques

**At a  
distance**

**Behavioural Mapping / Observation  
Graffiti Walls  
Journey Mapping**

**Touchstone Tours  
Cognitive Mapping  
Semi-Structured Interviews**

**Face  
to face**

# Observation / Behavioural Mapping

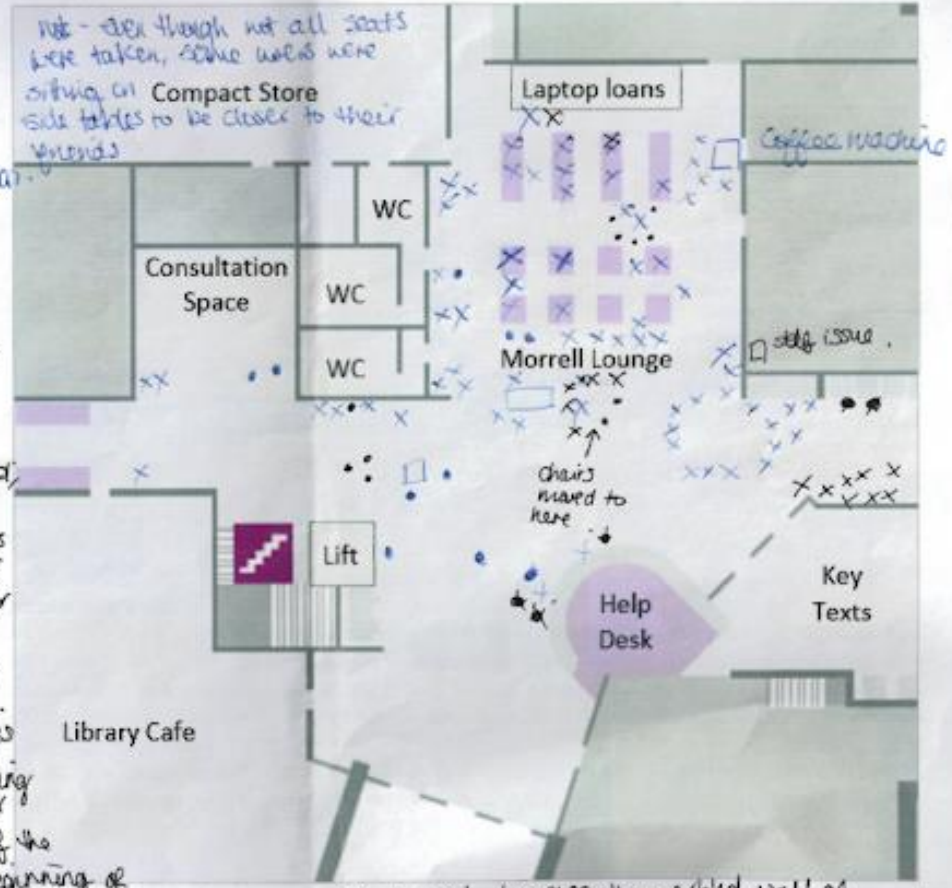
## MORRELL LOUNGE

Name: ROBINNE  
 Date: 25/4/17  
 Start time: 1015

Comments:

- X = sitting down 1st observation
- = standing
- X = sitting 2nd observation
- = standing

Lounge very busy. Space seems to be used for multiple groups of people sitting eating lunch and chatting. A few arm chairs have been moved around to the front of the info boards and other arm chairs in a semi-circular/circular shape to make it easier for groups to chat. A couple of users are attempting to study, but clearly quite distracted. Many of the main thoroughfares are filled with people, often meaning legs have to get stepped over for people to get through. Many of the people sat in the lounge at the beginning of the observation remained in the same place throughout.

