Evidence-Based Program Theory:
Necessary for High-Quality Programs & Assessment

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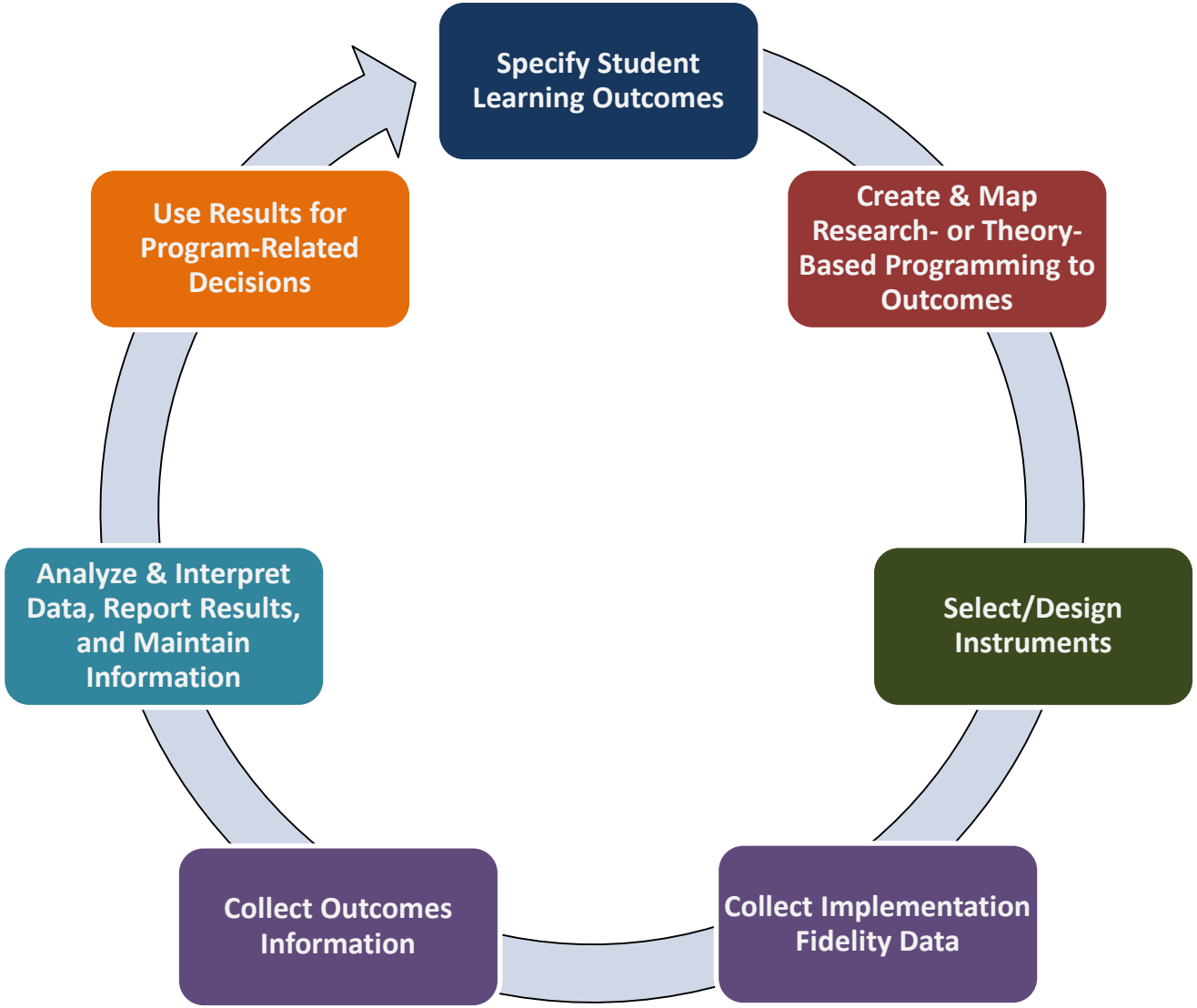
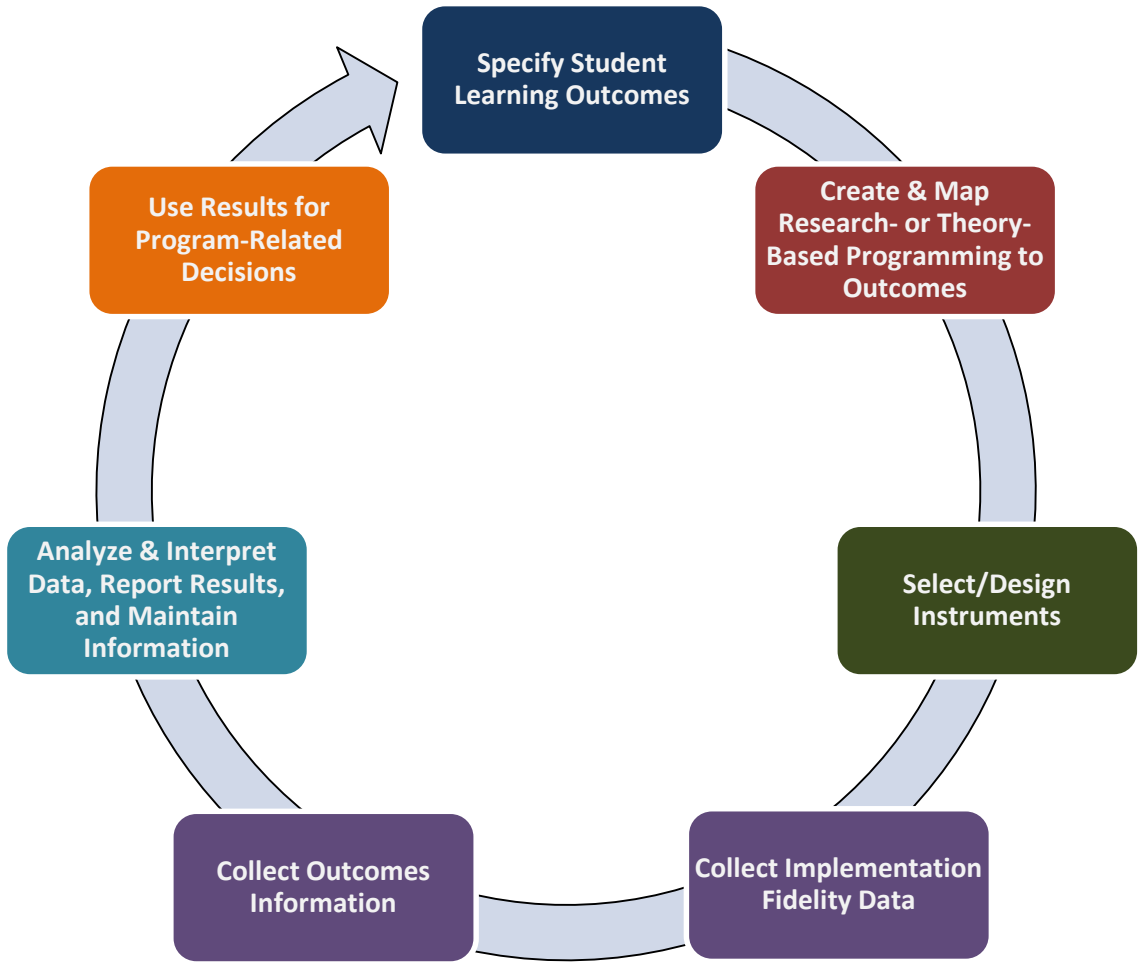
Outcomes Assessment Cycle



