YOU KNOW TOO MUCH: UNDERSTANDING AND MITIGATING YOUR EXPERT BLINDSPOT

EMILY ABELL
WARM-UP

Complete your worksheet
WARM-UP

Complete your worksheet

\((4+2\times12)^3 \times -47^2\)
WARM-UP

Complete your worksheet

Share with partner
WARM-UP

Complete your worksheet
Share with partner
Shareout to group
ABOUT ME
ABOUT ME

PARK VISITOR AS KNOWN HAZARD
DESIGNING FOR IMPERFECT HUMANS TO COMBAT "HUMAN ERROR"

a masters thesis
BY EMILY ABELL
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UNIVERSITY 2014
WHY ARE YOU HERE?
EXPERT BLINDSPOTS?
INTRO

PART 1
RECOGNIZE

PART 2
UNDERSTAND

PART 3
MITIGATE

WRAP UP
PART 1

RECOGNIZE
IF YOU WANT TO GO THAT FAR, YOU NEED TO GET AN EARLY START

GOT IT!
IT’S ALREADY 10AM, AND YOU’RE ONLY TO HERE. YOU STARTED WAY TOO LATE.

UMM, OK.
TAKEAWAY:
WHAT YOU INTEND TO SAY AND WHAT THEY HEAR MAY BE DIFFERENT
### Table of Distances and Elevations

<table>
<thead>
<tr>
<th>Destination</th>
<th>Distance (in Miles)</th>
<th>Elevation Feet (at Destination)</th>
<th>Services</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>One Way</td>
<td>Round Trip</td>
<td>W T E</td>
</tr>
<tr>
<td>Ooh-Aah Point</td>
<td>0.9</td>
<td>1.8</td>
<td>X</td>
</tr>
<tr>
<td>Cedar Ridge</td>
<td>1.5</td>
<td>3</td>
<td>X</td>
</tr>
<tr>
<td>Skeleton Point</td>
<td>3</td>
<td>6</td>
<td>X</td>
</tr>
</tbody>
</table>

**Services:**
- **W** = Water
- **T** = Toilet
- **E** = Emergency Phone

**Notes:**
- **Offers a spectacular view. Great day hike. No sign, point where trail opens to a WIDE view. No water.**
- **Good turn-a-round for first time canyon hikes, casual hikers, and late starters. Restrooms. No water. First hitching rail. Do not go past this point as a SUMMER day hike.**
- **First view of river. Trail sign, second hitching rail is located after flat stretch on top of ridge. Steeper switchbacks after hitching rail. No water. Do not go past this point as a day hike.**

**WARNING:** Do not attempt to hike from the rim to the river and back in one day!
TAKEAWAYS:
WHAT YOU ASSUME THEY’RE THINKING MIGHT NOT BE RIGHT
YOU MAY BE OPERATING OFF OF DIFFERENT INFORMATION
I’m going on a hike, going to head towards those chalets…

Ok sweetie have a good time!
YOU WERE GONE FOR LIKE 4 HOURS?!?

I WAS GOING TO GIVE YOU 5 AND THEN CALL OUT THE DOGS
TAKEAWAY:

EXPERTISE IS RELATIVE
TAKEAWAY:
WHAT YOU SEE MAY NOT BE WHAT THEY SEE
PART 2
UNDERSTAND
YOUR POINT OF VIEW IS UNIQUE...
EXPERTISE IS A SPECIAL KIND OF POINT OF VIEW
EXPERTISE IS A SPECIAL KIND OF POINT OF VIEW

1. TACIT KNOWLEDGE (VS. EXPPLICIT KNOWLEDGE)
YOU KNOW ALOT MORE THAN YOU REALIZE, OR CAN EASILY SHARE.
EXPERTISE IS A SPECIAL KIND OF POINT OF VIEW

1. TACIT KNOWLEDGE

2. SKILLS (VS. INFO/KNOWLEDGE)

EXPERTS’ SKILLS TAKE TIME TO DEVELOP AND HELP FRAME HOW KNOWLEDGE AND INFORMATION IS CALLED UPON, USED AND ORGANIZED.
EXPERTISE IS A SPECIAL KIND OF POINT OF VIEW

