MEASURING EXCELLENCE: TRENDS & NEW HORIZONS

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SOUTHERN REGION ACADEMIC PROGRAMS AND EXPERIMENT STATION DIRECTORS JOINT MEETING

SEPTEMBER 11, 2019

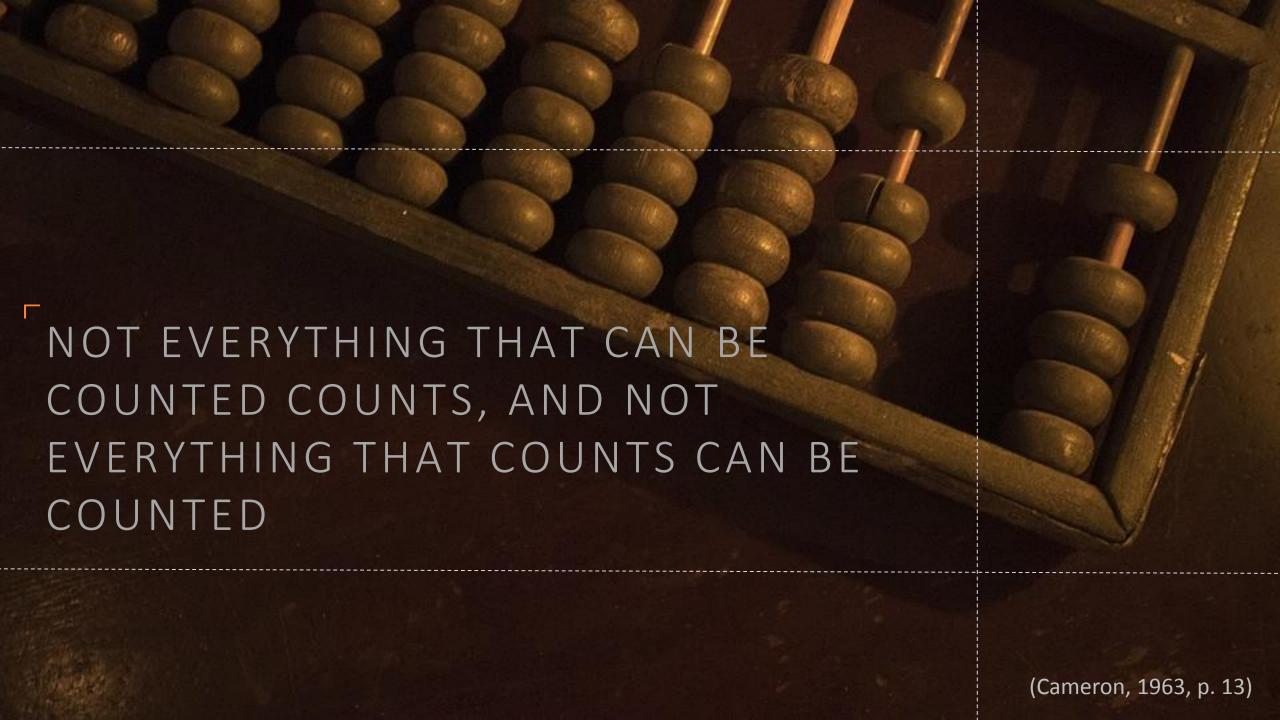


IN SEARCH OF EXCELLENCE



WHAT GETS MEASURED GETS DONE





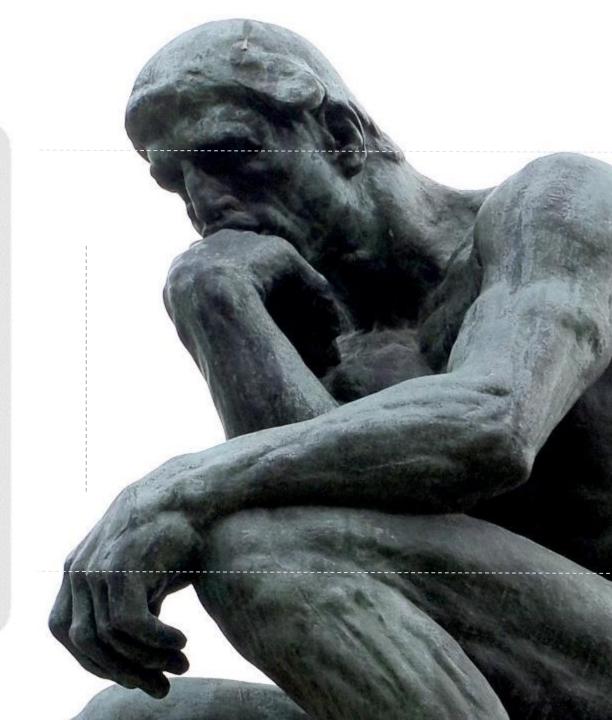
HOW < WHAT < WHY

WHY

I was working with a major, long-established organization. In a meeting with senior management to get the evaluation off to a good start, I asked them to tell me about an evaluation that had been useful to them, to start exploring the features that make evaluation useful. There was a long, nervous silence until one of them said, "None, really."

