



OPINION VS. EVIDENCE: WHAT IS THE DIFFERENCE?

What kind of data do you need to make decisions and policy?

52% of facts are made up on the spot

WHO?

- Policy Wonk

- Mary Hartnett

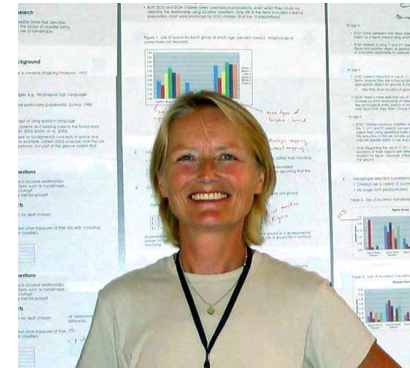
- Executive Director – Minnesota Commission for the Deaf, DeafBlind and Hard of Hearing
- 35 years working
 - director of three nonprofit organizations
 - educational and free lance sign language interpreter
 - Administrator
 - lobbyist

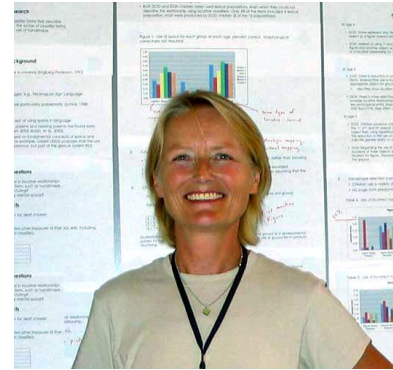


WHO?

○ Research and Education Wonk

- Certified Teacher of the Deaf
- Child of Deaf Parents
- Researcher in language and cognitive development of children with hearing loss – 30 years
- Associate Editor for Journal of Deaf Studies and Deaf Education
- Policy and standards for teachers and interpreters who work with children





Partnership that benefits
research & policy





WHAT QUESTIONS SHOULD YOU BE ASKING?

How do you know if the research or evidence is
GOOD!

WHAT IS GOOD EVIDENCE?

- Levels of evidence in research
 - All studies are not alike
- Lowest Level: Opinion
- OK Evidence: Case studies or descriptions of small samples
- Good Evidence: Observations of large samples with a control group
 - Children with CI's, hearing aids, and hearing children
 - Comparison Group
- Best Evidence: Randomized clinical trials: Impossible in education



WHAT TO ASK?

- How good are the studies?
- Are there numerous studies that show the same thing?
- How good are the samples?
- Would you base a child's future on this study?
- Have you read this research?
- Who funded it?
 - NIH is the gold standard
- Is the research published in good peer-reviewed journals?
 - Peer-reviewed journals vary in quality
 - JDSDE is among best
 - Impact factor rating system
- Trade journals are typically opinion



WHAT RISKS ARE THERE IS THIS DOES NOT WORK?

- If this approach is not successful, what risks does my child have?
- What is the percent success rate?
- You told me many children are successful. What about those who are not?
- What is the range of success?
- Can we do multiple strategies at the same time?

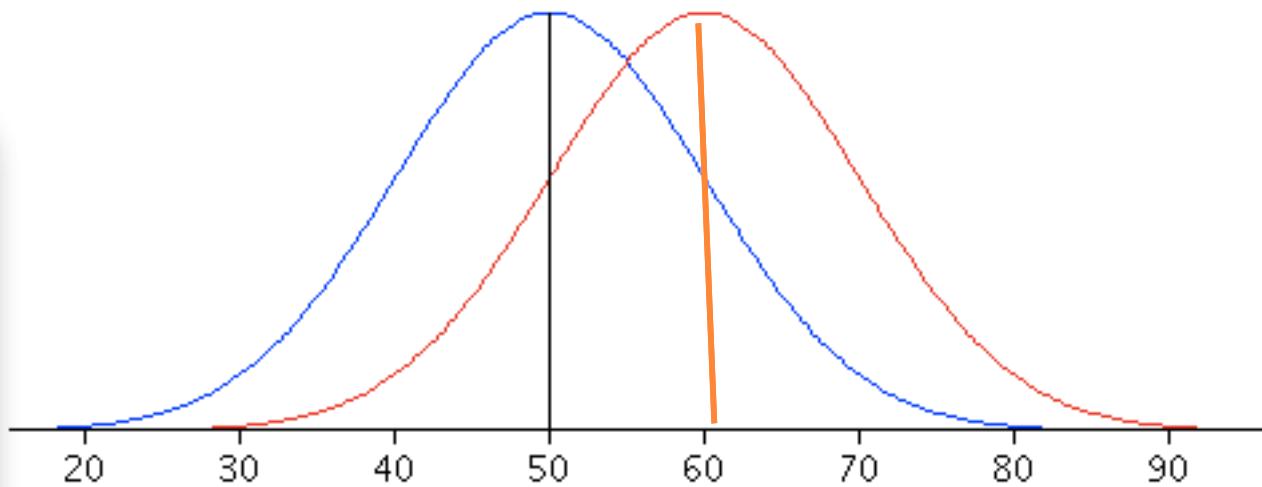


THE MYTH OF STATISTICAL SIGNIFICANCE

- People often believe that if research shows statistical significance, it is good.
- Statistical significance is a number that reflects how CONFIDENT you are that two groups differ
 - Smaller number = more confident the groups are different
- Statistical significance does not tell you if the differences are educationally important.