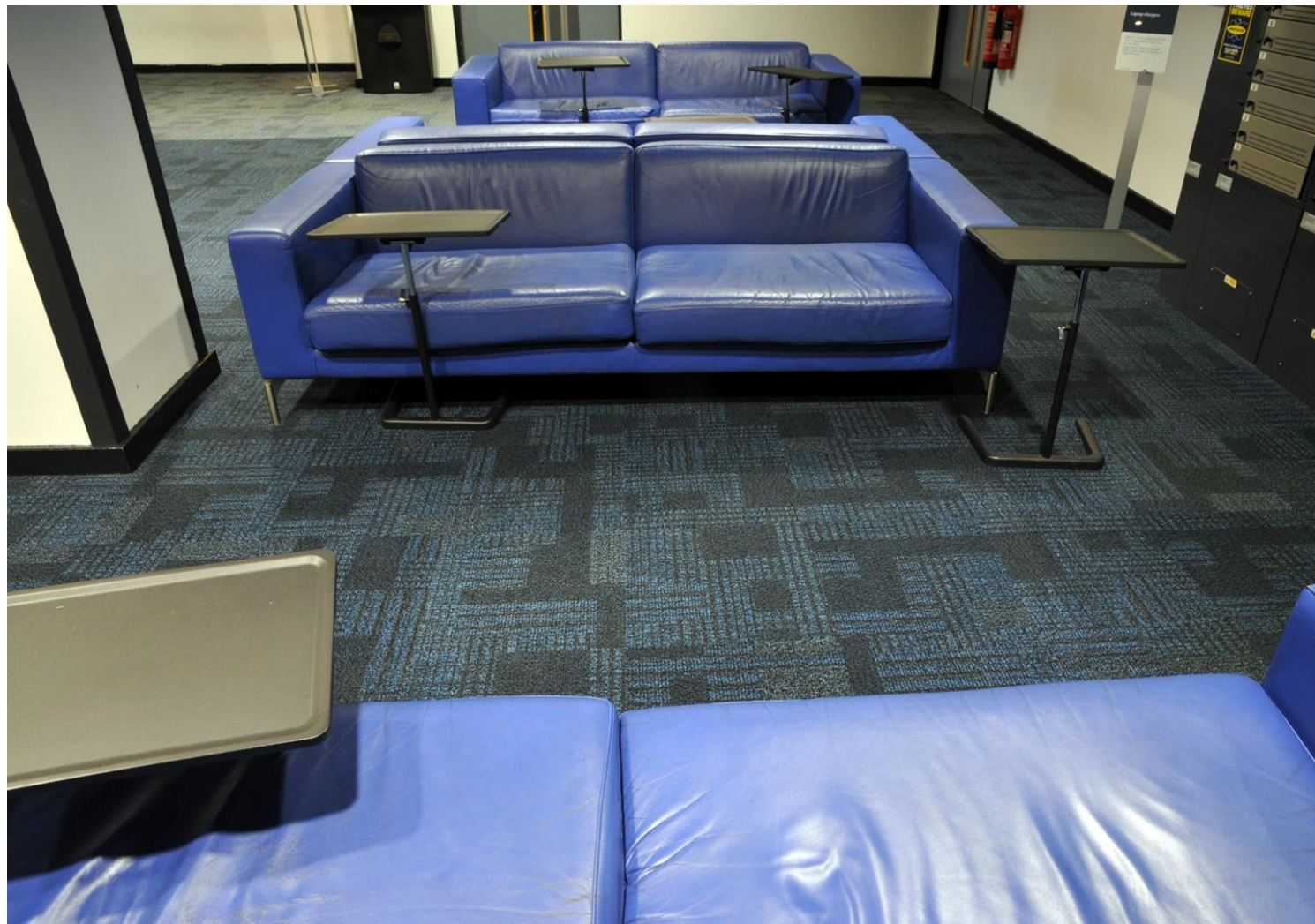


By the end, however, the warbled wall of chatter was not so obvious and people began to head elsewhere.

