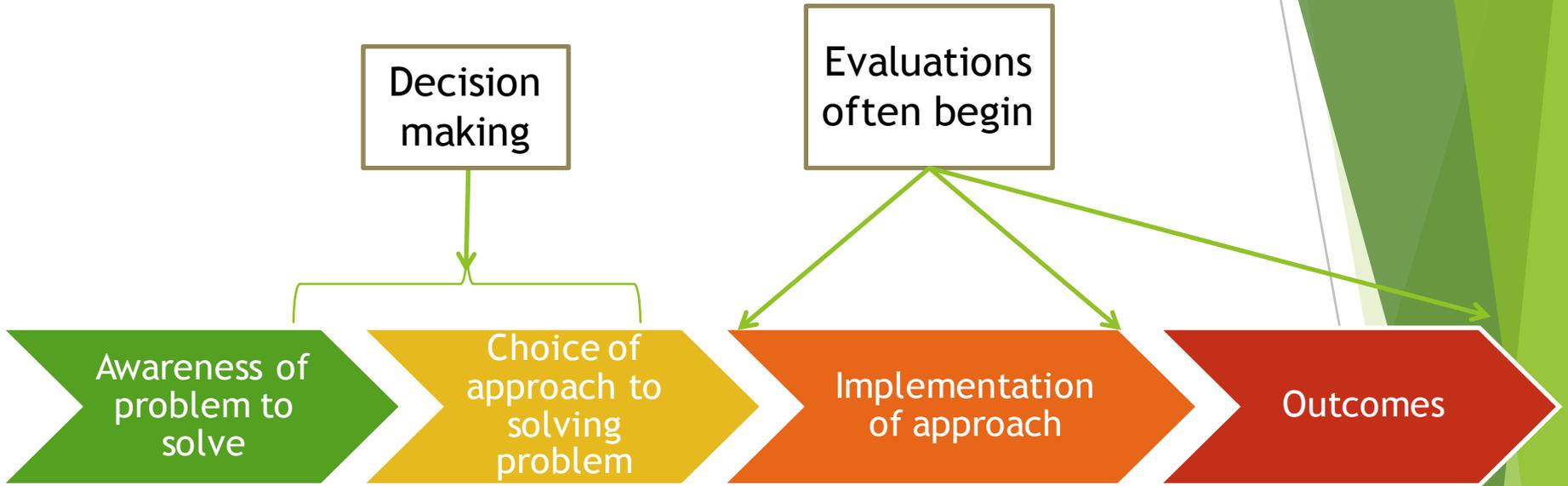


Got Data? Interrogating “Evidence-Based” Decision-Making

Sheila A. Arens, McREL International
Andrea D. Beesley, IMPAQ International
October 27, 2016
Evaluation 2016
Atlanta, GA

Why should we care about program decision making?

- ▶ Multiple levels of decision making should interest evaluators
 - ▶ Decisions made between becoming aware of a problem and choosing a solution
 - ▶ Decisions made during the determination of outcomes or indicators of success
 - ▶ Decisions made during program implementation



Setting the context: Why should evaluators care about program decision making?

- ▶ In education, federal pressure to use evidence to drive decisions:
 - ▶ ESSA Non-Regulatory Guidance - “evidence” appears 115 times
 - ▶ *Four evidence levels*
 - ▶ *Steps for enhancing effectiveness of investments include (1) Identifying local needs; (2) selecting relevant, evidence-based interventions; (3) planning for implementation; (4) implementation; and (5) examine and reflect*

Setting the context: Why should evaluators care about program decision making?

- ▶ Analogues in nursing and healthcare: reduce variability by increasing evidence-based practice
- ▶ Nursing Guidelines in the Star Model
 - ▶ *(1) discovery; (2) evidence summary; (3) translation into guidelines; (4) integration into practice; and (5) evaluation of process and outcome*

Why should evaluators care about program decision making?

- ▶ Much decision-making is invisible to evaluators
- ▶ Could earlier access to decision-makers or increased knowledge (even retrospective) of their decisions:
 - ▶ ...improve evaluation practice?
 - ▶ ...enhance evaluation use?

Why should evaluators care about program decision making?

- ▶ Using evidence for decision-making can be difficult and is rarely straightforward:
 - ▶ Educators struggle to articulate the rationale behind their decisions
 - ▶ Difference between data-driven decisions and decisions grounded in “data literacy” - often unsure how to include multiple sources of evidence in decision-making

On what grounds are decisions made?

