

We're the Problem

Mapping Our Way Out of Printing Purgatory



Josh

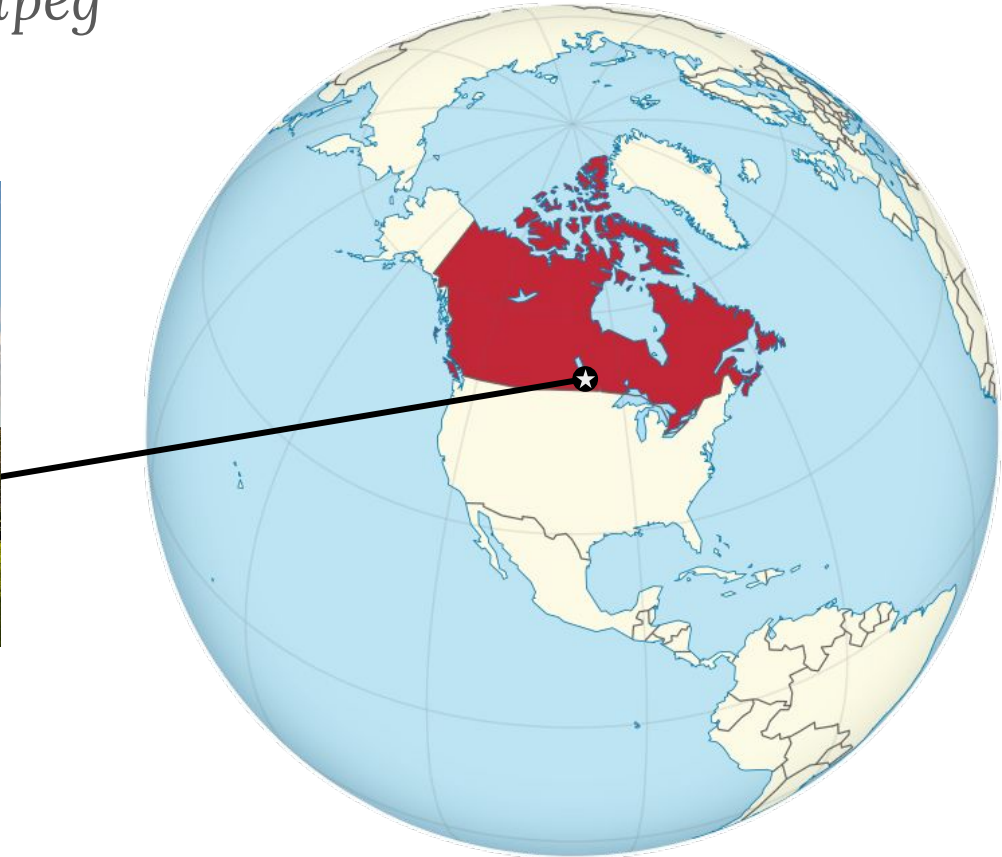


Sydney

Introduction | UWinnipeg



The University of Winnipeg
Winnipeg, MB, Canada



Background | A Toxic Relationship

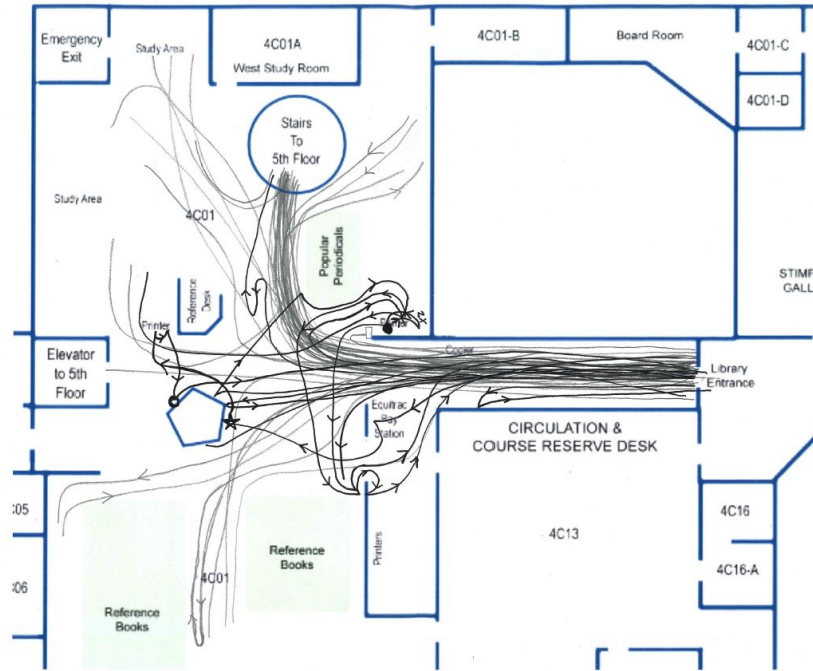
*We are **never**
Ever ever, ever, **ever**
Getting back together*