At a distance

help desk  
 main entrance to library

# Observation / Behavioural Mapping



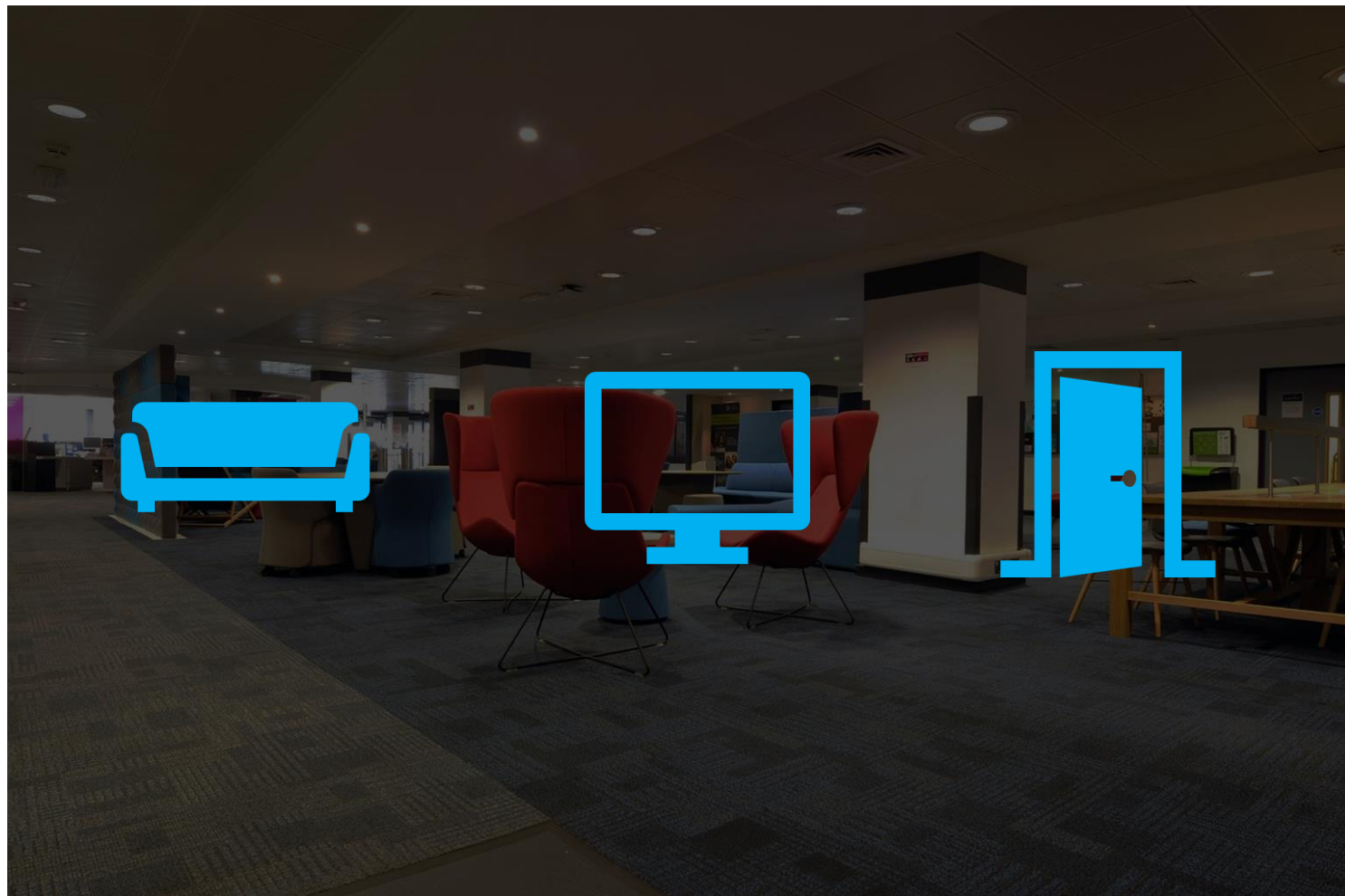
**Design changes**

# Observation / Behavioural Mapping



**Design changes**

# Observation / Behavioural Mapping



**Design changes**

# Graffiti Wall

# Tell us what you think...

People are  
constantly  
taking out  
books and you don't  
enforce the  
penalties. 6/2/17

put  
back  
de the  
sewing

12/2/17 as a non student  
who understands motivation  
this seems excessive  
we are all struggling  
w/ student budget.

08/02/2017  
Why not  
fine them  
+

Remember to take regular breaks  
and keep hydrated - especially at  
exam time + before big deadlines. Your  
brain will thank you for it!  
4/2/17

SAD PEOPLE  
STAY IN THE  
LIBRARY ALL NIGHT!

Yes - thank you!  
Instead of underlining, try copying/  
scanning the relevant pages and  
annotating your own copies.  
6/2/17

PLEASE STUDENTS STOP  
underlining in books - especially in  
pen. It's very distracting for other users  
as well as defacing library property. ☹️

could you have  
more markers  
and sponges  
in fourhurst  
2nd floor boards  
please?  
THANKS. THESE ARE ALWAYS  
AVAILABLE FROM THE DESK, BUT  
WE WILL LOOK TO KEEPING THEM  
TOPPED UP. 9/2/17

I'M really tired  
and I want a Peace  
to nap. The services are  
too noisy. 08/02/2017

Dear Librarians,  
Thank you!  
XX

Thank you  
for using  
the library  
and for that  
great feedback  
11/02/17

Please consider  
adding stones  
↳ Thanks for  
we will p

Thank you  
so much  
for those  
blankets! Very welcome!  
much appreciated Glad you've  
found them useful!  
6/2/17

Fix all the  
drinks vending  
machines please!  
08/02/2017  
Thanks  
XXXX

I like the idea of  
the blankets !! Fabulous! Glad you've  
found them useful! 6/2/17

## At a distance

Pick up a pen - ask us a question or make a comment - come back to see our reply.  
For a personal response, please fill in a comment card.

2/2017

# Graffiti Wall

## Plusses

Users love it

So good for capturing the non-extremes – like

UX itself, it's more representative of the true feelings of the user

Peer-to-peer dialogue can be really interesting

Correct problems and tell people you've done it

If there's long term issues beyond your control (e.g. temperature) you can leave the question – and the answer – up for all to see

## Minuses

It may result in a reduction in other feedback methods

If it takes off, you need a system to document it  
You never know, someone may put something offensive up...  
... or at the very least, ask us some tricky questions...

At a distance

Pick up a pen – ask us a question or make a comment – come back to see our reply.  
For a personal response, please fill in a comment card.

## Journey Mapping

**A visual representation of your user's experience, often best done with post-its and a large piece of paper.**

1. Define the scenario. Decide who your user is, and set an objective your user is trying to achieve (e.g book a one-to-one appointment)
2. List all the touchpoints – they can be physical (help desk) and virtual (website)
3. Take your user's journey yourself. Put each stage on a new post it. Record success and failure, and note the pain points where it all gets too complicated!
4. Make a list of recommendations for what you can change to improve the user experience – these can be both things you can do right away (DO THEM) and larger issues that need escalating...

**At a distance**



## FIGURE 3 Journey Map of Scenario to Find a Particular Article

### Scenario

You are a physical therapy student doing research for a paper on patient falls in hospitals, and you found the following reference. Your instructor told you that this article was perfect for your paper and that you could get it from the library. Locate this article:

Matthew Hepinstall, M.D., orthopaedic surgeon, Lenox Hill Hospital Center for Joint Preservation & Reconstruction, New York City; Grace Rowan, R.N., registered nurse educator, leader, falls prevention program, Winthrop-University Hospital, Mineola, N.Y.; JAMA Internal Medicine, news release, Jan. 19, 2015

### User Journey



### Expected Journey



### Recommendations

Make Chat option more visible on website so users can get help

Promote and advertise articles through ILL

Provide details on different ways to access an article

Advertise different ways to contact a librarian for help

# Touchstone Tours



**Face to face**

### **A map drawn from memory by the user.**

This can either be a **location map** of a physical space, or it can be a **process map**. They then talk the researcher through their map, and this is used as the starting point for the interview which follows.

### **A map drawn from memory by the user.**

Cognitive Mapping is distinct from journey mapping, because WE tend to do the latter whereas the user does the former – and cognitive maps can be based on a very wide range of prompts.