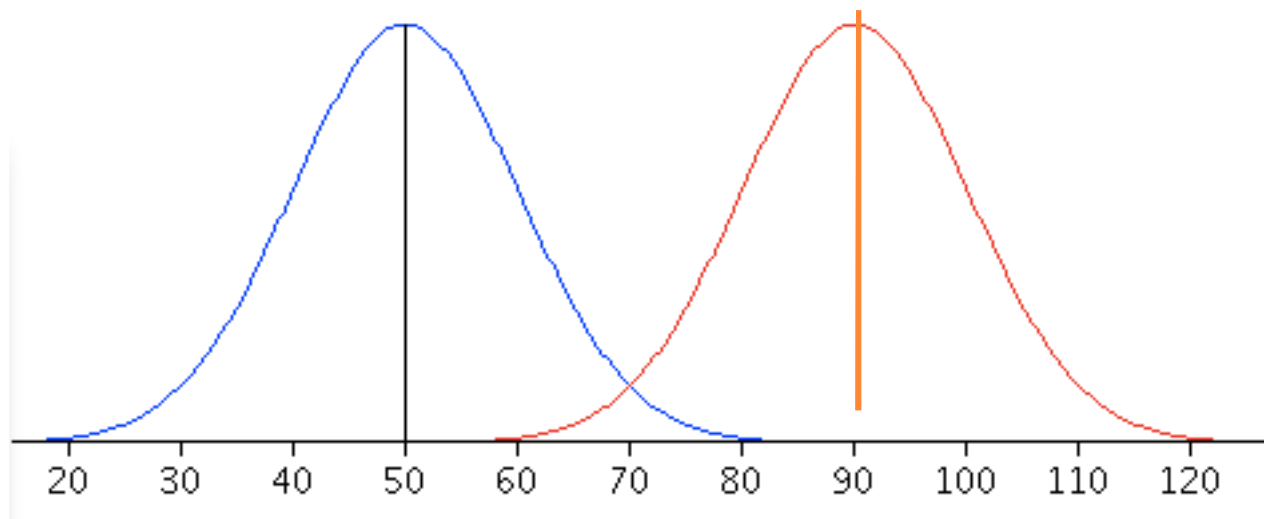
HOW BIG ARE THE DIFFERENCES?



Statistically different – but functionally, not that different.
Worth the effort and cost?



HOW BIG ARE THE DIFFERENCES?



Statistically different – and BIG functional differences. This difference is worth it!



DO RESEARCH ON MY CHILD!!

- Assessment is research on an individual basis
- Frequent assessment provides richer set of data to help with decision making
- How fast is my child learning?
- How does my child compare
 - with hearing children?
 - with other children with a similar hearing loss?



DO RESEARCH ON THE PROGRAM!

- What evidence is there that this program works?
- Program evaluation research
 - Often not in peer-reviewed journals
 - Often schools do not monitor their own success
- How do all the children do
 - Not just the program stars



DO RESEARCH IN MY STATE!

- Encourage your state system to monitor outcomes
- Most states do not collect data regarding student performance
 - Except with state reading, math tests



MINNESOTA EXAMPLE

- Minnesota has introduced legislation that will
 - require the Department of Education to report aggregate outcomes in accordance with the state performance plan
 - make recommendations for improvements
 - Report to the Commission of Deaf, DeafBlind and Hard of Hearing and the legislature.





FORMING YOUR OWN ADVISORY BOARD

How to talk with researchers!

EXAMPLES OF BILLS PASSED AND RESEARCH USED TO SUPPORT THEM

- ANSI Acoustics Standards for New School Construction
- Educational Interpreter Certification
- Hearing Aid Coverage for Birth – Eighteen
- Early Hearing Detection and Intervention
- Deaf Mentors
- Hearing Aid Loaner Bank



MARY'S RESEARCH ADVISORS

- EHDI- Dr. Karl White, Dr. Arlene StredlerBrown, Dr. Peggy Nelson, Nicole Brown and Yaoli Li from the Department of Health, Candace Lindow Davies Mark Marschark.
- Educational Interpreters- Brenda Schick
- Hearing Aid Coverage- Dr. Peggy Nelson, U of MN Audiology Department, Dr. Margolis, U of MN Clinic, Minnesota Speech and Hearing Association.
- ANSI Acoustics Standards- Jenifer Simpson US Access Board, Dr. Peggy Nelson, Dr. Mike Nixon.
- Reporting Mandate-, Dr. Susan Rose, Cheryl Johnson.



WHEN IS OPINION VALUABLE?

- Parents opinion regarding services is research data
 - Collect in systematic manner
 - Try to sample widely
- Parents can easily help with this type of research
 - Get some advice about the design and survey tool



PARENTS AS PARTNERS IN RESEARCH: EXAMPLE

- Hearing Aid Legislation: Wanted to prove that adding hearing aids as a mandated benefit would be revenue neutral or reduce costs to insurers.
- How? Parents at AG Bell surveyed all parents on their list in MN and they all received speech services. We asked for the average # of hours a week provided and the hourly charge.



WHAT DATA DID WE PROVIDE TO LEGISLATORS?

- **Costs to insurance companies will be offset by reduced costs in speech therapy.**
- Forty out of forty-three parents surveyed said that they receive speech therapy at a cost to the insurance industry of \$8,000 to \$14,000 every three years. One hearing aid would cost the insurance industry \$1600 every three years; two would cost \$3200.
- **The American Speech and Hearing Association says that costs for speech therapy would be cut by as least 30% if children receive early intervention.** This would result in costs being cut or offset to the insurance industry.



SUMMARY: HOW DO I APPLY WHAT I JUST LEARNED

- What would you like to see in research?
- Don't wait for researchers to do it!
 - Their agenda is different than educators or parents
- Get involved with researchers to shape research
- Many big research projects have parents on the advisory board
 - The “beginner's mind”



YOUR ASSIGNMENT: CATEGORIZE THE TALKS YOU HEAR

- Opinion
- Pretty Good Research
- Excellent Data

