

Whiteboarding 101

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Part I : The Basics

1. Introduction

- What we'll talk about
 - Skills that will help you talk to colleagues, customers or interviewers
- What we're not talking about
 - Sales techniques, Interview strategies
- What you'll know by the time you leave
 - This is not magic
- Ground Rules
 - 90 minutes, 5 minute break in the middle
 - There will be multiple opportunities for questions during the talk

Behold, the Whiteboard

- Whiteboarding is a combination of storytelling, teaching, and improv
- ...and a bunch of other skills
 - Structuring a talk
 - Narrowing a talk to fit a topic
 - Adapting to the audience in real time
 - Crowd control
- A couple of assertions
 - A whiteboard allows for the real-time organization of data into a story.
 - People absorb information through stories (e.g. “The 500-mile email”)

3. Helpful Safety Tips

- Bring your own markers. They're cheap.
 - This goes double if you're doing a coding interview
 - If you can't, make sure you specify what you need.
- Always cap your markers. They dry out quickly.
- Make sure the eraser erases.
- Have three colors: Black, Red, and Blue are a good start.
- Walk the room beforehand
 - Make sure there's no excessive glare on the board
 - You'll know what other people in the room will be able to see.

Part II: Telling the Story

4.1. Boundaries

- A story is told within boundaries
 - Horizontal Boundaries: Scope, and Time
 - Here's the subject we're covering, and the context
 - By the end of this talk, you'll know.....
 - Vertical Boundaries: Levels of Abstraction
 - How deep are you going? Good. Stay there.
 - If you go too high, you're handwaving. Too low, and you've lost people.
 - Structural Boundaries: Theme
 - "We found a problem, and here's the solution."
 - "We made and/or figured out a thing."
 - "Here's what we found after looking at a lot of things."

4.2. Symbols

- The beauty of a whiteboard is the ease of using symbols
 - You get to use the stories that are already in peoples' heads.
 - The ubiquitous 2x2 matrix is seven assumptions bundled into one.
 - Number lines
 - Venn Diagrams
 - THE CLOUD
 - Functions on a graph
 - Normal distributions
 - Exponential functions
 - The Power Law curve
 - etc. etc. etc. etc. etc.

5.1. The Thing You Want To Teach

- “Know 10 to teach 3.”
 - In general, you need to know your subject at an advanced level in order to teach at an intermediate level.
 - A good whiteboard talk is a test of systemic knowledge
- Choose your metaphors wisely
 - Colors mean different things to different people
 - Red and Black mean different things to finance people vs. electrical engineers
 - Use what you have, either in front of you, or in other peoples’ heads
 - You can discuss hydrocarbon polymerization and cracking using pool noodles. Trust me.
- The way you teach it is probably not the way you know it
 - What are the words you want them to use

5.2. Halftime Review

- Let's look at what I've done up here for the past 45 minutes.
- Boundaries: The whiteboard, and what to do with it.
 - Vertical: Keep the advice practical. Don't get too abstract.
 - Horizontal: Cover the medium and the realities of speaking in front of people.
 - Theme: How to effectively communicate
- Preparation
 - Walking the room, getting good markers, doing a color test, etc.
- The thing I want to teach
 - How to make this look easy. It's not easy, but it's not difficult. It just takes preparation.

Five Minute Break

- Check your mail. You know you want to.
- Alternately, count to 300.

Part III: The Audience

6. Crowd Control

- Beginning and ending
 - Definitely start and end your talk. “Thank you for coming...”
 - Humans love that stuff. Just ask your typical spiritual leader
- Give people time to take pictures of the board
- Agendas
 - Have an agenda, Stick to the agenda, Blame the agenda
- Defer if necessary, but don't go over quota
- Listen to all the words of a question
- Choose three proxies in the room: left, middle, right.
- Checking In: Are people following you?

7. Words of Caution

- You're the expert, until proven otherwise
 - You're the expert because you're the one at the front of the room.
 - People want to believe that you're knowledgeable, but once they doubt....
- You've made an implicit promise that you won't waste their time
- Don't make stuff up. **DO NOT MAKE STUFF UP.**
 - Just don't.
- Parking Lots are the technical debt of whiteboard talks
 - Every item you promise to answer later costs time and energy.
- If you feel you're going into the weeds, breathe.
 - Your audience will be happy that you're getting back on track.

8. Pitfalls

- Knowledging at people
- Making stuff up. **DO NOT MAKE STUFF UP.**
- Taking questions as a personal affront
- Getting bogged down in questions. Comfy, but not useful
- Breaking the flow
 - Diving into details
 - Aimless storytime
- Topic Jumping
 - It might make sense to you, but you're the only one with your brain.

9. Problem Audiences

- NAQMOAC – “Not A Question, More of a Comment.”
 - “This isn’t a question, but...”
 - “Would the panel agree with...”
 - “I was wondering if...”
 - Just cut them off. There’s no there, there.
- You’re talking to everyone in the room; they’re only talking to you.
- The Sniper – expose and isolate.
- The Bully – isolate, but do not escalate. They burn themselves out.
- The Status Seeker – recognize and defer

10. In Conclusion

- Whiteboards are a remarkably useful medium for getting info across
- This scales from one person with their own thoughts.... To this talk.
- Questions afterwards? Send me mail: ringel@akamai.com
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Part IV: Q & A