Evaluation? Why is this a thing?

EDP 618 Week 1

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First Things First



Ask questions or comment as you wish!

Things to think about

MIXING RESEARCH METHODS

- Who evaluates?
- What is evaluation?
- Where is evaluation needed?
- When is it a good time to evaluate?
- Why do you have to know how to evaluate?
- Your reputation

Who evaluates?



Traits



- Able to ask questions to anyone as needed
- Can live with the fact that they are likely the most hated and/or feared person in a room or study
- Capacity to separate personal biases over and over
- Displays the capacity to pass judgement based on grounded scientific outcomes
- Interest in studying programs regardless of content
- Loves to play with data
- Prepared to be political when necessary
- Skilled in anticipating all reasonable scenarios
- Thrives in uncertainty
- Understand, accept, and embrace the jack of all trades but a master of none (or maybe a few) life

What is evaluation?



Comparison of Purposes



Evaluation is not the same as

- Assessment. Snapshot of what is happening in the moment
- Research. Seeking further knowledge

Evaluation

- addresses needs for improvement or judgement
- uses both assessment and research

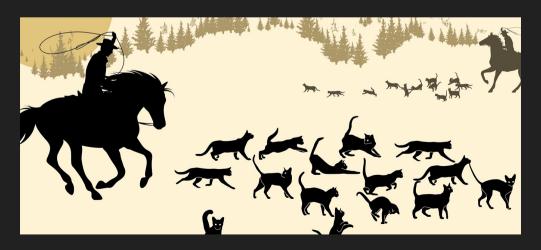
Public Perception of Evaluation



What people think



What its really like



General Types of Evaluations



Formal

Making decisions based on objective criteria

Used in studies

Informal

Making decisions based on subjective criteria

Used everyday by you

Definition



Formal Informal

Evaluation is the process of determining the

quality (merit), *value (worth)*, or

importance (significance)

of something, or the product of that process

Evaluation answers

Does it work?

Why does it work?

Note

How does it work? is a research question

Purposes of Evaluations



Formative

Evaluation conducted with the intent to improve

Summative

Evaluation conducted for decision-making or accountability (aka to pass judgement)

Broad Modes of Evaluation



Goal Free

Evaluation conducted by avoiding learning the stated purpose/goals/intended achievements of the program prior to or during the evaluation

Goal Based

Evaluation conducted learning the stated purpose/goals/intended achievements of the program prior to or during the evaluation

Why is evaluation important?



Accountability & efficiency

Responsibility for justification of expenditures, decisions, or the results of actions

Improvement

Improving the efficiency and effectiveness of services, the quality of products, the performance of personnel, etc.

Judgement

Determining the need or necessity of services, products, personnel, etc.

Resource allocation

Allotment, distribution, and uses of existing and/or scarce resources under consideration of competing demands

Examples



- Rash of recalls for FDA approved drugs/pharmaceuticals
- Contaminants in pet foods
- Dangerous levels of hazardous materials (e.g., lead) in consumer products (e.g., children's toys)
- Large-scale funding and implementation of educational and human and social service programs that simply do not work (e.g., NCLB, DARE, abstinence only education, etc.)

Where is evaluation needed?

MIXING RESEARCH METHODS

- Where there's a program, especially those that are ongoing
- In practice, anywhere money is involved

Example: Tuskegee Syphilis Experiment



- Setting. Clinical Study conducted between 1932 and 1972 by the U.S. Public Health Service (which turned into the CDC beginning in 1952)
- Sampling Frame. Studied the natural progression of untreated syphilis in rural African-American men in Alabama under the guise of receiving free health care from the United States government. Investigators enrolled in the study a total of 600 impoverished, African American sharecroppers from Macon County, Alabama
- Incentives. Medical exams, rides to and from the clinics, meals on examination days, free treatment for minor ailments and guarantees that provisions would be made after their deaths in terms of burial stipends paid to their survivors
- Study Design.
 - Divided sample into control and experimental groups
 - 399 already had syphilis
 - 201 did not
 - Provided no effective care as the men died, went blind or insane, or experienced other severe health problems due to their untreated syphilis

- Population Outcomes.
 - 28 participants had perished from syphilis
 - 100 others passed away from various related complications
 - o 40 spouses had been diagnosed with syphilis and then passed it to 19 children at birth
- Ethical standards. Violation of guidelines established after the 1940s found that researchers failed to treat patients appropriately after the 1947 standardization of penicillin as an effective cure for the disease they were studying
- Long Term Effects.
 - As a result of this and other ethical violations
 - many African Americans developed a lingering, deep mistrust of public health officials and vaccines
 - o in Nov 2021, The Pew Research Center found that 42% of African Americans would take the COVID-19 vaccine the lowest among any other racial and ethnic group



When is it a good time to evaluate?



Proactive Evaluations

- Administered at the onset of a program or cycle
- Formative by design
- Implemented to improve within a certain timeframe
- Provides real-time information about a program
- Rarely implemented unless required

Reactive Evaluations

- Administered at the end of a program or cycle
 - Summative by design
 - Implemented to construct elements for reporting purposes
 - Provides post-hoc about a program
 - Commonly implemented

Why do you have to know how to evaluate?



Accountability!

Should evaluators provide recommendations?



Questions Answer	ers
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How long is the evaluation?

Most evaluations are two weeks to one month

Do you enough about any program to give advice? Evaluations are generally *external* meaning an evaluator comes

in to an unfamiliar setting and people to conduct a study

Is it an expectation of the job?

If this is not clarified in the initial stages, then not providing

them would be an incomplete study OR may be taken as an

overreach

What are the practical implication?