Methodology | Behavioural Mapping - How it started



Example #1
Sydney's first map



- * Person was using the computer station here when I started observing, stayed until 9:10.
- Printed a page, then went to the computer till 9:16.
- Printed a page, back to computer, then back to shelves.
- * Person waited ~2 min for computer to login, had card out & didn't notice right away when it was printed.
- Returned to computers to stuff printers in their backpack before leaving.

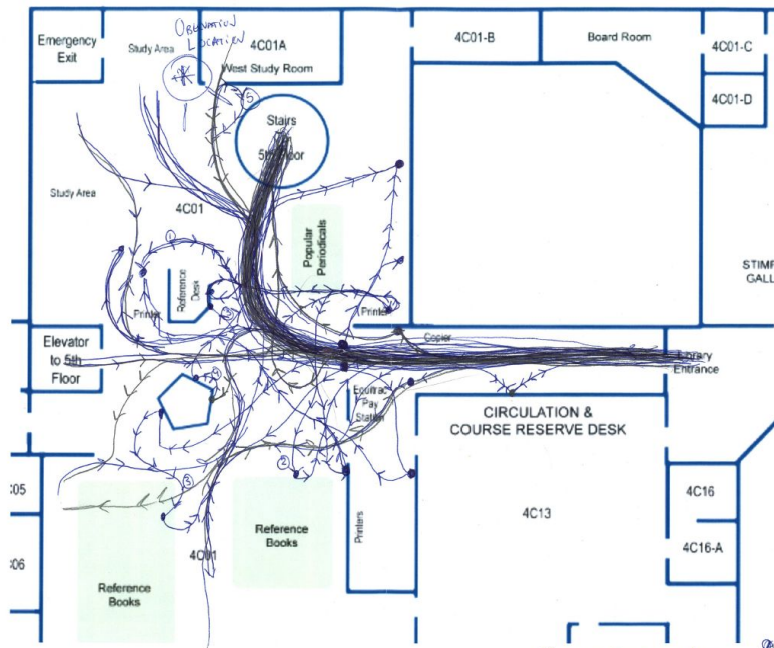
January 26, 9-10 AM

Methodology | Behavioural Mapping



Example #2

Josh's first map



THUR SAN 26
1030 - 1130

- COULDN'T SEE
CIRC DESK
properly
- HAD TO SEE
STAND-UP COMPS/
PRINTERS NEARBY

- REF DESK TIME
BEST SIGHTLINES
- COMFORTABLE SEAT

① Bypassed Ref
Desk, Retrieved SHARED
10:45 AM - 11:00 AM
- Multiple TRIPS

② GIVEN MAINTENANCE
Stopped at New Books,
Book SALE, + Display

③ ENTERED, used comp,
Blew by Reference,
10:55 TRACK... came
back, consulted DESK,
up STAIRS

