CITIZEN SCIENCE AS CIVIC SCIENCE

NEW SPACES FOR REFLEXIVE PRACTICE

DR. GWENDOLYN BLUE

Alberta

- ALBERTA is poised for LEADERSHIP
  - KEY CHALLENGE is to REBUILD TRUST · CREDIBILITY
- ASSUMPTIONS + VALUES > SELF + INSTITUTIONS = TIME + POSSIBILITY

REFLEXIVITY — TURNING INWARD

CITIZEN SCIENCE is SOCIAL + SCIENTIFIC

DEEP IMPLICATIONS + POSSIBILITY

the CHALLENGE is in taking down walls + barriers

CONTROVERSY DISAGREEMENT DEBATE = EMOTIONAL INVESTMENT

- 2 WAYS OF THINKING
  - CONVENTIONAL: facts vs. values, purely descriptive
  - FACTS + VALUES INTERWOVEN: public involved · exposed values

FRUSTRATED SCIENTISTS

"policy + public don't listen" "if we just knew the facts + had the data..."

PROBLEMS/ISSUES

DATA QUALITY + COLLECTION

- Does more data lead to better decision making?

DATA ≠ GOOD DECISIONS

CLIMATE CHANGE and PUPPIES

- People don't "GET IT"
- vested interests
- assumptions aren't enough

WHO DEFINES ENVIRONMENTAL PROBLEMS/SOLUTIONS?

- ie. REFRAMING DEFORESTATION — gathering local knowledge

deforestation wasn't the actual problem

WHAT ARE SCIENTISTS' ASSUMPTIONS ABOUT THE PUBLIC?

- "DEFICIT NOTIONS" "People need to be informed"

What can scientists learn from public engagement?

INEQUALITY IN SCIENCE

- HARASSMENT + ABUSE — INITIATIVES FOR SOCIAL CHANGE

gender, sexuality, color, socio-economic status, etc.

PUBLIC PRESSURE — Athena Swan Charter

- 2 FACES OF SCIENCE (JANUS)
  - the GOOD SIDE seen by the PUBLIC — "You guys are the problem"
  - the PRIVATE SIDE hidden from the PUBLIC — backstage, debates, issues

HELD TO UNFAIR STANDARDS

Which path for Citizen Science?

- integrate into present system (conformity) OR
- as a practice for freedom?

THINGS THAT MATTER

MEANING + STORIES

- NOT CAPTURED IN QUANTITATIVE DATA

BEAR 71 — please watch

POWER

... WHEN IT DOESN'T GO WELL..

- ie. dynamics in Flint, Michigan

UNCERTAINTY / IGNORANCE

- DATA IS ALWAYS HISTORICAL

We are not looking forward

TO WHAT EXTENT SHOULD CITIZENS BE PART OF...

- KNOWLEDGE, DATA, STANDARDS, PROTOCOLS

Standards are social technology = DISCIPLINE

VALUES

- THERE IS NO SUCH THING AS VALUE FREE SCIENCE

get democracy right + good science will follow

MODEST VIRTUES

- TRUTH, KNOWLEDGE + POWER. QUESTIONS TRADE-OFFS, HUMILITY, UNCERTAINTY

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