Need for Evidence-Based Program Theory



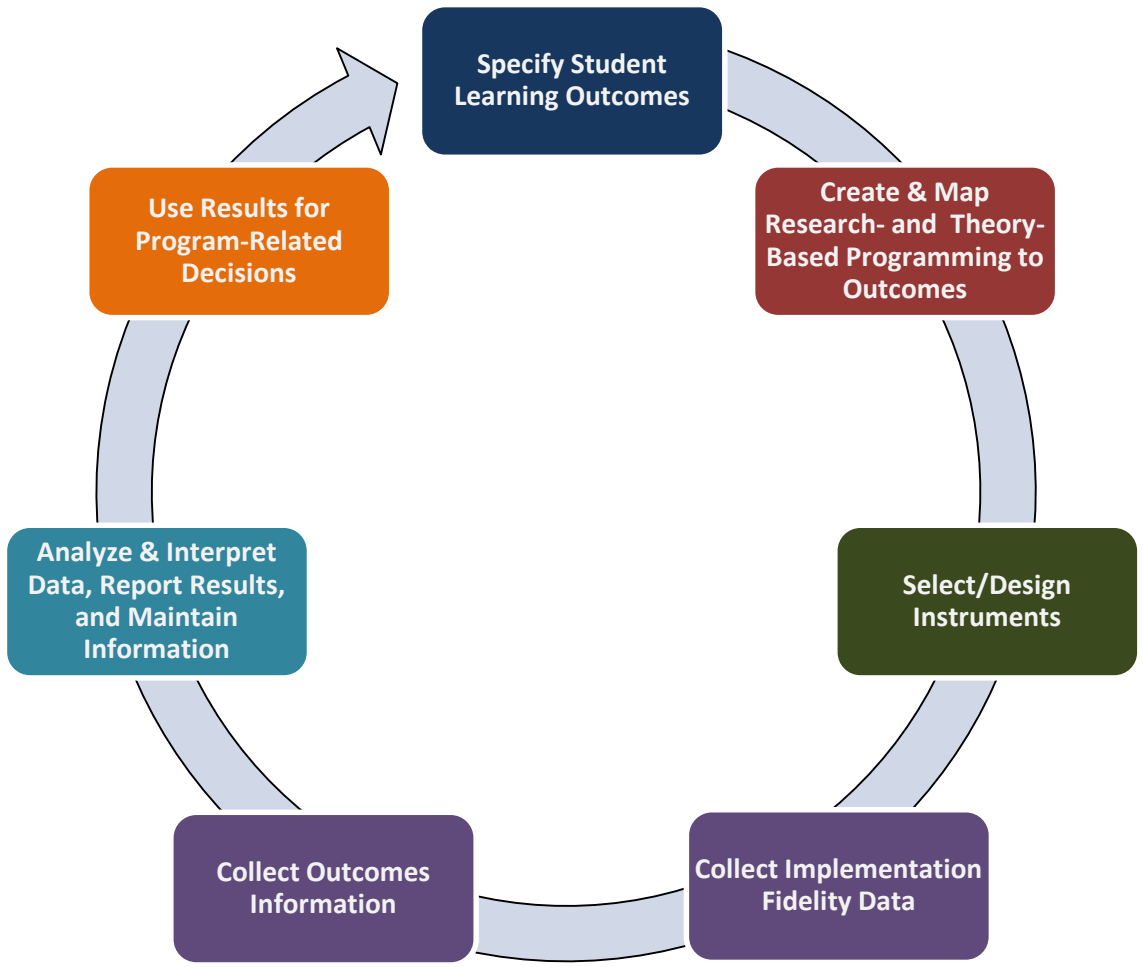
When developing a program, much attention ***should be*** given to:

- Designing theory-based or evidence-informed programming (e.g., curriculum, activities, strategies)
- Training those who implement program (e.g., practitioners, facilitators, instructors)

WHY? Because every time you implement a program, big or small, you are betting our students' money & time that it will "work"

- Think about a program ***you*** have facilitated.
  Would you bet your car that it "works"?
- Theory & research increase the odds that programs will be effective

Need for Evidence-Based Program Theory



We often find programming can be articulated & for some, programming is also mapped to intended outcomes, **but programming has no justification**

Professionals can't answer basic question:

WHY should doing A, B, & C

result in the intended outcome?

Program theory: consists of an *explicit theory or model of how the program causes the intended outcomes* (Rogers et al., 2000).

How does PT relate to outcomes assessment?
Assessment of programming is guided by PT.

Lack of PT Impacts Use of Assessment Results

- Bresciani (2010): purpose of her study was to explore reasons that institutions committed to outcomes assessment were finding SA professionals struggling with it
- Core category emerging: **Lack of Understanding of Student Learning & Development Theories that Inform Practice**

Appears to be "..a lack of intentionality in the purposeful planning of activities, workshops, and curriculum that reflect student learning and development theories."

"…professionals who understand the nature of their profession (e.g., the theories that underlie their work) were **able to more effectively engage in outcomes-based assessment and identify how their programs contribute to student learning and development**. Without an understanding of theories, others were having difficulty evaluating their programs, even though they had a general understanding of how to implement outcomes-based assessment."

This finding supported ***previous*** calls to base programming on research & theory……

- Without engaging in the literature, SA practice can become “simply random activity, bound by tradition and convention, maybe helpful, maybe not, probably suiting some students, almost certainly leaving others out” (p. 305).
- “Any student affairs professional not reading the literature, not becoming knowledgeable of research and theory, is not acting ethically. Students have a right to expect that student affairs professionals are knowledgeable of appropriate theories, current research, and proven best pratices” (p. 311).

Carpenter, S. (2001). Student affairs scholarship (re?)considered: Toward a scholarship of practice. *Journal of College Student Development*, 42, 301–318.

- “We need to argue for moral, sane, and appropriately complex assessment, research, and evaluation. We can argue the case most readily and convincingly if we are actively engaged in such and are using it to inform practice every day.” (p. 190).

Jablonski, M. A., Mena, S. B., Manning, K., Carpenter, S., & Siko, K. L. (2006). Scholarship in student affairs revisited: The summit on scholarship, March 2006. *NASPA Journal, 43*, 182–200.