"Then I guess we'll have to do things quite differently," I said.

—An experienced evaluator



-WHY

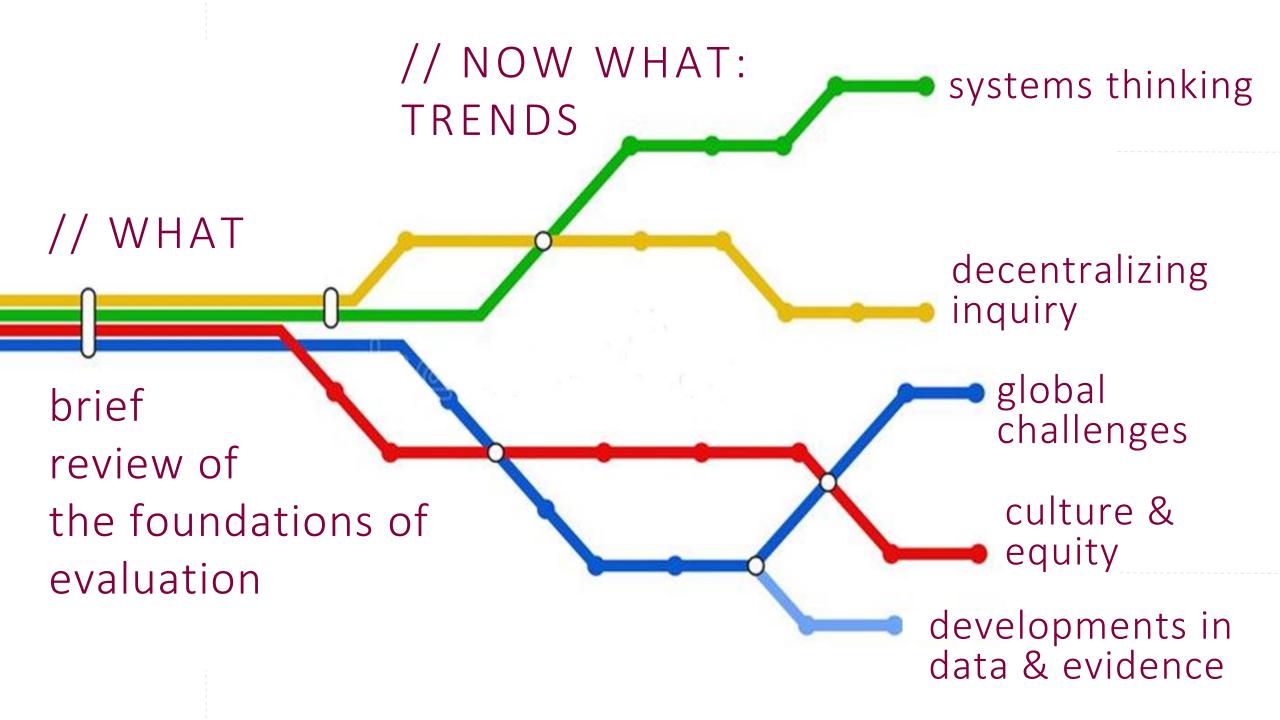
For purposes of:

- Accountability
- Adaptive management and program improvement
- Learning
- Social betterment, or the common good
- In other words, use

WHY

Accountability is a "slippery rhetorical term" containing two distinct, interchangeable meanings:

- Technical management processes
- Democratic accountability



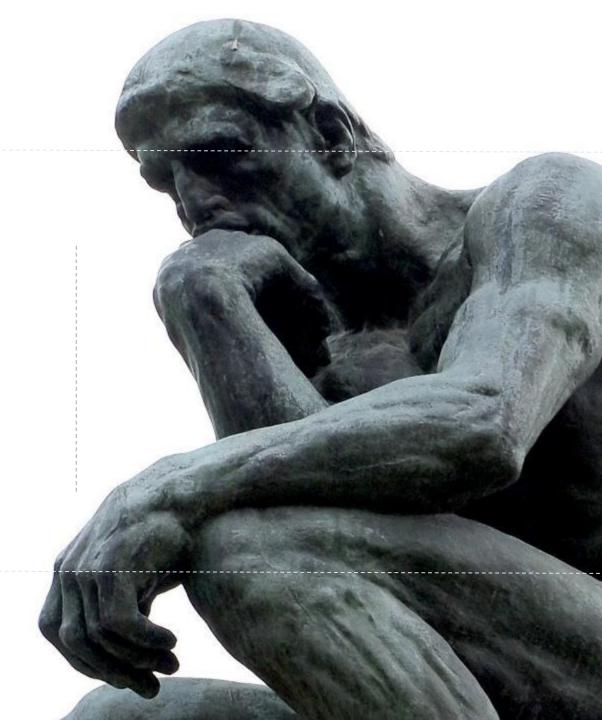
Evaluation is the process of determining the merit, worth and value of things, and evaluations are the products of that process.