#### **For example:**

**Draw a map of the hospital featuring your most important parts buildings**

**Map the 'golden triangle' – where you live, work and eat**

**Map your process for finding info for a patient intervention, from start to finish**

**Map your process for writing an essay, from getting it assigned to submitting**

### Cognitive maps are incredibly useful.

- They allow the user to **formulate genuine reflections** on their behaviour, without the time-pressure of a Q&A. The participant is able to dump info out of their brains, uninterrupted by us shaping it or putting them off!
- They centre the subsequent Interview in **the world of the user** (as opposed to e.g. a survey which will usually be centred in our world)
- They allow you to ask **informed questions** about subjects you know very little (or nothing) about
- They lead to much **more interesting, impactful conversations** than going straight to the Interview

## Cognitive Maps

**Normally we give people six minutes to do this. It doesn't need to be a hard time limit, but it's helpful for the user to know what is expected. They may take less time, or more.**

Most users will draw in silence, then talk you through their map afterwards; occasionally some may wish to talk as they draw, which is fine too.

Always emphasise that artistic skills are of no relevance...

An optional variation is to change colours of pen every two minutes. This allows you to analyse, retrospectively, the order in which things were committed to paper.

**Interviews can either be unstructured, or semi-structured.**

A **structured interview** involves a rigid list of questions and you go through them one by one with each participant. Normally you wouldn't do this as part of a UX project.

An **unstructured interview** is one where you have no prepared questions at all, but let the conversation flow according to what the participant wants to talk about.

A **semi-structured interview** is similar to an unstructured one, but you know there are certain key topics you want to discuss – so if they don't arise naturally in the conversation you touch on them towards the end. This is the technique we use most of the time in UX fieldwork.

## Semi Structured Interview

**The initial questions will flow naturally from the map chat.**

Focus on the things **the user wishes to talk about**. Prepare yourself for the fact you may learn useful things beyond the scope of the project!

Try to explore anything of interest as the user says it – even very **tangential** stuff can yield useful insights.

**Ask OPEN questions**. It's not 'which of our eResources do you use?' – it's 'where do you look for supporting evidence when you have an assignment due?' Don't lead the witness!

If your **key topics** haven't come up naturally, raise them towards the end of the interview to make sure they're covered.



# Touchstone Tours or Cognitive Maps, leading into Semi- Structured Interviews

Design changes

 **noah william todd**  
@WmNoah

@UoYLibrary awesomely wonderf  
in king's manor too? 🧐

LIKES  
2

2:29 PM - 1 Feb 2017

👤 1 🔄 ❤️ 2

 Reply to @WmNoah @UoYLibrary

 Uni of York Library @UoYLibrary - Feb

 **Lydia Brown**  
@hellyeahydia

 Follow

@UoYLibrary the blankets available is the best  
thing in my life right now, thank you!

LIKES  
2

*I like the idea of  
the blankets !! Fabulous! Glad you've  
found them useful! 6/2/17*

 **GSA York**  
@GSAYork

 Follow

@UoYLibrary This is adorable and practical!  
Great work! 😊

LIKES  
2

11:15 AM - 1 Feb 2017

👤 🔄 ❤️ 2

*very welcome!  
Glad you've  
found them useful!  
6/2/17*

# Touchstone Tours or Cognitive Maps, leading into Semi- Structured Interviews

The screenshot shows the YorSearch library website interface. At the top, there is a navigation bar with the logo 'YorSearch' on the left and links for 'Can't Find What You Need?', 'Help', 'Browse', 'Back To Old YorSearch', 'Login', and 'Menu'. Below this is a search bar containing the text 'how to write essays' with a search icon and a close button. To the right of the search bar is a link for 'ADVANCED SEARCH'. Below the search bar, there are filters for 'All items' and 'anywhere in the record'. A banner below the filters says 'Sign in to get complete results and to request items' with a 'Login' button and a 'DISMISS' link.

The main content area shows search results for 'PAGE 1 333,469 Results'. The first result is a book titled 'How to write essays' by Lewis, Roger, published by Heinemann in 1979. This result is circled in blue. Below it is a result for 'How to write essays and assignments' by McMillan, Kathleen, Weyers, Jonathan D. B. The third result is 'How to Write Essays & Assignments: UEL' by McMillan, Kathleen; t, published by Prentice Hall in 2012. The fourth result is an article titled 'A start, middle and an end: nursing students are expected to write essays of high quality.(Student Supplement)' by Oxtoby, Kathy, published in Nursing Standard in 2013.

On the right side of the page, there is a 'Refine my results' section with a checkbox for 'Include results where no full text'. Below this is a 'Sort by' dropdown menu set to 'RELEVANCE'. There are two expandable sections: 'Availability' and 'Resource Type'. The 'Availability' section shows 'Peer-reviewed Journals (235,779)', 'Full Text Online (333,414)', 'In the Library now (44)', and 'Open Access'. The 'Resource Type' section shows 'Articles (232,585)', 'Reviews (65,565)', 'Newspaper Articles (24,975)', 'Books (4,382)', and 'Book Chapters (2,407)'. Below these is a 'Subject' section with 'Languages & Literatures (49,474)' and 'Education (21,055)'.

At the bottom left, there is a 'PAGE 1' indicator and a 'Need help?' button.