- “senior administrators could help to make sure that decisions regarding policy and practice are not made, at any level, without a review of the literature related to the decision” (p. 391)
- “senior administrators should at least ensure that their professionals engage in reading the literature and discussing its relevance to current practice” (p. 391)

Sriram, R. & Oster, M. (2012). Reclaiming the “scholar" in scholar-practitioner. *Journal of Student Affairs Research and Practice*, *49*, 377-396.

Stakeholders (e.g., parents, students) are entitled to know if educational programming was intentionally created to achieve desired outcomes. Clear intentions are particularly important for vaguely described student affairs and co-curricular programs.

> "While they [students, faculty, parents, politicians] understand that students do change and grow emotionally and socially during college, they do not attribute the change to anything other than natural maturation and some vague notion about the college experience. The idea that students might be learning outside of class is frequently regarded with skepticism and is even a bit unsettling—who is directing this surreptitious learning and what are their goals?" (Carpenter, 2012, p., vii)

Program theory allows stakeholders to understand **what** programming is implemented and **why**, making obvious the links between programming and intended outcomes. By making the rationale of programming explicit, it can be **interrogated**, **assessed**, and **improved**.

Finney, S.J., Wells, J.B., & Henning, G.W. (2021). *The need for program theory and implementation fidelity in assessment practice and standards*. (Occasional Paper No. 51). Urbana, IL: University of Illinois and Indiana University, National Institute for Learning Outcomes Assessment.

You Need to be Able to Answer this Fundamental Question:

Why **should** this programming result in these outcomes?

OR

What is the **LOGIC** of the program

& is it supported by THEORY or RESEARCH?

- It is very difficult, if not impossible, to fix something when it breaks if you don't know how it was supposed to function in the first place.

Finney, S.J. & Horst, S.J. (2019). Standards, standards, standards: Mapping professional standards for outcomes assessment to assessment practice. *Journal of Student Affairs Research and Practice, 56,* 310-325.

3-Step Process to Articulate Logic of Programming

Step 1: State Appropriate/Feasible Distal Outcome

- What is the distal outcome?
- What do you ultimately hope to achieve?

Step 2: ??

Step 3: ??

Pope, A., Finney, S.J., & Bare, A. (2019). The essential role of program theory: Fostering theory-driven practice and high-quality outcomes assessment in student affairs. *Research & Practice in Assessment, 14*, 5–17.

Step 1: State the Distal Outcome

Distal Outcome

How Do You Choose the Distal Outcome?

CAS Standards Outcomes

- Exhibits behaviors of a leader (Leadership)
- Engages in behaviors that promote health (Health/Wellness)
- Seeks involvement with people different from self (Appreciation of Differences, Diversity)

Focus in Division or at the University

- Civically Engaged
- Demonstrates a Global Perspective
- Ethical Behavior

Questions to ask yourself: Is outcome **malleable**? Is it **feasible**? It is **valued** by JMU?

3-Step Process to Articulate Logic of Programming

Step 1: State Appropriate/Feasible Distal Outcome

- What is the distal outcome?
- What do you ultimately hope to achieve?

Step 2: Specify Intermediate Outcomes

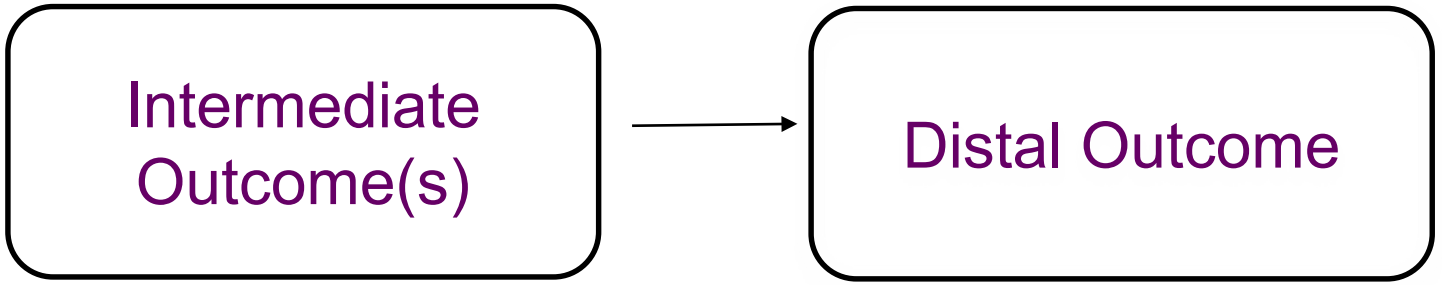
Explain their role in specifying program theory.

- Specify attitudes, skills, & behaviors that ***influence*** the distal outcome
- What is the *etiology* (cause, reason, origin) of the distal problem, behavior, skill?

Step 3: ??

Pope, A., Finney, S.J., & Bare, A. (2019). The essential role of program theory: Fostering theory-driven practice and high-quality outcomes assessment in student affairs. *Research & Practice in Assessment, 14*, 5–17.

Step 2. Specify *Intermediate* Student Learning Outcomes



How Do You Specify the Intermediate Outcomes?

Ask yourself: What knowledge, attitudes, skills, and/or behaviors will the program need to cultivate to achieve the distal outcome?

Then Go Find the Answers--Read the Research/Find the Evidence!

- Exhibits behaviors of a leader (Leadership)
  - Research has shown students need to know/think/do X to exhibit leadership behaviors
- Engages in behaviors that promote health (Health/Wellness)
  - Research has shown students need to know/think/do X to engage in health behaviors
- Seeks involvement with people different from self (Appreciation of Differences, Diversity)
  - Research has shown students need to know/think/do X to engage with people different from them

3-Step Process to Articulate Logic of Programming

Step 1: State Appropriate/Feasible Distal Outcome

- What is the distal outcome?
- What do you ultimately hope to achieve?

Step 2: Specify Intermediate (More Proximal) Outcomes

- How do you achieve your distal outcome?
  - Specify the attitudes, skills, & behaviors that influence the distal outcome
- What is the etiology (cause, reason, origin) of the distal problem, behavior, skills?

Step 3: Develop Program Components

- Knowing the intermediate outcomes helps you develop **theory- or research-based program components** to help achieve *the intermediate outcomes*, leading to the achievement of *your distal outcome*

Pope, A., Finney, S.J., & Bare, A. (2019). The essential role of program theory: Fostering theory-driven practice and high-quality outcomes assessment in student affairs. *Research & Practice in Assessment, 14*, 5–17.