Michael Scriven Evaluation Thesaurus, Page 1



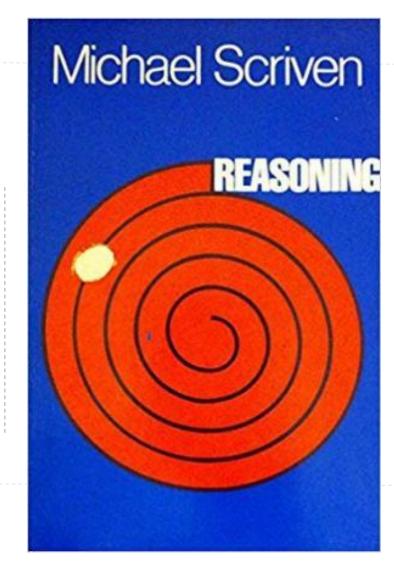
The general logic of evaluation

The systematic means for arriving at evaluative conclusions, the principles that support inferences drawn by evaluators.



Making an evaluative judgment involves:

- 1. Establishing criteria of merit for the evaluand (e.g., program, person, etc.)
- 2. Constructing standards for the criteria
- 3. Measuring performance of the evaluand against the criteria
- 4. Synthesizing and integrating data into a judgment of merit or worth



(Scriven, 1994; Schwandt, 2015)

extension

- programs
- impacts

research

- reports
- products
- impacts



teaching

- instructor variables
- student competencies
- student outcomes
- student evaluations