- ▶ Characteristics of the setting
- ▶ Physical features and resources available
- ▶ Climate
- ▶ Interpersonal dynamics
- ▶ Political context

Chars of the setting
Physical features &
available resources
Climate
Interpersonal dynamics
Political context

Decision
making

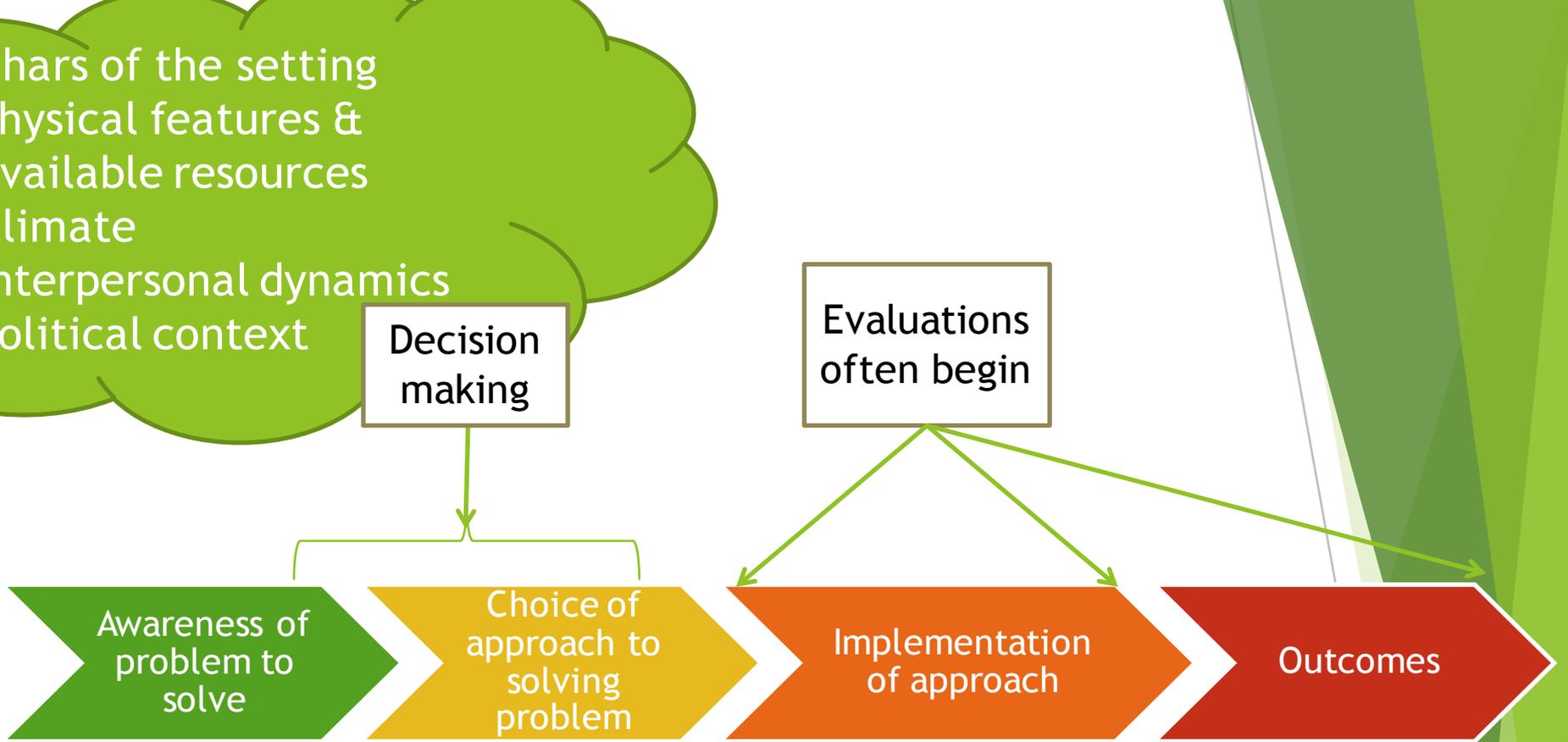
Evaluations
often begin

Awareness of
problem to
solve

Choice of
approach to
solving
problem

Implementation
of approach

Outcomes



Decision-Making Frameworks

- ▶ Many factors play into decisions
- ▶ Are there ways to help practitioners improve or refine their decision-making?
 - ▶ Rules of thumb (collect needs data, don't jump to conclusions)
 - ▶ Improvement science approach
- ▶ Variety of descriptive frameworks in which decision-making = individual(s) choosing between n alternatives
 - ▶ Examining predominant types of decision-making can be informative to evaluators
 - ▶ Logical empirical
 - ▶ Normative affective

Decision-Making Frameworks

Type	Questions asked	Type(s) of rationality	Process
Logical-empirical	What's the most efficient (effective) means to an end?	Reason Analytical rationality Instrumental rationality	(1) Identify the problem; (2) generate alt solutions; (3) select solution that is most logical that has desired effect; (4) implement and evaluate solution Follow rules or satisfice
Normative-affective	What is the right choice? Where are we going? Is this development desirable?	Prudence and practical wisdom – goal is to make the “right” choice	Use experience to recognize patterns: “feel for the game” or habitus (Bourdieu); determine course of action they think will work (intuitive)

Illustrative Examples

- ▶ Surveys of education decision-makers
- ▶ Semi-structured conversations: school district leader and school principal

Collecting information about client decision making—surveys and interviews

- ▶ What is one “problem of practice” you faced this past year?
- ▶ How did you go about identifying or defining that problem of practice?
- ▶ How did you determine or decide on a course of action to confront that problem? What factors influenced your decision(s)? Who did you consult?