Relevant Knowledge Bases to Create Programming

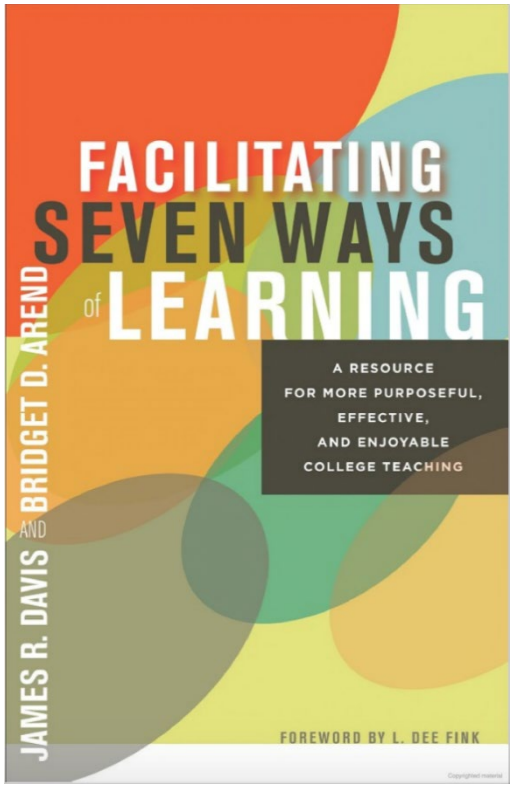
Foundational student development theories (e.g., Chickering's Theory of Identity Development) are better for ***describing*** where students are, **not** ***prescribing*** how to move from one developmental stage to next via programming

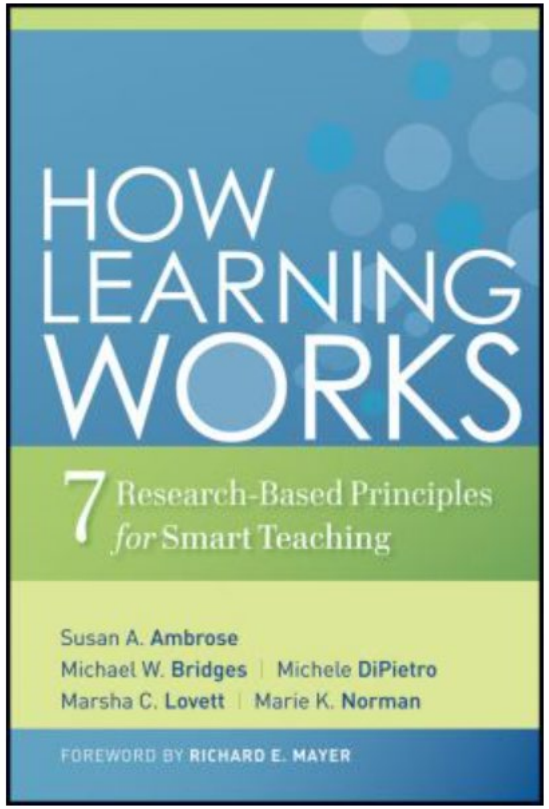
> "…many student affairs educators have inappropriately elevated student development theory to something resembling icon status. If this has happened or is happening in the student affairs profession, the act deserves to be challenged. No single resource stands alone as the foundation for professional practices. Student development theory, for example, is one of several knowledge bases that can inform student affairs practice."
> -Evans, Forney, Guido, Patton, & Renn, 2010

Important to be familiar with research related to *your specific program/outcome area* (e.g., civic engagement, student leadership, inter-cultural competence, alcohol interventions, career development)

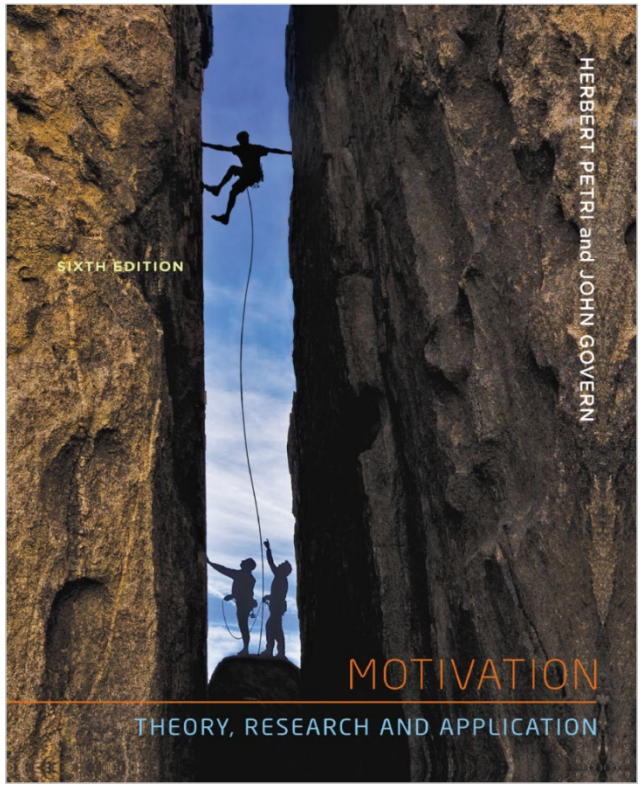
Relevant Knowledge Bases to Create Programming