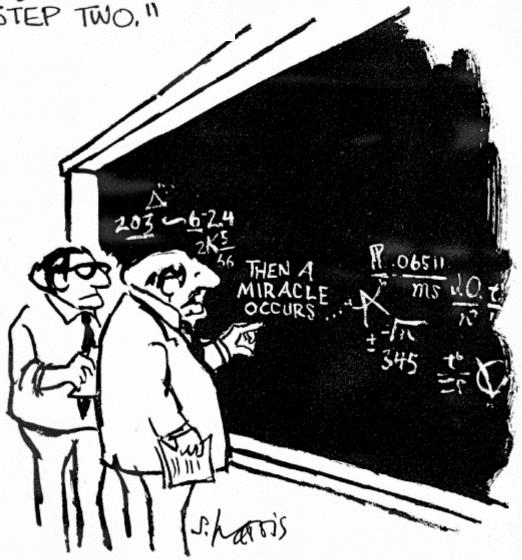
holistic / whole unit / university

- criteria for success
- criteria for impact



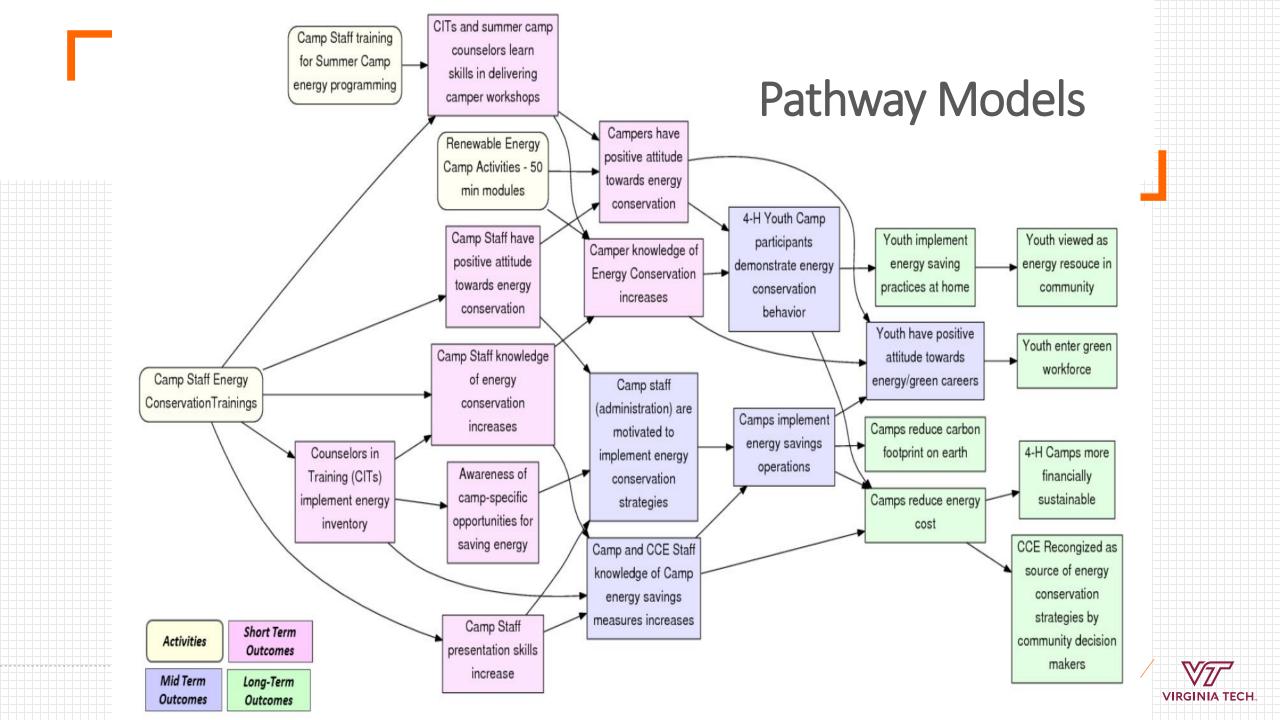


"I THINK YOU SHOULD BE MORE EXPLICIT HERE IN STEP TWO,"



(Harris, 1977, used with permission)





Translational research evaluation

Clin Transl Sci. 2011 Jun;4(3):153-62. doi: 10.1111/j.1752-8062.2011.00291.x.

Evaluating translational research: a process marker model.

Trochim W¹, Kane C, Graham MJ, Pincus HA.

Author information

Abstract

OBJECTIVE: We examine the concept of translational research from the perspective of evaluators charged with assessing translational efforts. One of the major tasks for evaluators involved in translational research is to help assess efforts that aim to reduce the time it takes to move research to practice and health impacts. Another is to assess efforts that are intended to increase the rate and volume of translation.

METHODS: We offer an alternative to the dominant contemporary tendency to define translational research in terms of a series of discrete "phases."

RESULTS: We contend that this phased approach has been confusing and that it is insufficient as a basis for evaluation. Instead, we argue for the identification of key operational and measurable markers along a generalized process pathway from research to practice.

CONCLUSIONS: This model provides a foundation for the evaluation of interventions designed to improve translational research and the integration of these findings into a field of translational studies.

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PMID: 21707944 PMCID: PMC3125608 DOI: 10.1111/j.1752-8062.2011.00291.x

- Translational research evaluation
- Multi-trait, multi-method matrices
- Rubrics (McKegg, 2013)

	Ratings				
	Poor	Performance is barely adequate	Reasonable performance	Strong performance	Excellent /Exemplary performance
Overall rating					
Content and design					
Programme delivery – systems and approaches					
Programme delivery – human resources					
Programme delivery – finances and sustainability					
Programme delivery – relationships					

Complex

Enabling constraints
Loosely coupled
probe-sense-respond
Emergent Practice

Complicated

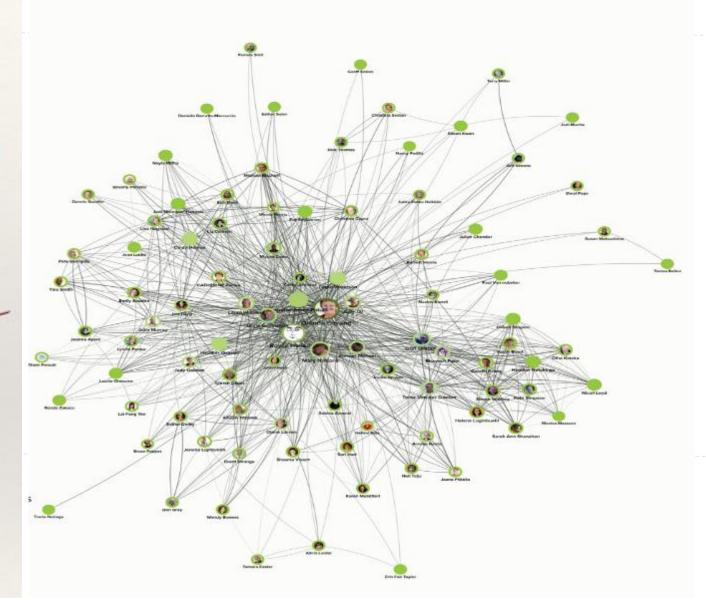
Governing constraints
Tightly coupled
sense-analyse-respond
Good Practice

Chaotic

Lacking constraint
De-coupled
act-sense-respond
Novel Practice

Obvious

No degrees of freedom sense-categorise-respond
Best Practice





Adaptive management: what it means for CSOs

Bond

Michael O'Donnell

Monday, September 12, 2016

Adaptive management is an approach to working on complex problems or contexts which focuses on acting, sensing and responding: it assumes solutions cannot be completely known in advance and, therefore, that interventions cannot be planned out in full ahead of time.