1. TACIT KNOWLEDGE

2. SKILLS

3. RISK AS ANALYSIS (VS. RISK AS FEELINGS)

NOVICES FRAME AND EXPERIENCE RISK DIFFERENTLY THAN RISK EXPERTS (SLOVIC, 2004).
EXPERTISE IS A SPECIAL KIND OF POINT OF VIEW

1. TACIT KNOWLEDGE
2. SKILLS
3. RISK AS ANALYSIS
YOU ARE NOT THE USER
YOU ARE NOT THE USER
YOU ARE NOT THE USER
YOU CAN’T SIMPLY CATCH UP NON-EXPERTS
... so that they can see from your expert pov
YOU NEED TO MEET THEM WHERE THEY ARE
APPROACHES

1. Develop a beginner's mindset

2. Gain empathy

3. Listen (better)
APPROACH 1
DEVELOP A BEGINNER'S MINDSET
APPROACH 1

DEVELOP A BEGINNER'S MINDSET

Methods:
Fly on the wall
Go judgement / assumption free, and ask questions
Look for analogous examples
METHOD

FLY ON THE WALL

HOW TO:
• Observe and note what is happening
• Don’t interfere
• Don’t facilitate
• Note, but don’t ask, questions

GOAL:
Learn what is happening, NOT why
METHOD
FLY ON THE WALL
APPROACH 2

GAIN EMPATHY
APPROACH 2

GAIN EMPATHY

Methods:
Walk a mile in their shoes
Guided Tour
Empathy exercise
METHOD

WALK A MILE IN THEIR SHOES

HOW TO:

• Hop into the non-experts spot
• Don’t “assume” or “pretend” really do it!
• If you’re too familiar with your activity or program try something different where you’re less comfortable

GOAL:
Empathize with the feelings of your participants, not have the same experience per say
METHOD

GUIDED TOUR

HOW TO:
• Ask a non-expert to walk you through a space, backpack, workflow - anything
• Leave all preconceived ideas behind, ask WHY, don’t assume
• Only ask open-ended questions

GOAL:
Help you learn things you didn’t know to ask about, let them share beliefs indirectly
METHOD

GUIDED TOUR
METHOD

GUIDED TOUR

TRY IT OUT
APPROACH 3
LISTEN (BETTER)
TRY IT OUT
LISTENING EXERCISE
APPROACH 3

LISTEN (BETTER)

Methods:
- Directed storytelling
- Participatory shadowing
- 5 Whys
- Feedback
METHOD

5 Whys

HOW TO:

• Interview someone, and when they provide an answer, keep asking “why?” until you go 5 layers deep

• Mix up the wording so it doesn’t sound like a interrogation (Why did you choose that store? Why was it convenient for you? Why does it take an hour to reach the other store?)

GOAL: Get to the root cause or motivation, don’t assume
Participatory Shadowing

HOW TO:
• Shadow someone and ask questions
• Leave it open ended - “I noticed you put a lot in that drawer…” “Is today a unusually busy day here?
• Spend most of the time observing, with only occasion questions, otherwise you’ll interrupt the subject’s normal flow / process

GOAL: Understand subjects context better, discover new things to ask, empathize
Directed Storytelling

HOW TO:
• Instead of conducting an interview with a lot of pre-written questions, ask for a story
• Prompt them by asking “telling me about a time you…”
• Ask follow-ups to clarify your understanding, and steer down the most relevant rabbit holes

GOAL: Learn about how the person really behaves vs. how they think they should respond
WRAP UP
ACTION STEPS

LOCATE OPPORTUNITIES

Look for places you may be making assumptions about your participants or where your expert bias may trip you up.

GIVE IT A TRY

Try out at least one of the research methods out in your program / population space.

SHARE WHAT YOU’VE LEARNED

Share with your organization the basics of the method you choose, how you applied it to your circumstances, and what you learned from it.
LEARN MORE

Books:
Thinking Fast and Slow
IDEO’s Human Centered Design Toolkit
Universal Methods of Design

Google:
Design Thinking
Stanford d.School
Design research methods
THANKS!


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