Cognition & Learning

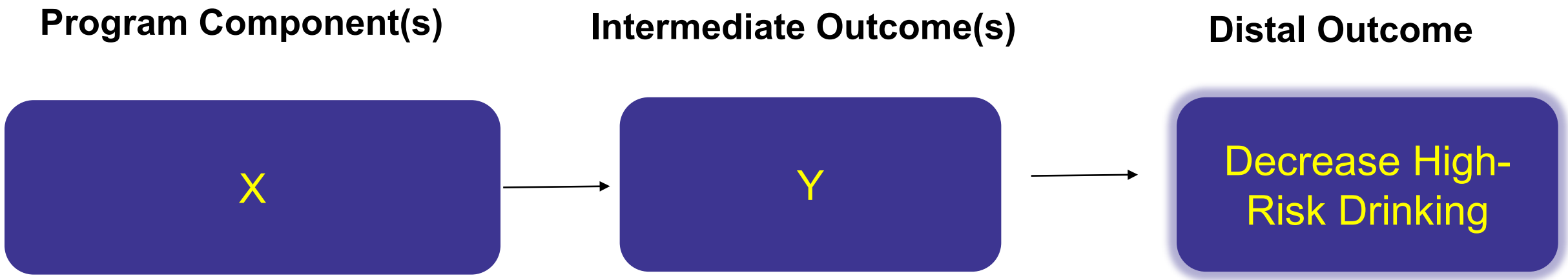




Motivation Theory & Research



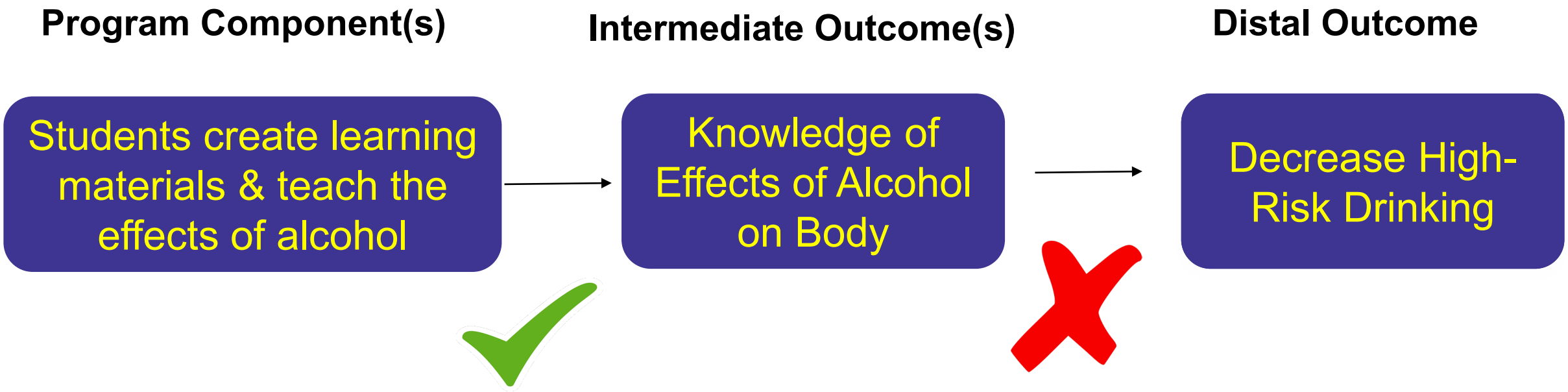
Drinking Example: State Feasible Distal Outcome



Abstinence is *not* a feasible outcome for college students.

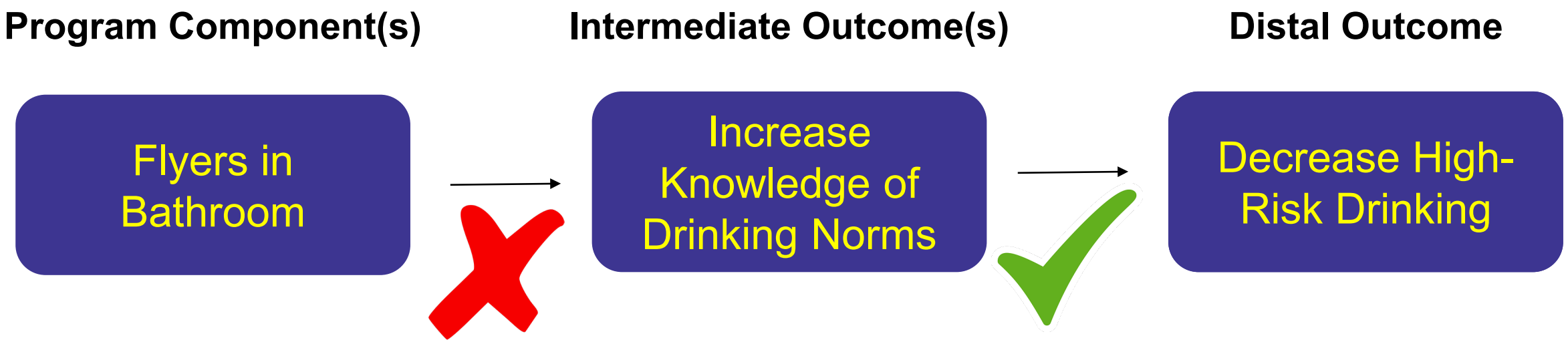
Marlatt, G. A., & Witkiewitz, K. (2002). Harm reduction approaches to alcohol use: Health promotion, prevention, and treatment. *Addictive behaviors*, *27*, 867-886.

Example 1: Problematic Intermediate SLOs



Halpern, D. F., & Hakel, M. D. (2003). Applying the science of learning to the university and beyond: Teaching for long-term retention and transfer. *Change: The Magazine of Higher Learning, 35*, 36-41.

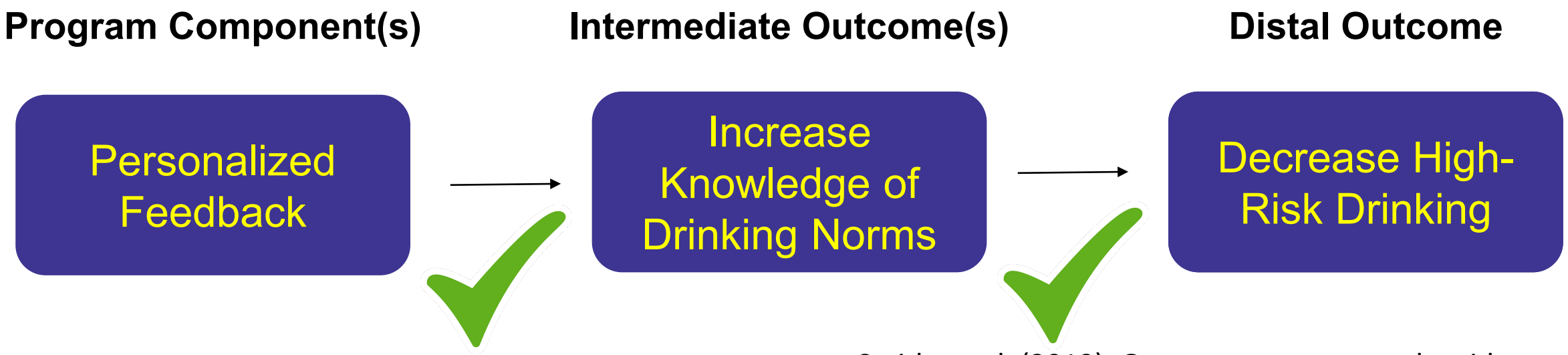
Example 2: Ineffective Programming



VCU researchers found students' beliefs about how much students drink is one of most important predictors of whether their alcohol use will increase—more important than genetics.

Smith, et al. (2019). Genes, roommates and residence halls: A multidimensional study of the role of peer drinking on college students' alcohol use. *Alcoholism: Clinical and Experimental Research*, 43, 1254-1262.

Example 3: Effective Program & Appropriate Intermediate Outcome



Walters, S. T., Bennett, M. E., & Noto, J. V. (2000). Drinking on campus: What do we know about reducing alcohol use among college students? *Journal of Substance Abuse Treatment*, *19*(3), 223-228.

Smith, et al. (2019). Genes, roommates and residence halls: A multidimensional study of the role of peer drinking on college students' alcohol use. *Alcoholism: Clinical and Experimental Research*, 43, 1254-1262.

What about Equity?

Where does that fit into this Program Theory process?

3-Step Process to Articulate Program Theory

Step 1: State Malleable & Feasible Distal Outcome

- What problem are you trying to solve?
- What do you ultimately hope to achieve?
- Is outcome malleable & feasible for *all* student populations or just some?