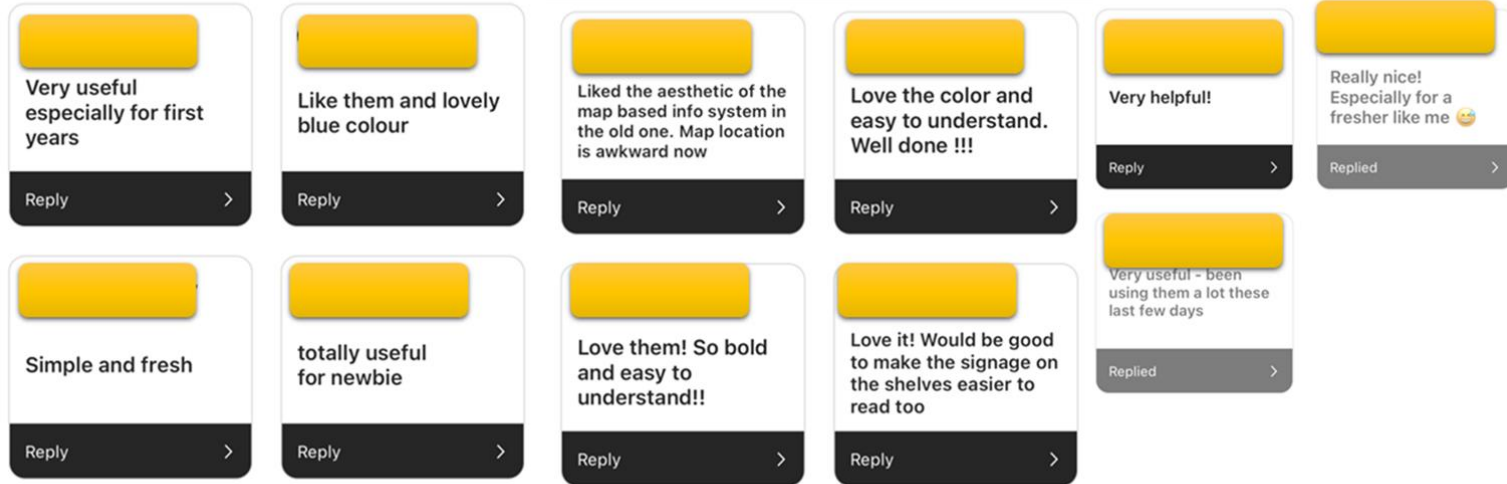
Design changes

Touchstone  
Tours or  
Cognitive  
Maps, leading  
into Semi-  
Structured  
Interviews



**Design changes**

# Touchstone Tours or Cognitive Maps, leading into Semi- Structured Interviews



Design changes

We are now going to try  
out a technique:  
**cognitive mapping.**

You will need a piece of  
actual physical paper,  
and a pen or a pencil...





**6 minutes**

Draw either

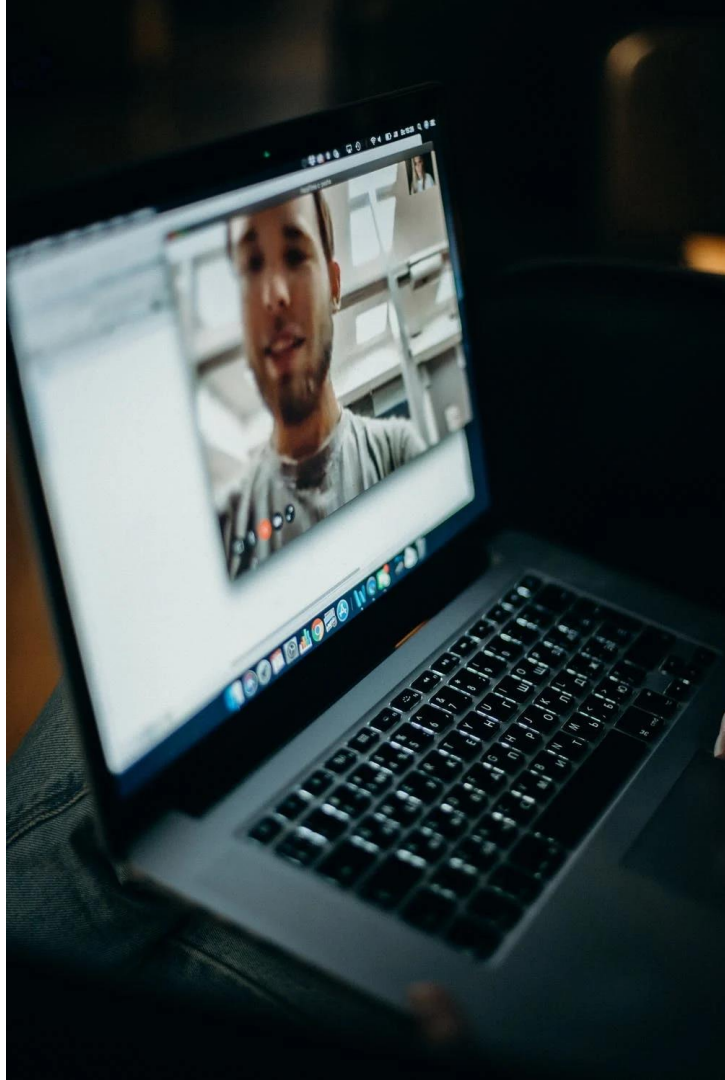
**A map of your work location, as best you can, from memory**

Or:

**A process map of how you understand your users. It might include things like survey data, direct user feedback, or via social media or in emails. What is the current process for learning about your audience?**

## **The process in full goes like this:**

- 1) Welcome the user and explain the purpose of the study, and the map / interview process. Allow them time to ask any questions about it.
- 2) Talk them through the consent form and get them to sign a copy for you and one for them
- 3) Explain the cognitive map prompt and tell them they have around six minutes
- 4) The user draws the map
- 5) Once they're finished, switch on your recording device
- 6) They talk you through the map, with you asking questions
- 7) The interview continues from there, with you taking notes
- 8) Optional: I always, always end with the same project: "Let's say we put you in complete control of [the library] for a day. If there was one thing we could do to make your life easier, what would it be?"



