

WRMC 2016

YOU KNOW TOO MUCH:
UNDERSTANDING AND
MITIGATING YOUR EXPERT
BLINDSPOT

EMILY ABELL

WARM-UP

Complete your worksheet

WARM-UP

Complete your worksheet



$$\left((4+2 \times 12)^3 \times -47 \right)^{-2}$$



WARM-UP

Complete your worksheet

Share with partner

WARM-UP

Complete your worksheet

Share with partner

Shareout to group

ABOUT ME



ABOUT ME



ABOUT ME

PARK VISITOR AS KNOWN HAZARD

DESIGNING FOR IMPERFECT HUMANS
TO COMBAT "HUMAN ERROR"

a masters thesis
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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!



UMM, OK.

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

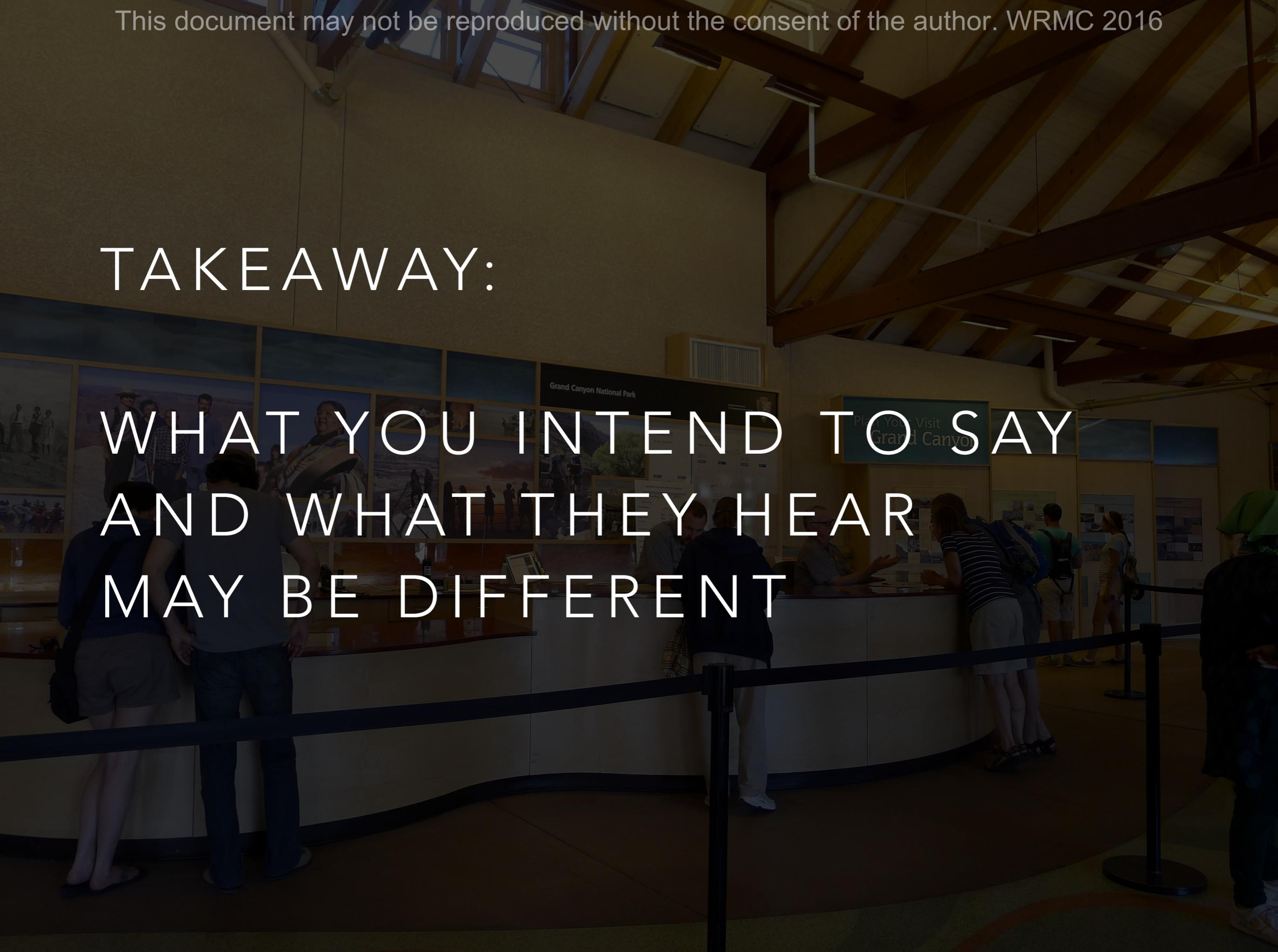


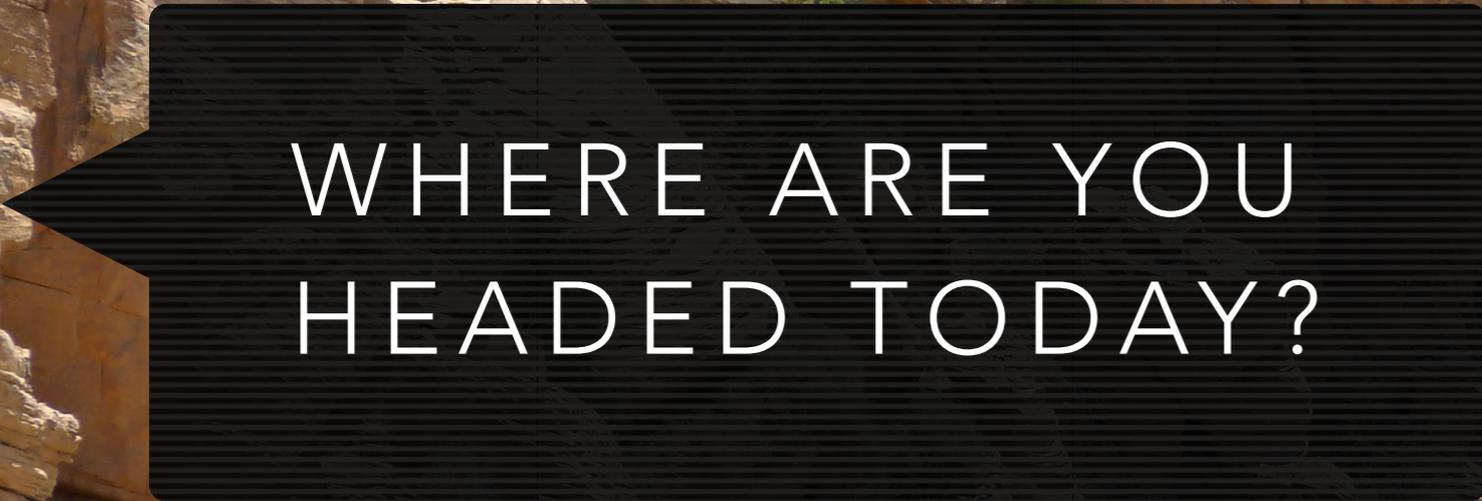
EXPERT
RANGER

NON-EXPERT
VISITOR

TAKEAWAY:

WHAT YOU INTEND TO SAY
AND WHAT THEY HEAR
MAY BE DIFFERENT





WHERE ARE YOU
HEADED TODAY?



TO THE END! :)