Step 2: Specify Intermediate (More Proximal) Outcomes

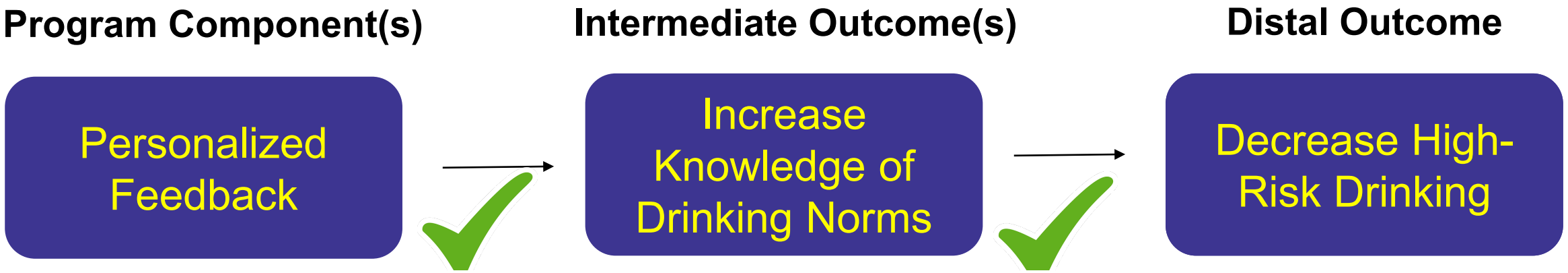
- What is the etiology (cause, origin) of the distal problem, behavior, skills?
- What attitudes, skills, & behaviors influence the distal outcome?
- How does this etiology *differ* across *different* student populations?

Step 3: Develop Program Components

- Knowing the intermediate outcomes helps identify/develop theory- or research-based programming to help achieve *the intermediate outcomes*, leading to the achievement of *your distal outcome*
- Are there approaches to programming that recognize *needs of student populations*?

Is the impact of Personalized Feedback on Knowledge of Drinking Norms found for *all* student populations or is it effective only for non-first-gen students?

Is the impact of Knowledge of Drinking Norms on High-Risk Drinking found for *all* student populations or is this relevant only for white, male students?



Does research & theory suggest programming will have *differential effectiveness* across student populations?

- If so, we should acknowledge & plan for differential effects.
- Or indicate we don't know & need to examine with our data.
- **Example of *Equity-Minded work***

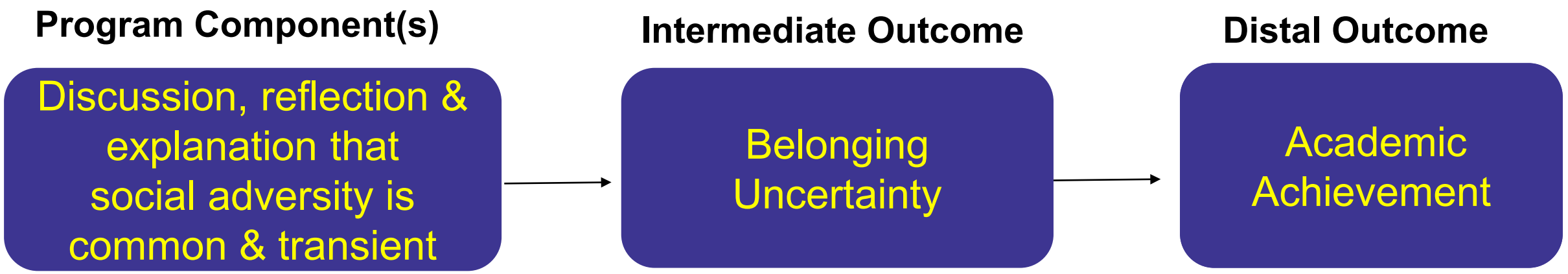
Going *Beyond* Equity-Minded via Program Theory

- **Equity-Minded**: Ensuring steps in the program development & assessment process are implemented in a fair, unbiased way that doesn't harm minoritized students
  - Thus, when designing & assessing programming, you need to acknowledge possible inequities & how they may impact your programming and its assessment
- **Equity-Centered**: Use program development & assessment process with explicit *purpose* of advancing equity. ***How?*** Steps in program development process & assessment cycle are used to further expose or better understand known inequities

Let's see an example where the **purpose** is to address a *known* inequity

- Let's **use** the program development & assessment process to identify an effective intervention that lessen inequalities in achievement
- Goes beyond equity-mindness, which is being *aware* that inequitable systems exist which *may* impact a variety of actions related to programming & assessment that you need to think through, *but* you aren't trying to address a specific inequity

Brief Social-Belonging Intervention for Students Identifying as a Minority



-Short, easy, portable 1-hour intervention

-Doubts about belonging in college are *not* unique to you or your racial group, but common to *all* students & lessen with time (social adversity is shared & short-lived)

-To internalize this idea, students explained in written & video form to "help" prospective students. Didn't perceive as "intervention" or "program" which can come with stigma.

-Administered to *all* students to avoid further isolating students even though effects found for subpopulations of students

-Intervention mitigated doubts about social belonging for black students

-After intervention, black students construed that naturally occurring social adversity they experience is non-diagnostic of a fixed problem of social belonging. In turn, they experienced a greater sense of belonging or fit.

-Higher GPA for black students

-3 to 5 year follow-up found greater career satisfaction and success, psychological well-being, and community involvement & leadership

Walton & Cohen (2007). A question of belonging: Race, social fit, and achievement. *Journal of Personality and Social Psychology*, *92*, 82-96.
Walton & Cohen (2011). A brief social-belonging intervention improves academic and health outcomes among minority students. *Science*, *331*, 1447–51.

General Takeaway: Program Theory & Equity

- **Articulating Program Theory:** forces you to state *if* etiology of distal outcome *varies* across student populations, which informs *what* intermediate outcomes to target with programming & what to assess
- **Research** that demonstrates how the links between intermediate & distal outcomes are ***moderated*** by self-identified gender, ethnic group, first-generation status, other characteristics provide tremendous resources to build effective programming ***based on students needs***
- There may be programming that facilitates some populations meeting the distal outcome but no effect for other student populations. **That's ok!**
  - State that *a priori,* then look for that differential effect when collecting outcomes

What if Programming is Already Built?

Let's say you "inherit" a program to decrease sexual assault, but you don't inherit the evidence-based program theory. You only received the specific aspects of the program.
-You can interrogate the existing the programming by asking some basic questions.

Activity	IF students participant in this activity, THEN what should be the outcome?	WHY do you believe the activity will lead to the outcome?	What Empirical EVIDENCE do you have that the activity leads to outcome?
Students watch a video that highlights the importance of bystander intervention.			
Students play a matching game of the five steps of bystander intervention.			
Students create a plan outlining how they might intervene in 3 high-risk scenarios.			

Again….Why are We Doing This?