PRINCIPLES FOR EVALUATION IN #AdaptDev

- Organizational culture of openness, relationships, and continuous learning and improvement
- Processes for decision-making and knowledge management
- Resources for adaptation, including time, money, and people/expertise; skills in:
 - Curiosity
 - Communication and listening skills
 - Critical thinking (and evaluative thinking)
 - Comfort with uncertainty and change



PRINCIPLES FOR EVALUATION IN #AdaptDev

- Use complexity-aware approaches for evaluation like:
 - Outcome Harvesting
 - Most significant change
 - SenseMaker
 - Ripple Effect Mapping
 - Developmental evaluation



PRINCIPLES FOR EVALUATION IN #AdaptDev

- Focus on learning, not just accountability
- Accountability in a participatory, democratizing way
- Attention to voice, power, and ownership
- Agility and readiness to learn from safe to fail experiments
- Evaluative thinking as a way of doing business



TRENDS: DECENTRALIZING INQUIRY





Evaluation is an activity. Evaluative thinking is a way of doing business. This distinction is critical. It derives from studies of evaluation use. Evaluation is more useful and actually used—when the program and organizational culture manifests evaluative thinking.

Embracing Evaluative Thinking for Better Outcomes:

Four NGO Case Studies



- Michael Quinn Patton











 Evaluative thinking is critical thinking applied in the context of evaluation and program management, motivated by an attitude of inquisitiveness and a belief in the value of evidence, that involves:

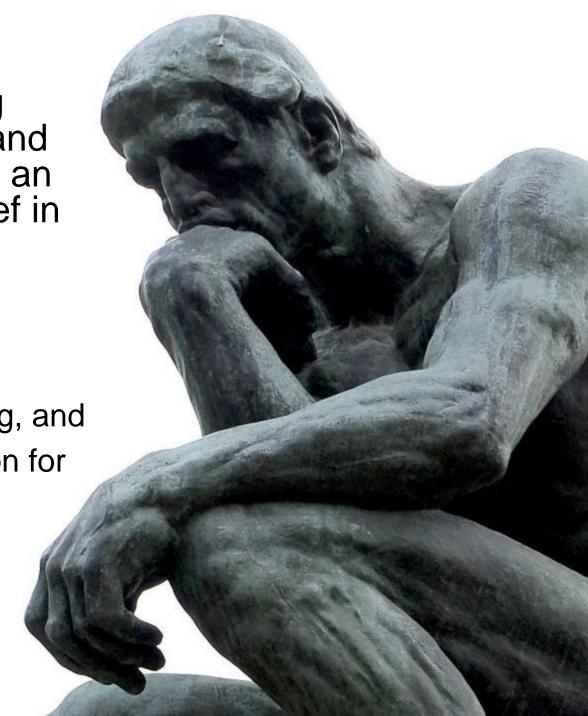
• identifying assumptions,

posing thoughtful questions,

 pursuing deeper understanding through reflection and multiple perspective taking, and

 making informed decisions in preparation for action.

(Buckley, Archibald, Hargraves, & Trochim, 2015)



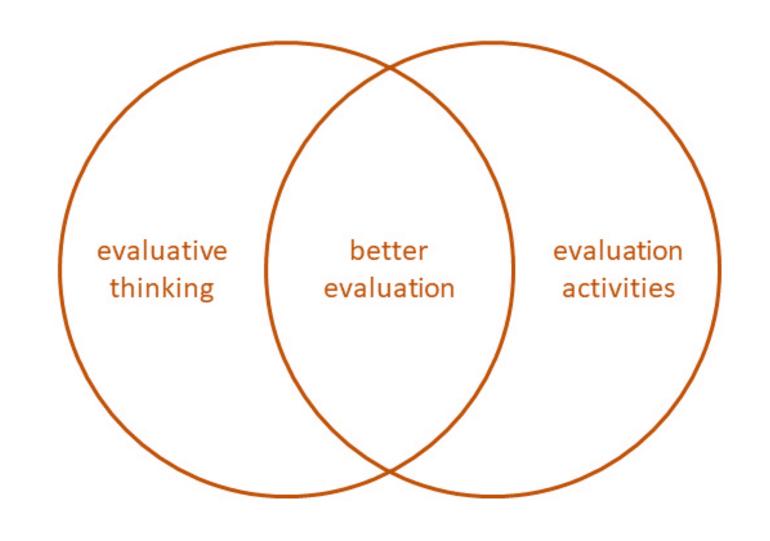
WHAT DOES EVALUATIVE THINKING SOUND AND LOOK LIKE IN CONTEXT?

Things you may hear:

- Why are we assuming X?
- How do we know X?
- What evidence do we have for X?
- What is the thinking behind the way we do X?
- How could we do X better?
- Stakeholder X's perspective on this might be Y!
- How might we be wrong?

Things you may see:

- More evidence gathering and sharing
- More feedback (all directions)
- Reflective conversations among staff, beneficiaries, leadership, etc.
- More illustrating thinking
- Evolution in the way you do things
- Work is more effective and efficient





TRENDS: GLOBAL CHALLENGES

SUSTAINABLE GEALS







































Publications

Various important and interesting publications on SDGs and evaluation are available for use at your convenience. Feel free to share any publications you have and not included in this virtual space.