Keep in mind the Cognitive Map into Interview format works absolutely fine **virtually**. You can do it over Zoom and sometimes it can even be better than doing it face to face.

(Don't forget to ask your subjects to take a photo of their map using their phone, and email it to you.)



**Try to write  
the notes in  
the first  
person.**

Don't worry  
about  
transcribing  
unless you're  
quoting them  
directly, in  
which case  
check the  
recording.

**[Showed the PG lounge: would you use it now you've seen it?]**

I would use it now. Nice to have our own focused area, private zone for PGs.

I like the cube chairs - my friend says they're the best seats in the library. I know people get up extra early to get these.

Tend to bring my own device and use it for notes and PC for data.

**What do you want on the big plinth maps?**

'You are here' on the maps please. I tend to go off the colour coding. That does help.

Tend to use Fairhurst for group study.

I used the single space rooms a lot more in my UG - they were a lot easier to get hold of pre zoom calls. I like fans in there, they're really appreciated.

I enjoy the Fairhurst 1st floor booths really for planning presentations, nice to be enclosed.

I've not used the living room but seen it a lot on twitter.

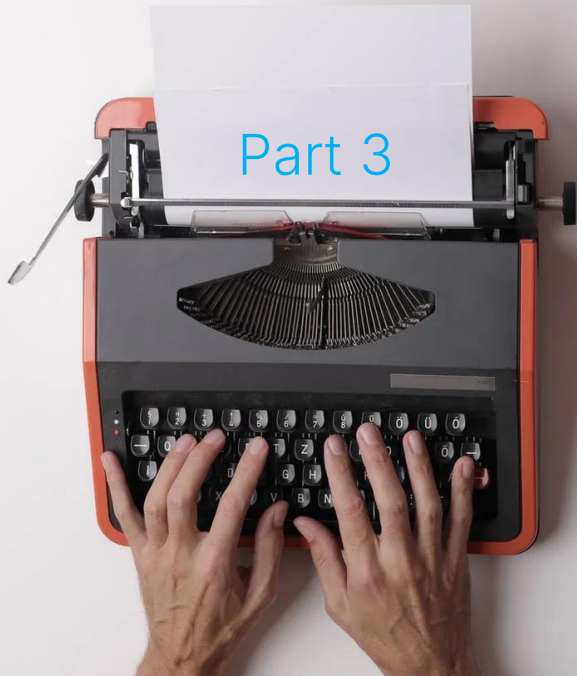
**How often do you tend to study in the library?**

I use it constantly. It's the only way I can find to make myself work well. It's the atmosphere. It feels studious. Everyone is there to do the same thing. Nice form of peer pressure. Very occasionally work in Biology.

**How do you feel about the changes we've made to the study space booking system?  
(From all bookable to only bookable on one floor of each building)**

Think it's good to have a mix [now]. Sometimes you've planned to come in, nice to know you have a place. But sometimes if you've got 2 hours between lectures, you don't want to go home, nice to have both options.

Nice to have a bit of everything.



# **RECRUITING** **PARTICIPANTS**

For the face-to-face fieldwork,  
you will need participants.

Speaking to five people will be  
incredibly useful. You do not  
need to recruit huge numbers.

If you can get 15 participants that  
works really, really well... You  
should learn 80% of what there is  
to know, from 15 people.



**Round 1: 5 people**

The generative stage. Zoom out and try and learn as much as you can about your users, and where your service fits in.

**Round 2: 5 people**

The prototyping stage. Show your users something you've done since round 1. It can be a mock-up, or it can just be an idea.

**Round 3: 5 people**

This is a  
prototype



**Round 1: 5 people**

The generative stage. Zoom out and try and learn as much as you can about your users, and where your service fits in.

**Round 2: 5 people**

The prototyping stage. Show your users something you've done since round 1. It can be a mock-up, or it can just be an idea.

**Round 3: 5 people**

The evaluative stage. Having implemented changes, find out if they've worked, and what tweaks can be made.

My own approach is to incentivise students, but not staff. We pay a £15 voucher for an hour of their time.

We almost always try and recruit **15 people**, so we know each project will cost £225 or less.



I don't recruit on a first-come, first-served basis. We try to get as wide a variety of users as possible, sometimes by direct approach and sometimes through various groups.

For general recruitment people often find flyers work okay, but emails and social media work a bit better.

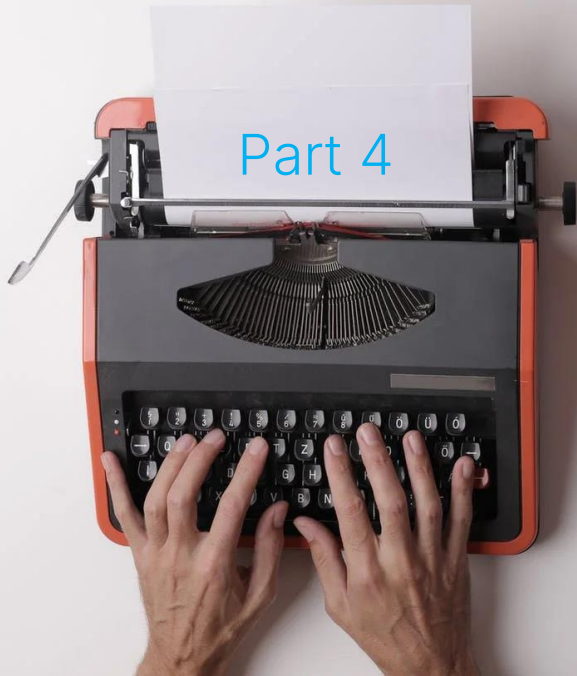






**In health-libraries, fieldwork recruitment is the hardest part. Everyone is simply already flat-out.**

**Student nurses are more often amenable because a voucher is still a nice incentive – keep in mind you only need 5 people, and you can do UX at a distance.**