⑤ Arrived @ STUDY ROOM,
NO KEY, RETURNED TO REF DESK +
each

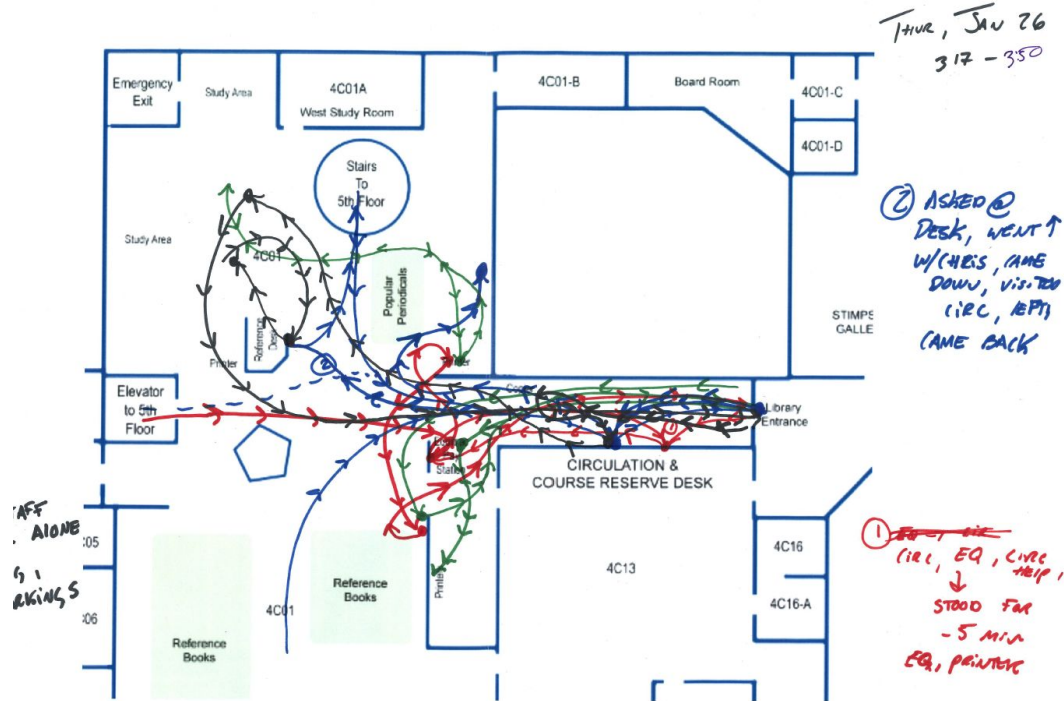
⑥ Borrowed
WANTED FIRE G.P.L.

Methodology | Behavioural Mapping



Example #3

Josh's second map



Interlude | A Conversation

Bit of a mess, huh?



Would you say...We. Hi.

We're the problem it's we?



josh look at this



holds up map LOOK AT IT



understatement



we've created a labyrinth
of mayhem and despair



no



'%\$#@mmit josh

^ transcript edited for dramatic purposes

Methodology | Behavioural Mapping



Final Scheme

Created together

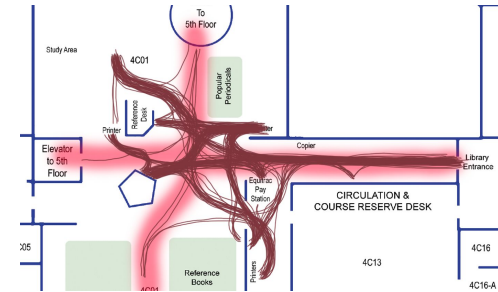
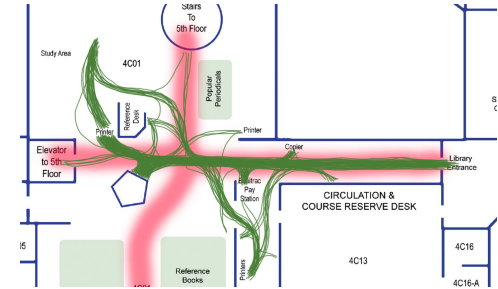
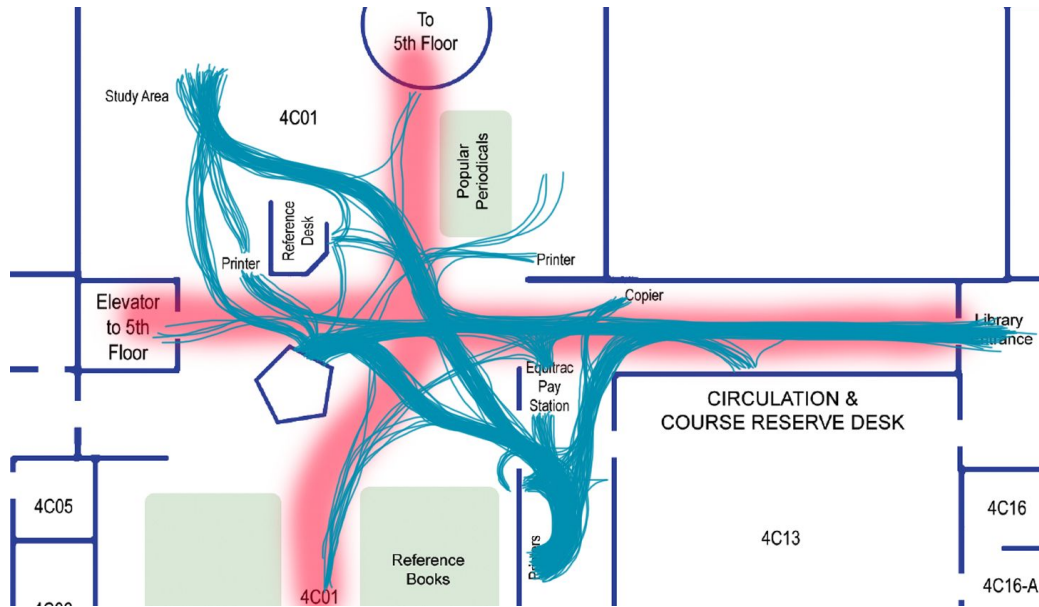
EN SS BWP ST