To determine if an evaluator should serve as an *agent of change*

Real World Evaluations



Considerations



Benefit. Is the study actually beneficial or just an interest?

Drive. Are you and possibly a team motivated enough to accomplish this task?

Outcomes. Are the anticipated or possible results worth your time and effort?

Resources. Do you have enough capital to get the job done?

Sample. Can you reasonably get enough people or units to perform a study?

Workload. Is the work going to hinder your well being or hinder your resources?

Scope



Frame. What would be your population and sample? Where would they be from

Size. How large of a study could you reasonably take on?

Questions. What questions would you ask?

Collection. What type of data would be collected and how would you go about it?

Methods. What study methodologies and/or approaches

Timeframe. What is your anticipated timeframe?

Logic Models



Description



A *logic model* is a graphic representation (road map, flow chart, insert buzz word here) and is a very early step in the evaluation planning process where you can show

- the shared relationships among the program's
 - resources
 - activities
 - outputs
 - outcomes
 - impact/effect (if applicable)

- the association between the program's
 - activities
 - intended effects

Practical Purpose

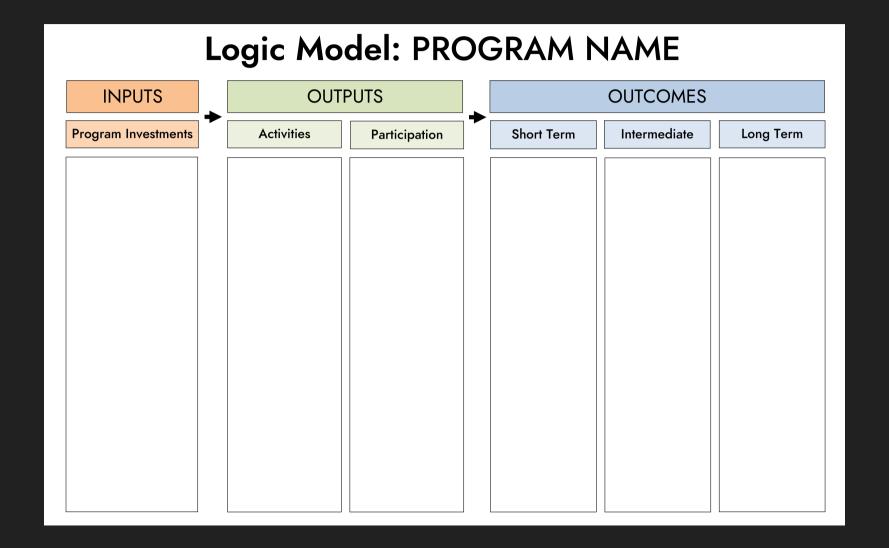


Theory-Driven Evaluation

- Step 1. Find out what a program looks like typically from a sponsor's or primary stakeholder's point of view
- Step 2. Find out what it really looks like through a study
- Step 3. Compare the two and report the results

Picture!





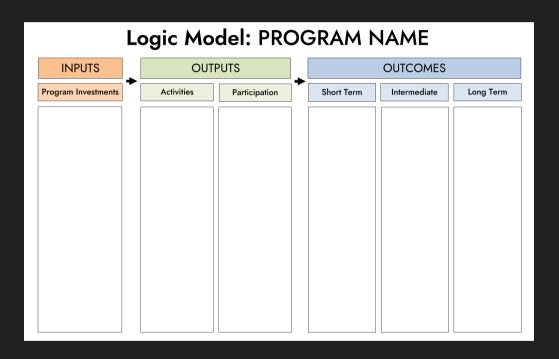
Meanings



Terminology

- Inputs
 - Investments (what is put in)
- Outputs
 - Activities (the actual tasks performed)
 - Participation (who is served; customers & stakeholders)
 - Engagement (how those served engage with the activities)
- Outcomes
 - Short Term (immediate, measurable e.g. learning: awareness, knowledge, skills, motivations)
 - Medium Term (by the conclusion of the program, measurable e.g. action: behavior, practice, decisions, policies)
 - Long Term (distant, immeasurable e.g. consequences: social, economic, environmental etc.)





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Example



INPUTS	OUTPUTS			OUTCOMES	
Program Investments	Activities	Participation	Short Term	Intermediate	Long Term
REDACTED University REDACTED University University of REDACTED First, Second- and Third-year Engineering Students within target population Faculty/Staff within target population REDACTED project Researchers Evaluators Qualtrics Interviews Institutional data Social Cognitive Career	Transfer successful activities from REDACTED University to REDACTED University to REDACTED University and University of REDACTED Develop, pilot, and transfer new activities to extend the diversity and inclusion training into second- and third-year engineering curricula Longitudinal Assessment of Impact of Diversity and Inclusion Curricula on Students	Faculty/Staff involved in the transfer of activities. Freshman, Sophomore and Junior level students	Course changes and TA trainings Transfer of first-year activities	Changes in student appreciation for diversity/inclusive behaviors over several semesters	Inclusive engineering identities

Task: Evaluation Proposal



- 1. Create an Evaluation Team
 - a. Work in groups of 2 or 3
 - b. Pick a program everyone would consider evaluating (real or imaginary)
- 2. Establish the Process
 - a. Make a plan
 - Address the Considerations
 - Figure out Scope of evaluation
 - Construct a Logic Model
 - Fill out *Planning a Program Evaluation* as you go along
 - b. Decide whether to provide recommendations

1. Present the Plan

- a. Describe the program
- b. Establish a need for the evaluation
- c. Display and explain your logic model for show and tell
- d. Anticipate outcomes and limitations¹



 $^{^{\}rm 1}$ What you expect to see as a result of the study $\it and \, what \, barriers \, that \, may \, come \, up$

That's it!

Any questions?