# **DATA ANALISYS AND DESIGN TECHNIQUES**

**What are we trying to achieve when we analyse UX data? The ultimate goal is look for themes in the fieldwork, from which you can draw conclusions, which lead to design changes.**

NB: It's often said there's a 4:1 analysis to fieldwork ratio. Build in plenty of time!

You will notice themes and trends organically, and it is possible to analyse the data in a relatively informal way: a couple of people combing through the notes and drawing conclusions.

If you want to take a more robust approach, you can code both the maps and the interviews.

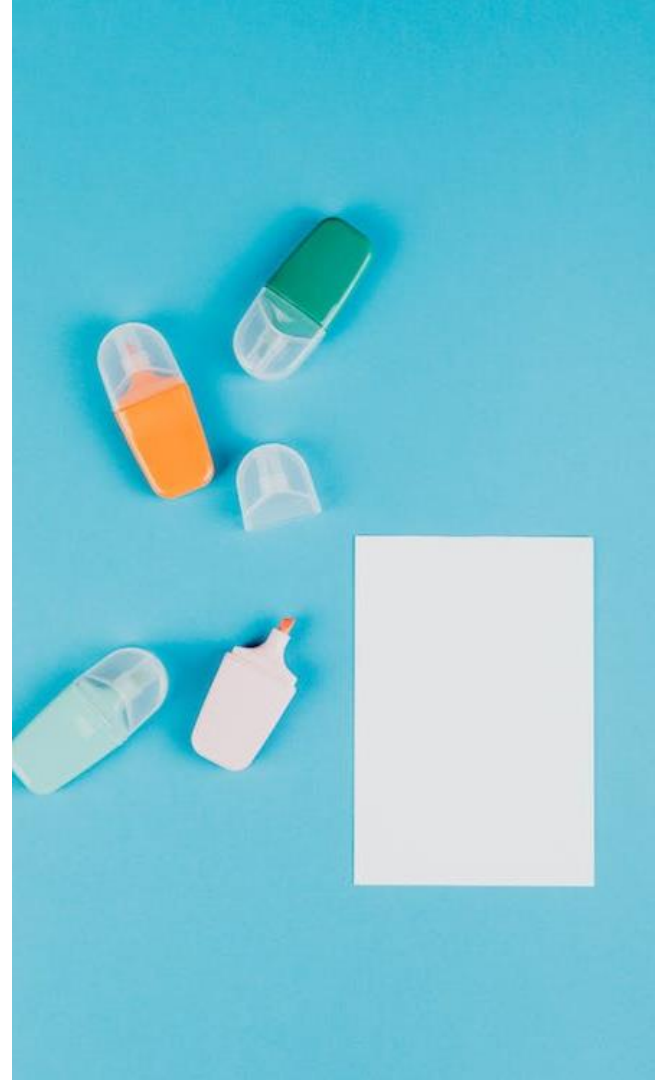


## Coding UX data

You can code data based on a pre-existing set of themes you come up: for example, face-to-face help; website; peer-support, etc.

Or you can do an initial pass of the data and see what themes emerge, then code based on those. Generally I'd recommend this approach.

Once you have a few themes, collect together quotes on that theme, then start trying to come up with ideas to make design changes to your services. Some will be absolutely self-evident, some will need more teasing out – this process is known as 'ideation'.



Categories	Item	Number of occurrences	IDENTIFICATION INDEX % of time is occurs (number of occurrences / number of participants)	REPRESENTATIVE-NESS INDEX (number of occurrences / times category is drawn)	TEMPORAL INDEX value if red = 3 green = 2 black = 1
Areas/floors					
	Morrell ground	20	83%	17	54
	Morrell 1: quiet area	14	58%	12	37
	Morrell 1: silent area	8	33%	7	--
	Morrell 2: quiet area	14	58%	12	32
	Morrell 2: silent area	4	17%	3	--
	Morrell 3	13	54%	11	25
	Fairhurst ground	10	42%	8	22

An example of fully-coding a cognitive map - usually not required in this much depth

“ The **Design Thinking** process first defines the problem and then implements the solutions, always with the needs of the user demographic at the core of concept development. This process focuses on needfinding, understanding, creating, thinking, and doing. At the core of this process is a bias towards action and creation: by creating and testing something, you can continue to learn and improve upon your initial ideas. ”

## 6-8-5

Good ideas take work. Teams often end up with underdeveloped ideas because they stick with the first good idea they have, rather than exploring other approaches. The 6-8-5 ideation method combats this pattern by forcing us to generate lots of ideas in a short period of time.

- 01\_ Start by giving everyone 8 sticky notes and nominating a timekeeper. From the moment the timekeeper says go, each person has 5 minutes to silently sketch 6-8 ideas that answer one of your group's "how might we" questions.
- 02\_ After 5 minutes, everyone in the group gets 2 minutes to present their ideas.
- 03\_ Play continues with another 5 minute round. In the second and every subsequent round, each participant can either introduce more new ideas, build on someone else's idea or merge other people's ideas together.