EXPERT RANGER



EXPERT RANGER

EXPERT
RANGER

NON-EXPERT
VISITOR

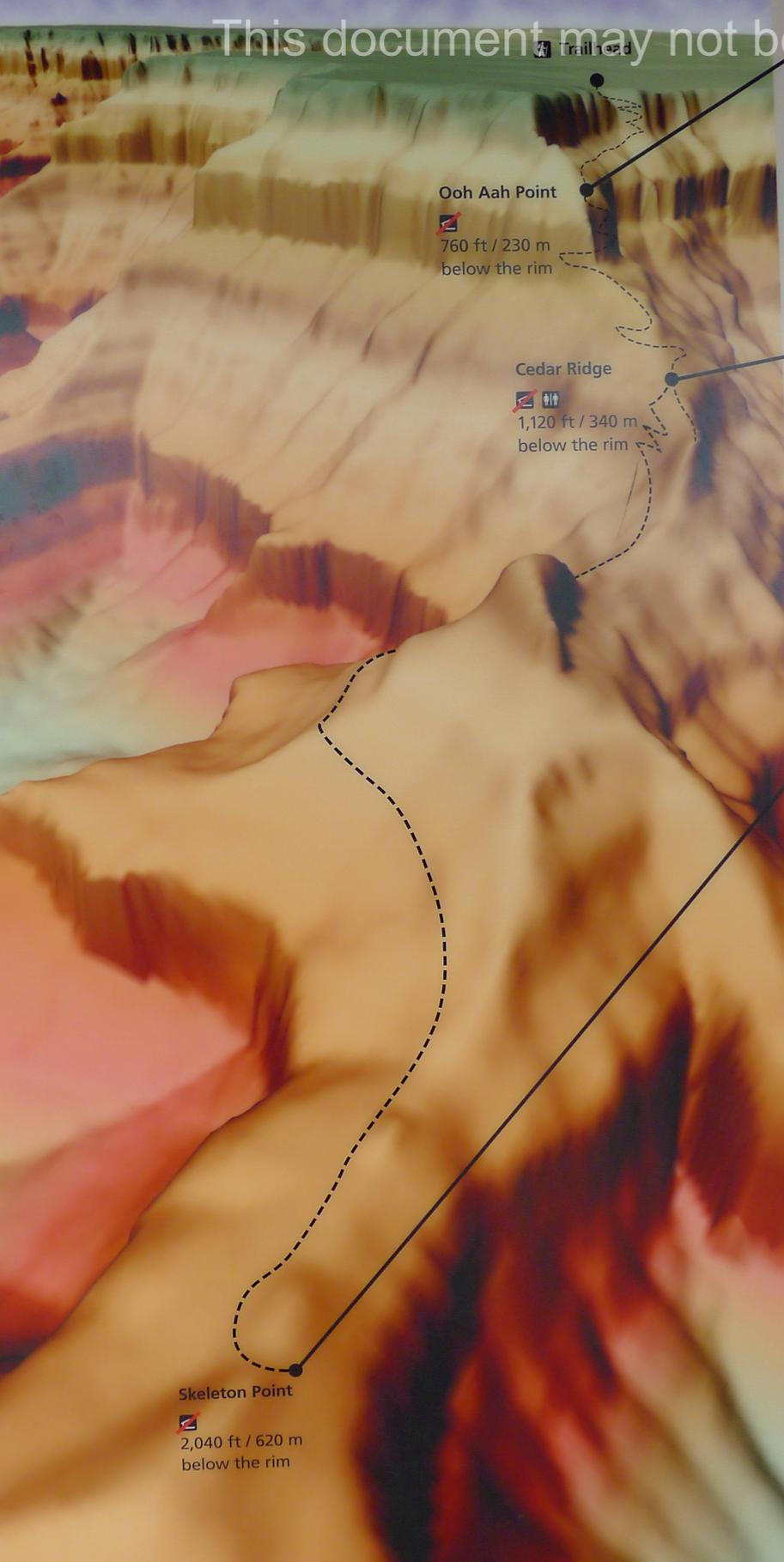


NON-EXPERT VISITOR





EXPERT RANGER



Destination	Distance (in Miles)		Elevation Feet (at Destination)	Services: W = Water; T = Toilet; E = Emergency Phone			Notes
	One Way	Round Trip		Services			
				W	T	E	
Ooh-Aah Point	.9	1.8	6660				Offers a spectacular view. Great day hike. No sign, point where trail opens to a WIDE view. No water.
Cedar Ridge	1.5	3	6120		X		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.
Skeleton Point	3	6	5200				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!



NON-EXPERT VISITOR

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...



...SO IS EVERYONE ELSE'S



EXPERTISE IS A SPECIAL
KIND OF POINT OF VIEW

EXPERTISE IS A SPECIAL KIND OF POINT OF VIEW

1. TACIT KNOWLEDGE (VS. EXPLICIT 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

PART 3

MITIGATE

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 an 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

METHOD

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

METHOD

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!

<http://bit.ly/wrmc-feedback>

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