- Building a program based on evidence seems like ***a lot of work***
  - Agreed! That is why there are paid positions to build programs
  - And remember the goal—to build a program that should "work", that should be effective, that should result in the desired student learning & development
    - Ethical obligation to do this

- Why *not* just make programming decisions based on **experience** (your own or anecdotal stories from others)?
  - Using **personal experience** (rather than research & theory) to determine what "works" may lead **to false positives & false negatives**

Errors in Judgement Easily Made

Inattentional Blindness: humans do *not* perceive unexpected events/outcomes when focusing on something else

- During a program, there are many things happening
- You can easily *not* notice events/outcomes occurring (you're error-prone!)
  - This is especially true if you do *not* expect an event to occur
  - The probability you will notice an unexpected event or outcome depends largely on *what you thought would occur*
  - In short: Preconceptions influence one's interpretation & memories of experiences, meaning both can be grossly inaccurate

Errors in Judgement Easily Made

Illusory Causation: humans tend to ascribe causality when it doesn't exist

- May believe an aspect of programming (e.g., mentoring) caused a student outcome (e.g., higher grades)
- Since humans tend to pay attention to what they already believe is true, they selectivity extract information from their observations *to support their point of view*
- They will construct a perception of a causal relation consistent with their a priori beliefs even if the relation doesn't actually exist

Why Discuss These Errors in Judgement?

Because your colleagues may state, "I can explain if & why a program should be effective given my experience—no need to spend time reading the research".

They're stating that they, unlike other humans, aren't susceptible to fallible perceptions

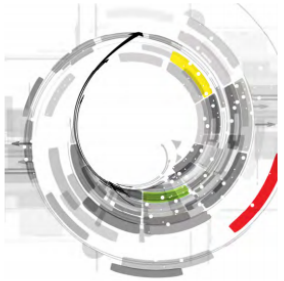
- Highly Unlikely
- Efficiency & Ethical Implications: Wasted students' time & money on ineffective programs; students not receiving effective interventions to support learning, well-being, development, behavior

Imagine your doctor not reading the literature on what works to impact specific diseases but instead relying solely on their perceptions, hunches, good intentions

- That was the case before evidence-informed medicine….not good results

Utility of Empirical Research

- Empirical research is one way to improve the process of identifying which practices are effective
  - Studies are conducted to test theories
  - *Some theories are supported for some populations in some contexts*
- With that said, research findings are
  - far from infallible
  - can be difficult to interpret
  - can be difficult to apply
- But "research is essentially a refined and systematic application of the observational, trial-and-error process [practitioners] go through every day to form their personal perspectives on what works, conducted in ways that systematically guard against Type I and Type II errors" (Cook & Smith, 2012, p. 284).



Abstract

Identifying evidence-informed programming (e.g., strategies, activities, pedagogies) facilitates both the intentional offering of programming that should "work" and the use of the outcomes assessment process to evaluate program effectiveness. Evidence-informed programming is more efficient than unsupported programming because the programming is more likely to improve learning and development. Thus, faculty and student affairs professionals require fewer iterations of the assessment cycle to inform programming changes in order to achieve desired outcomes. To help locate evidence-informed programming, we describe systematic review repositories (e.g., *Campbell Collaboration*, *What Works Clearinghouse*) that synthesize high-quality research to identify "what works". We share a tool we created that organizes relevant systematic review repositories and other collections of evidence of effectiveness, providing numerous examples of evidence-informed programming pertinent to higher education. These resources aid faculty and student affairs professionals in achieving their ethical obligation to engage students in effective learning and development experiences.

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A More Efficient Path to Learning Improvement: Using Repositories of Effectiveness Studies to Guide Evidence-Informed Programming

Institutions of higher education are expected to gather and use outcomes data to improve student learning and development (Jankowski et al., 2018; U.S. Department of Education, 2006). It is hoped that learning improvement will be evidenced by employing an iterative process of building educational programming, implementing programming, assessing outcomes, and using results to make changes to programming (Fulcher et al., 2014). Changes to pedagogy, activities, or educational content are common strategies employed in the hope of creating more effective programming and in turn improving student learning and development (Jankowski et al., 2018).

We endorse this improvement science (Bryk et al., 2015; Lewis, 2015) approach promoted in higher education (Fulcher et al., 2014). However, echoing others, we call for a process of improvement that begins with programming that *should* be effective based on research (Kerr et al., 2020; Pope et al., 2019; Pope et al., in press; Slavin, 2020; Smith & Finney, 2020; Wight et al., 2016). Our recommendation is informed by concerns of