Collecting information about client decision making—surveys and interviews

- ▶ How did goals play into the decision about a course of action?
- ▶ How did values play into the decision about a course of action?

Collecting information about client decision making—surveys and interviews

- ▶ How did you determine the most important markers (or criteria) of success relative to confronting or addressing the problem of practice? How were these criteria communicated?
- ▶ If you learned that your decision is not leading to the desired results, did you decide on a different course of action? If so, what other factors did you consider? Who else did you consult?

Illustrative Example - Education Decision-Makers (Surveys)

- ▶ In some cases, respondents noted that decision-making adhered to a formal process wherein particular data points were reviewed (pre- data, research evidence, perspectives of identified stakeholders)
- ▶ In other cases, decision-making processes for a particular problem of practice varied, depending on the point of entry

Illustrative Example - Education Decision-Makers (Surveys)

- ▶ In most cases, survey respondents described decision-making as distributed, with key stakeholders invited to provide input
 - ▶ Multiple meetings with different stakeholders
 - ▶ Key questions and possible solutions provided for feedback
 - ▶ Observation and listening sessions
 - ▶ Sometimes, not often, program recipients consulted (students, parents)

Illustrative Example - Education Decision-Makers (Surveys)

- ▶ Largely unquestioned, goals and values that were referenced in the responses existed as part of the systems or the interventions being implemented
 - ▶ Problematic for some respondents—intervention values did not correspond to the values of the school (principal's decision about the program guided by his/her normative commitments to students)

Illustrative Example - Education Decision-Makers (Surveys)

- ▶ Criteria of success defined in terms of whether addressing the initial problem of practice (educator compliance, student attendance)
- ▶ Recognition of the importance of tracking implementation to determine alternative courses of action; determining next steps can be facilitated by external agent

Illustrative Example - School Principal (Interview)

- ▶ Data highlighted need to rethink school calendar (quarter, trimester, semester)
- ▶ Distributed decision making on small scale
- ▶ Decision based on “trimester break is particularly difficult for them; they face difficult scenarios at home” and semesters providing a “safety net”

Illustrative Example - School District Leader (Interview)

- ▶ Decision-making focused on internal politics and adhering to process
 - ▶ Problem identification highly formalized process in designated spaces
 - ▶ Decisions grounded in bureaucratic or political bargaining
- ▶ District leadership identifies problems
 - ▶ Using a prescribed protocol in scheduled meetings
 - ▶ Through business-style continuous improvement teams
- ▶ Decisions primarily involve consensus among senior leadership
- ▶ Indicators of success based on formal charter

Preliminary Findings

- ▶ Decision-making falls along a continuum from logical-empirical to normative-affective
- ▶ Some aspects of the decision-making present as logical empirical whereas others are clearly normative affective ... these can be combined for a single decision
- ▶ Decision-makers all used some form of data to identify problems
- ▶ Goals & values largely unquestioned ... evaluators can facilitate conversation about alignment with needs

Preliminary Findings

- ▶ Eliciting information on the pressures and concerns of decision-makers can inform next steps
 - ▶ Individuals in more political positions tend to rely on rule-bound decision-making—less likely to describe influence of personal commitments
 - ▶ Individuals closer to those impacted by decisions relied more on normative commitments

What can we do with this information?

- ▶ Condition client's decision-making?
 - ▶ Are there other ways to think about the problem?
 - ▶ Are there other voices that should have been included?
 - ▶ How to balance accountability requirements with serving others' needs?
 - ▶ How well do the problems of practice align with selected programs and anticipated outcomes?
 - ▶ Are program selection decisions justified? Will they meet federal or other requirements?

What can we do with this information?

- ▶ Instrumental uses
 - ▶ Examine alignment among problems of practice, selected programs, and anticipated outcomes
 - ▶ Frame or reframe evaluation plans
 - ▶ Determine how to share findings with clients and program beneficiaries
 - ▶ Evaluation practice may improve—better knowledge of the program and politics = more responsive and useful
- ▶ Conceptual use
 - ▶ Improve clients' evaluation literacy