It is important to defer judgement while playing 6-8-5. The objective is to generate lots of ideas and everyone in the team should feel like they can share their ideas, no matter how outlandish. In fact, 6-8-5 is the perfect game for sharing outlandish ideas, as these can often give rise to creative leaps.

IMAGINE MODE  
Modern Human Method Card 303

See also: *How Might We...? Codesign Workshop, How? Now. Wow!*



## How? Now. Wow!

- 01\_ Draw a 2-by-2 matrix. X denotes originality, while Y shows ease of implementation. After 5 minutes, everyone in the group gets 2 minutes to present their ideas.

**6-8-5 is incredibly useful for finding consensus, and making sure everyone is heard.**

**Now**: high originality, easy to implement. These ideas are breakthrough ideas that are possible to implement now given current technology, budget or culture.

**How**: high originality, difficult to implement. These are ideas that are possible to implement in the future given current technology, budget or culture.

**Wow**: high originality, easy to implement. These ideas have the potential for orbit-shifting change and are possible to implement now.

**It involves post-its and a stopwatch, and is really easy to do.**

Display the ideas generated during the 6-8-5 exercise around the team and categorise them into Now, How, or Wow. Ask them to vote for their three favourite ideas in each category by sticking a dot of the corresponding colour next to it.

The highest number of dots of a certain colour categorises the idea as that colour. You now have a bucket of blue ideas to work on further. Make sure you also collect the readily implementable green ideas for immediate implementation, and the yellow ideas to keep an eye on for the future.

IMAGINE MODE  
Modern Human Method Card 307

See also: *How Might We...? 6-8-5, Create a Concept*



Use design techniques to help structure your thinking

Let's try out How Now Wow.

Do you think UX can work at your institution, and if you so what do you want to try out?

On the back of your map paper, make a list of possible UX ideas, themes or techniques you'd like to use in your library. Then put them in the How Now Wow matrix as described on this slide.

It really helps give you a path forward!

IMAGINE MODE  
Modern Human Method Card 307

See also: How Might We...? Codesign Workshop, How: Now: Wow

## How? Now. Wow!

- 01\_ Draw a 2-by-2 matrix. X denotes originality, while Y shows ease of implementation. After 5 minutes, everyone in the group gets 2 minutes to present their ideas.
- 02\_ Label the quadrants as:
  - Now:** low originality, easy to implement. These are typically solutions that fill gaps in existing processes.
  - How:** high originality, difficult to implement. These are breakthrough ideas but impossible to implement right now given current technology, budget or culture.
  - Wow:** high originality, easy to implement. These ideas have the potential for orbit-shifting change and are possible to implement within current reality.

Display the ideas generated during the 6-8-5 exercise around the room and give each of your team three lots of three sticky dots - green for Now, yellow for How, blue for Wow. Ask them to vote for their three favourite ideas in each category by sticking a dot of the corresponding colour next to it.

The highest number of dots of a certain colour categorises the idea as that colour. You now have a bucket of blue ideas to work on further. Make sure you also collect the readily implementable green ideas for immediate implementation, and the yellow ideas to keep an eye on for the future.

IMAGINE MODE  
Modern Human Method Card 307

See also: How Might We...? 6-8-5, Create a Concept

Use design techniques to help structure your thinking



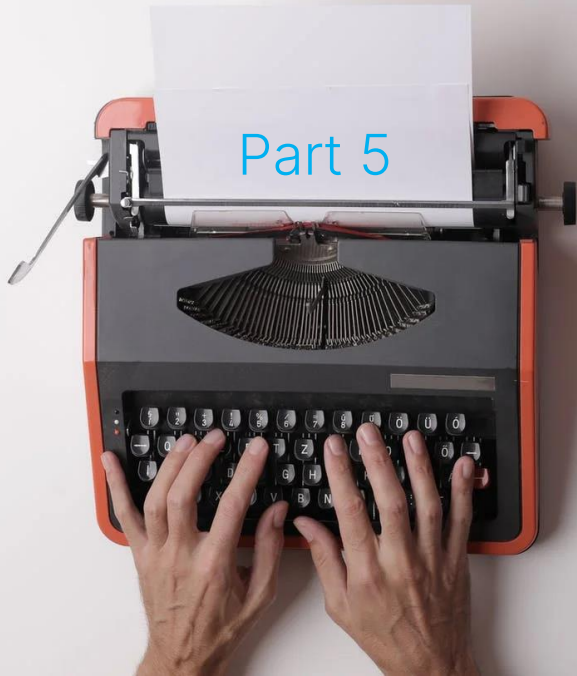
## **Assign areas to relevant people or teams.**

As you explore areas where you can improve services, it can be helpful to assign themes to different people – either to make recommendations, or to take your own recommendations forward.

Take a rapid prototyping approach – try things out in any way you can, and make small changes whenever you think of them.

Don't fall into the trap of saving up all your design changes for a Big Bang end of project change! Your users will thank you for making things better as you go along.





**QUESTIONS  
AND IDEAS?**



Either choose a **space**  
or a **demographic**.

Start with Observation  
and Behavioural Mapping

Move onto the Cognitive  
Map / Interview axis

Look for opportunities to **make change**.  
Even tiny changes should be celebrated.  
Do as much as you can right away

Share what you're doing – both methods and  
results – with users and the library **community**



Thank you for having me

[@ned\\_potter](#)