# Demonstrations

From research to practice

@wendyjsadler@scimadesimple

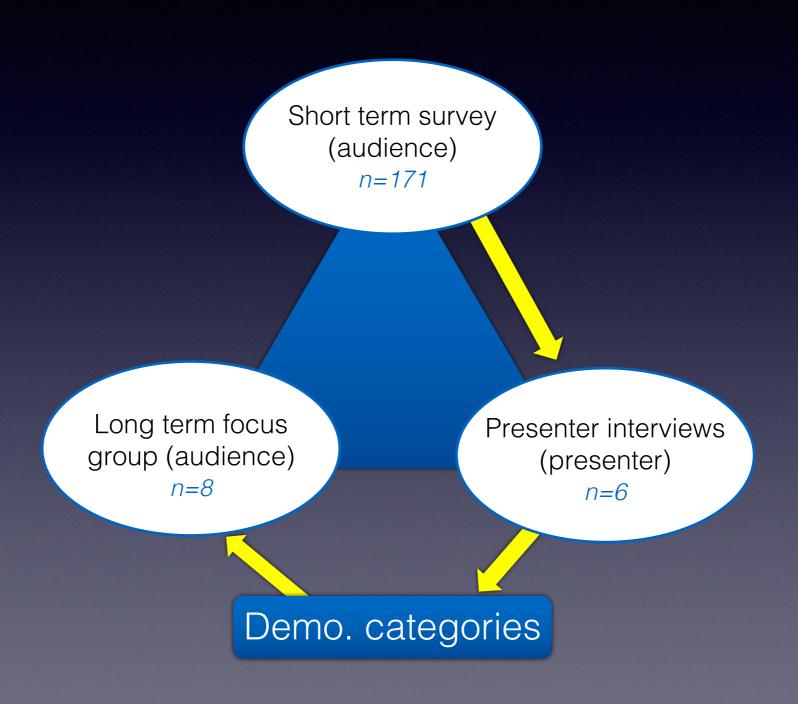




science made simple

TO YOUR EARS
The Story of Sound, Synths and CDs

### Measuring the impact of demonstrations



# Categories of demonstration

Code	Name	The audience
С	Curiosity	are surprised
Н	Human	interacts
A	Analogy	understands
M	Mechanics	contextualises
Р	Phenomena	experiences



### **C** Curiosity

Something weird
Unusual equipment
Counter-intuitive
Challenge to audience

eg: Clucking cup, theremin, thunder drum



#### H Human

A volunteer is used
Audience mass experiment
Individual self-learning
Humour with person

eg: Feeling voice vibrations, listening test, voice changer



### A Analogy

Visual model of something invisible Presenter body language models Using physical models

eg: using oscilloscope to picture musical sounds



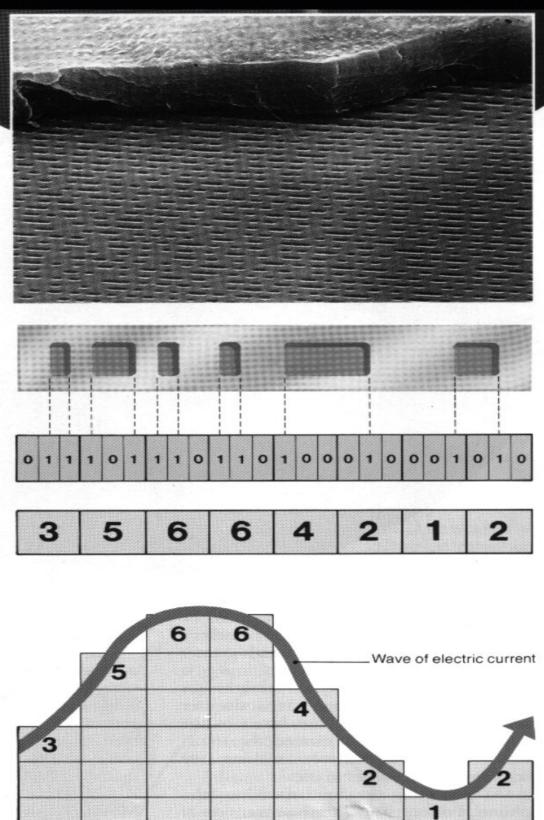
#### **M** Mechanics

How things work
Taking things apart
Understanding the technology

eg: How a CD stores music, needle in bucket record

### **M** Mechanics







#### P Phenomena

Shows actual science phenomena Demonstrates not explains

eg: standing waves on string, whirly tube





# Measuring the impact of a science show

Audience short term (n=171)	Audience long term (n=8)	Professional presenters (n=6)
curiosity (33%)	curiosity (25%)	curiosity (50%)
human (25%)	mechanics (18%)	human (25%)
analogy (17%)	human (14%)	analogy (12.5%)
mechanics (17%)	phenomena (11%)	phenomena (12.5%)
phenomena (8%)	analogy (6%)	mechanics (0%)





"It's the science lesson children will so enjoy, they'll never know they've learned something."



"It's not often children's theatre truly inspires but this defies anyone, no matter what their age, not to stare in wonder at an altogether different kind of science class."







science made simple

# Demonstrations

From research to practice

@wendyjsadler@scimadesimple