Briefing Papers

Briefing papers are jointly published by IIED,
EVALSDGs and UNICEF in collaboration with various
partners depending on the topic of the briefing
paper. Feel free to download them or share the links
with your networks.



Country Spotlights

EVALSDGs advocates for the use of "Spotlight" as a tool to build and reinforce the national evaluation capacities of countries and contribute to empowering various partners in exchanging and sharing learnings. Find country cases here.



Insights

EVALSDGs publish insights on various aspects on SDGs and evaluation to share the technical aspects with practitioners. Feel free to download them or share the links with your networks.

News





Evaluation and the 2030 Agenda

EVALSDGs and UNITAR announces the free e-learning on "Evaluation and the 2030 Agenda" to be started on 12th September 2019. Feel free to enroll or share the



Side event - Evaluation to connect the SDGs with national priorities:

learning from Finland and Nigeria was held on Wednesday 17 July from 12 to 14.00 hours. This event



BLUEMARBLE evaluation

ABOUT BLUE MARBLE EVALUATION

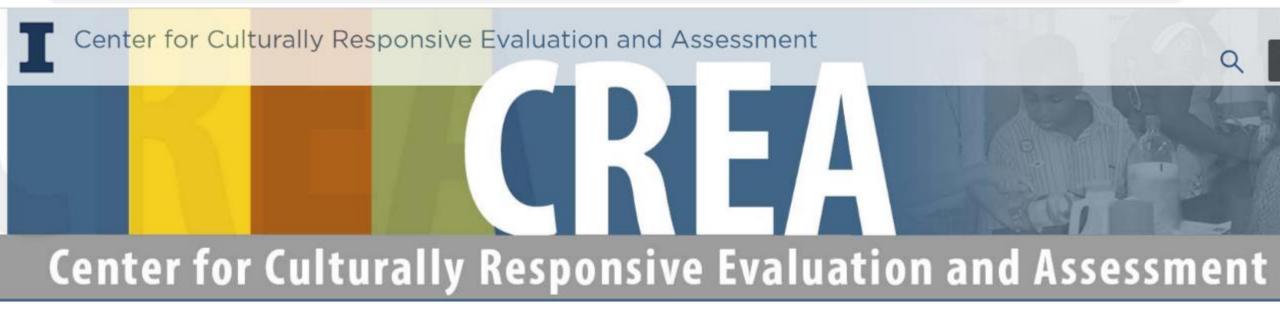
GLOBAL EVALUATION
COMPETENCE
UPCOMING EVENTS
STAY INFORMED
BME RESOURCES
BLOG

Global challenges like climate change, massive cross-border movement of displaced persons, virulent super-viruses and contagious diseases that threaten world health, dying oceans, global terrorism, global food insecurity, global economic interdependence, and multinational capitalism, to name but a few examples, operate beyond national borders and regional or sectoral domains. Technology knows no national or agency boundaries. Moreover, these global systems and challenges are interconnected and dynamic. Global innovators and global systems change initiatives are beginning to think and act from the perspective of a complex, dynamic, and interconnected world system.

Evaluators need special perspectives and competences to engage and evaluate these global change efforts, to monitor, improve, help develop, and ultimately judge the effectiveness, efficiency, relevance, and sustainability of these global change efforts.

This involves much more than monitoring performance indicators and sustainable development goals. It means bringing the full arsenal of evaluation thinking, tools, methods, and processes to bear at a global level -- and creating new approaches appropriate to the challenges of global systems evaluation.

TRENDS: CULTURE & EQUITY



IN THIS SECTION

Center for Culturally Responsive Evaluation and Assessment

Home

Origins

About

The Center for Culturally Responsive Evaluation and Assessment (CREA) is located in the College of Education at the University of Illinois at Urbana-Champaign. It is an international community of scholars/practitioners that exists to promote a culturally responsive stance in all forms of systematic inquiry including evaluation, assessment, policy analysis, applied research and action research. In this work, CREA recognizes issues of power, privilege, and intersectionality. Using its base at the University of Illinois, the Center provides a resource for organizations and individuals seeking to better understand and apply cultural responsiveness. CREA seeks to produce a body of informed practitioners, published scholarship, professional development opportunities, technical assistance resources and advocacy advancing cultural responsiveness across inquiry platforms and settings.

Equitable Evaluation Principles

1)

Evaluation and evaluative work should be in service of equity.

→ Production, consumption, and management of evaluation and evaluative work should hold at its core a responsibility to advance progress towards equity. 2

Evaluative work can and should answer critical questions about the:

- Ways in which historical and structural decisions have contributed to the condition to be addressed
- → Effect of a strategy on different populations
- → Effect of a strategy on the underlying systemic drivers of inequity
- Ways in which cultural context is tangled up in both the structural conditions and the change initiative itself.