Methodology | Behavioural Mapping

Date	ID	Time	Researcher	WP1	WP2	WP3	WP4	WP5	WP6	String
20230126	LP1	09:00	SN	EN	SS	BWP	ST			ENSSBWPST
20230126	LP2	09:01	SN	EN	ST					ENST
20230126	LP3	09:03	SN	EN	ST					ENST
20230126	LP4	09:04	SN	EN	ST					ENST
20230126	LP5	09:04	SN	EN	EQ	CP	CI	CP		ENEQCPCICP

Methodology | Behavioural Mapping



Methodology | *Unstructured Interviews*



Confirm Assumptions

Test validity, provide context

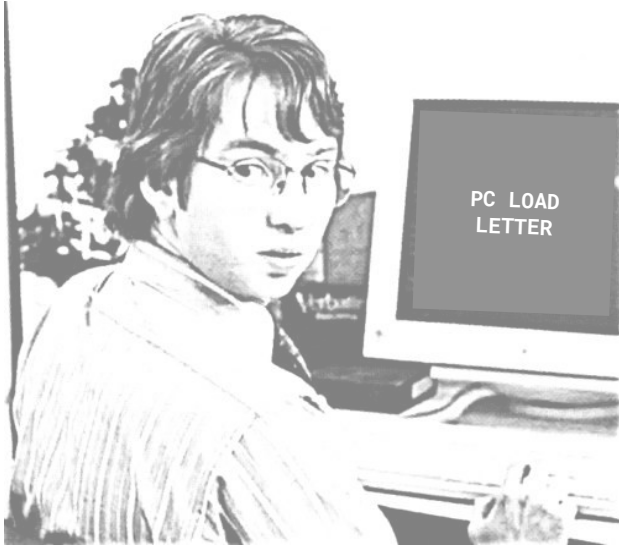
Clarify Behaviour

Explore outliers and unexpected actions

Build Empathy

Solicit feedback and build trust

Findings | What We Learned



“WTF does that mean!?”

Ineffective Feedback Mechanisms

Difficult for users to prevent, diagnose, recover from errors

Inconsistent Features and Affordances

Variety of devices, options, and features are confusing

Scattered Deployment

Physical infrastructure lacks a clear, intuitive workflow

Staff-Centric

System does not match student expectations from the “real world”

Minimal Communication & Training

Users do not receive adequate information before point-of-need

Action | *What We're Doing*



Create a “Print Centre” in the Library

Consolidate infrastructure in single location with good visibility



Improve Device Consistency

Only deploy print stations that share affordances and hardware that appropriately implies the intended use



Update Printing Communications

Remove jargon, reconsider timing, and ensure language matches experience

Reflection | *Room for Improvement*



Not an Easy Process

Freedom to iterate came at the cost of emotional labour

Original Problem Remains Unaddressed

Signage remains a major issue

Mobilization is Difficult

Post-project stakeholder engagement is cumbersome

Reflection | *What Went Well*



The Data Tells a Good Story

Mix of visual and quantitative data is compelling, recognizable, and mutable

Developed a Scalable, Reusable Toolkit

Resulting methodology can be refined, appended, expanded

Changed Attitudes, Inspired Action

Built empathy and encouraged positive, proactive solutions