3

Evaluative work should be designed and implemented commensurate with the values underlying equity work:

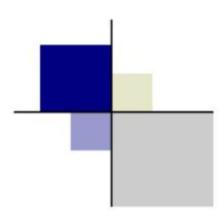
- → Multi-culturally valid
- → Oriented toward participant ownership.





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Special Issue: Credible and Actionable Evidence in Extension Practice

> Benjamin Silliman and Scott R. Cummings, Guest Editors Donna J. Peterson and Rich Poling, Co-Editors

Rich Poling, Donna J Peterson

Editors' Introduction to This Special Issue



Scott Chazdon, Samantha Grant

Situational Complexity and the Perception of Credible Evidence



Mary S Marczak, Emily H Becher, Patricia Olson Credible and Actionable Evidence Across Extension Program Areas: A Case Example



Chelsea Hetherington, Cheryl Eschbach, Courtney Cuthbertson

How Evaluation Capacity Building Grows Credible and Actionable Evidence for Cooperative Extension Programs



Benjamin Silliman, Scott R Cummings

Credible and Actionable Evidence in Extension Practice: Framing Issues, Contexts, and Principles



Kenneth R Jones, Eugenia P Gwynn, Allison M Teeter

Quantitative or Qualitative: Selecting the Right Methodological Approach for Credible Evidence



Nick T Place, Richard M Klemme, M Ray McKinnie, Carrie Baker, Jean Parella, Scott R Cummings

Credible and Actionable Evidence Across Stakeholder Levels of the Cooperative Extension System



Scott R Cummings, Benjamin Silliman

Where Do We Go from Here?: Credible and Actionable Evidence in Extension



Thomas Archibald

Whose Extension Counts? A Plurality of Extensions and Their Implications for Credible Evidence Debates



Marc T Braverman

Measurement and Credible Evidence in Extension Evaluations



Diane D Craig, Ruth H Borger

Communicating with Data: Telling the Extension Story in Credible and Actionable Ways



Benjamin Silliman, Scott R Cummings

Thank You to Reviewers for This Special Edition







"Under the banner of the new experimentalism, systematic searches for hard-headed evidence about the effects of policy and programmes are highly prized. The 'randomistas' lay claim to scientific validity through evaluation processes that award a privileged status to randomized field experiments or quasi-experimental methods that approximate the randomization 'gold standard." (Picciotto, 2014, p. 32)



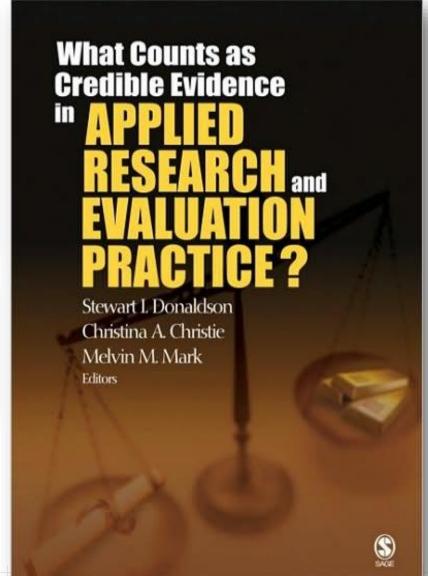






A NONPROFIT, NONPARTISAN ORGANIZATION







- Part of 'an evidence-based global society' (Donaldson, 2009, p. 4) in the era of accountability.
- 'One of the most important and contentious issues challenging applied research and evaluation practice today' (Donaldson, Christie & Mark, 2009, p. vii).
- The RCT has 'essentially zero practical application to the field of human affairs' (Scriven, 2008, p. 12).
- This issue is not a mere academic dispute, and should be treated as one *involving the welfare of very many people*, not just the egos of a few' (Scriven, 2008, p. 24).



WHAT COUNTS AS CREDIBLE EVIDENCE

Smith, G. C., & Pell, J. P. (2003). Parachute use to prevent death and major trauma related to gravitational challenge:

Systematic review of randomised controlled trials. *BMJ: British Medical Journal*, 327(7429), 1459.





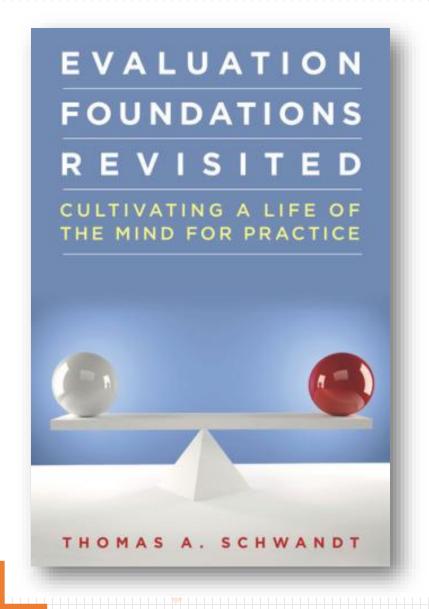
- "The idea that dominates most thinking about knowledge for the professions is that practice is the site where this theoretical knowledge is applied to solutions to problems of instrumental choice ... a matter of applying a toolkit or following a pre-approved set of procedures or practices" (Schwandt, 2015, p. 32)
- However, due to the messiness of "wicked problems," practitioners more often engage in "reflection-in-action, a kind of ongoing experimentation, as a means to finding a viable solution to such problems" leading to "a particular kind of craft knowledge (or the wisdom of practice)" (Schwandt, 2015, p. 32)



Technical rationality: a positivist epistemology of professional knowledge and practice in which "professional activity consists of instrumental problem solving made rigorous by the application of scientific theory and technique" (Schön, 1983, p. 21).

The dominant epistemology of practice, "the view of professional knowledge which has most powerfully shaped both our thinking about the professions and the institutional relations of research, education, and practice" (Schön, 1983, p. 21).





"This aim reflects my longstanding concern that training in technique in evaluation must be wedded to education in both the disposition and the capacity to engage in moral, ethical, and political reflection on the aim of one's professional undertaking" (Schwandt, 2015, p. 9).

"[Evaluators] recognise patterns, perceive and frame situations, draw on intuition, deliberate on available courses of action, empathise, balance conflicting aims, improvise, make judgments and act in ways appropriate to the time and circumstances" (House, 2015)





'Extension workers need to have faith in spiritual values and to recognize the human relationships that contribute to what the ancient Greeks called "the good life." They should believe that in the kind of homes, farms, and industries which are the goals of Extension service "man [sic] cannot live by bread alone;" that it is not enough for people to have food, shelter, and clothing—that they aspire also to find appreciation, respect for individuality and human dignity, affection, ideals, and opportunities. These are the satisfactions that belong to democratic living.'

(Smith, 1949/2013, p. 544)



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TRENDS: DEVELOPMENTS IN DATA & EVIDENCE

- Big data
- Machine learning and artificial intelligence
- Data ethics (e.g., who owns student data?)
- The role of values and valuing



About

REF2021

News

Publications

Guidance

Panels

Submission system

Contact

FAQs

Home / About

About the REF

The REF is the UK's system for assessing the quality of research in UK higher education institutions. It first took place in 2014. The next exercise will be conducted in 2021.

More about the REF

What is the REF?

REF team

REF Blogs

Guide for research users

Background

Background documents

Key decisions

REF 2014

Policies

Interdisciplinary research

Equality and diversity

Institutional-Level **Environment Pilot**

Governance

REF Governance

REF Steering Group

REF Data Collection

WHAT IS THE COUNTERFACTUAL?

- Would the agricultural industry exist without it?
- Would our institutions in rural and urban areas be as strong without it?
- Would the population of Rural areas be as high without it?

Inputs	Activities	Outputs	Outcomes	Impact
· Agency 229 dollars, faculty and staff, research and Extension locations across Virginia	 Needs-based applied research Innovative research Grant-sponsored research Technical assistance from agents Commodity group and industry group advising 	Research results such as reports Presence in 107 rural and urban communities throughout the commonwealth Strong relationships with producers and partnerships with private industry More external funding leveraged to support research and Extension	 Environmental benefits Perception of Virginia as a grower of premier products with a strong workforce Better management practices More money staying local Knowledge about how to live a healthy life 	 Higher returns and profits Virginia jobs Investment in Virginia companies Money in the pockets of Virginians Knowledgeable, healthy citizens

Resources, when applied to Agency 229 research and extension programs bring investment into Virginia and create jobs.

IMPACT TYPES (WITHIN MODEL)

- HIGHER RETURNS AND PROFITS
- MONEY IN THE POCKET OF VIRGINIANS
- Virginia Jobs
- KNOWLEDGEABLE, HEALTHY CITIZENS

Virginia Tech wheat and barley research programs reduce costs for producers by \$2.4 million annually

Two peanut varieties developed by Agency 229 brought farmers more than \$16 million since their introduction

Management training brings an additional \$2.2 million to corn producers annually

Soybean producers gain an additional \$1.3 million in income annually due to Agency 229 programs.



In 2015, VQA-certified producers received an extra \$1.5 million. leading to a statewide economic impact of \$2.5 million. That's money directly into the pockets of Virginians that would not exist without Agency 229.

Safety validation of a product for Tyson Foods led to a

\$36 million 200 job expansion

of Monagram Foods in Martinsville.

WHOLE STORY?

- BENEFITS BEYOND THE I-O ECONOMIC MODEL
- TACIT ASSUMPTIONS ABOUT THE LAND-GRANT AND EXTENSION
- ROLE OF VALUES AND VALUING

THANK YOU

THOMAS ARCHIBALD // tgarch@vt.edu // @tgarchibald Agricultural, Leadership, and Community Education

special thanks to Courtney Vengrin and Elli Travis for their contributions to this presentation