Table 1
Description and examples from systematic review repositories

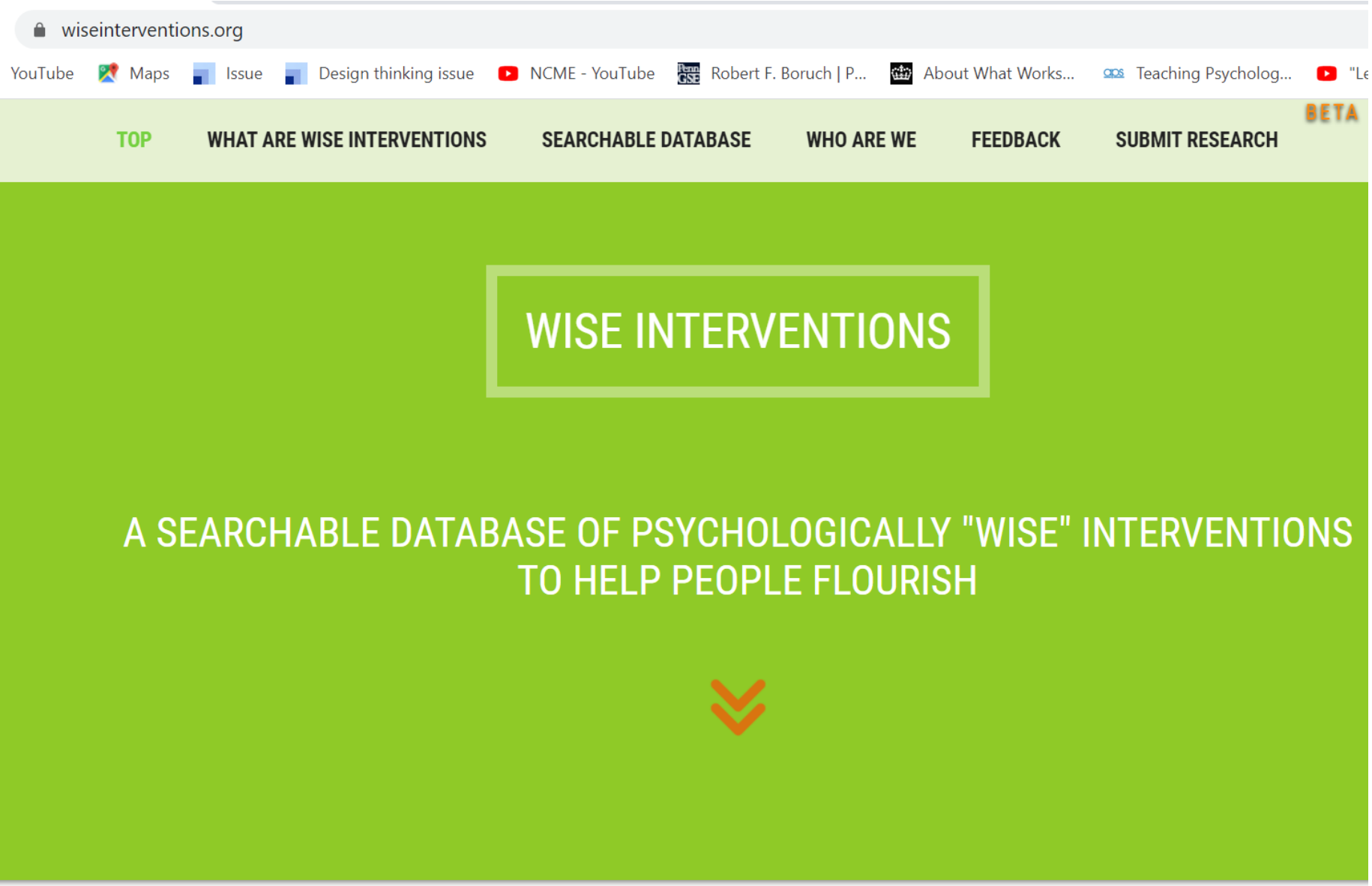
Repository	Description	Examples Relevant to Higher Education
Campbell Collaboration	Exists to help people make well-informed decisions about **social & behavioral interventions**. Provides systematic reviews of programs or interventions using rigorous review & synthesis processes of high-quality (RCTs or quasi-experimental designs) primary research. Some research designs have such weak internal validity that they are unacceptable in reviews to inform effective claims (e.g., simple before-after programming studies without comparison groups).	• Bystander Intervention • Mindfulness-based Stress Reduction • Motivational Interviewing for Substance Abuse • Exercise to Improve Self-Esteem in Young People • Advocacy Interventions to Reduce Violence & Promote Well-Being of Women who Experience Partner Abuse
What Works Clearinghouse	A trusted source of scientific evidence on **education programs, practices, & policies**. WWC reviews research, determines which studies meet rigorous standards (RCTs, quasi-experimental designs), summarizes findings, and provides practice guides.	• Using Technology To Support Postsecondary Learning • Linked Learning Communities • Organizing Instruction & Study to Improve Learning • First Year Experience Courses • Strategies for Postsecondary Students in Developmental Education
Cochrane Library	Provides short plain language summaries of their longer systematic reviews of empirical research that focus on interventions for **health outcomes** (e.g., alcohol, STIs). Indicates the quality of the studies that informed their conclusions.	• Social norms interventions are not effective enough on their own to reduce alcohol misuse among college students • Self-help & Guided Self-help for Eating Disorders • Prevention of Suicide in University Settings

Note. RCTs = Randomized Controlled Trials.

The systematic review *Effects of Bystander Programs on the Prevention of Sexual Assault among Adolescents and College Students: A Systematic Review* (Kettrey et al., 2019) is (unfortunately) quite relevant to higher education. The full report of the program's effectiveness begins with a description of the purpose for the review, including background information on the problem, research question of interest, and current state-of-the-evidence. In this example, the review "examines the effects bystander programs have on knowledge and attitudes concerning sexual assault and bystander behavior, bystander intervention when witnessing sexual assault or its warning signs, and participants' rates of perpetration of sexual assault" (p. 1).

This information is particularly helpful for faculty and student affairs professionals seeking to align their desired outcomes with evidence-informed programming.

Next, the review includes a description of the studies included in the review. Of note are details regarding the types of interventions and various outcomes. This information is particularly helpful for faculty and student affairs professionals seeking to align their desired outcomes with evidence-informed programming. For example, this review summarizes research on the effects of bystander programs on the following outcomes: knowledge concerning sexual assault and intervening, attitudes concerning sexual assault and intervening, behavior when witnessing a sexual assault or its warning signs, and perpetration of sexual assault. Thus, if professionals were interested in influencing these outcomes, this review would provide insight



-Database of *theory to practice*.

-These are theories that help prescribe programming!

-Model the use of theory to create should-be effective-programs AND provide data regarding how effective they are and for who.

BETA

THREE FAMILIES OF PSYCHOLOGICAL PROCESSES

<DATABASE

GLOSSARY

* THE BIG PICTURE
* THREE FAMILIES OF PSYCHOLOGICAL PROCESSES
* INTERVENTION TECHNIQUES
* REFERENCES

THREE FAMILIES OF PSYCHOLOGICAL PROCESSES

Walton and Wilson (2018) clustered wise interventions into three families based on the basic motivation underlying meaning making upon which the intervention capitalized. Most interventions fall primarily into one category; a few, however, cut across categories. See how Walton and Wilson defined each category.

Psychologically Wise Interventions that Capitalize on the Need to Understand

Many interventions aim to help people interpret themselves and their circumstances in adaptive ways by capitalizing on the need to make sense of matters as best they can. These studies draw primarily on attribution theory, which assumes that people try to form rational impressions of the causes of their own and other people's behavior (Weiner, 1985). They thus assume that people are responsive to information and experiences that suggest new ways of thinking. Because there is typically no single simple truth about subjective meanings, and because people's views readily become self-fulfilling, this approach is less concerned with whether people's interpretations are accurate in some objective sense than with facilitating reasonable perspectives that help people flourish (Abramson, Seligman, &Teasdale, 1978).

Want to learn more?

Psychologically Wise Interventions that Capitalize on the Need for Self-Integrity

Even as people strive to make sense of the world reasonably, they desire or are threatened by certain meanings. Among these is the desire to see oneself as decent, moral, competent, and coherent. Experiences that threaten this sense of self-integrity can give rise to a range of personal and social problems (Aronson, 1968; Sherman & Cohen, 2006; Steele, 1988).

Want to learn more?

Psychologically Wise Interventions that Capitalize on the Need to Belong

A third family of interventions capitalizes on people's need to see themselves as connected to others so as to improve outcomes that go beyond a relationship or a sense of belonging itself, such as to improve well-being, health, or achievement.

Database - Wise Interventions

wiseinterventions.org/database

Apps YouTube Maps Issue Design thinking issue NCME - YouTube

BETA

WISE INTERVENTIONS

GLOSSARY

* THE BIG PICTURE

* THREE FAMILIES OF PSYCHOLOGICAL PROCESSES

* INTERVENTION TECHNIQUES

* REFERENCES

INTERVENTION OF THE DAY

Search by, referenc

Search the database using the s

1. By the **family of psychologica** that drive how people make sens
   - *To understand things as b*
   - *To think well of themselve*
   - *To feel connected to other*

To learn more, click here.

2. By the specific **psychological** *nested within the three families use this filter.*
3. By the **social area** (e.g., healt
4. By the **intervention technique**

FAMILY OF PSYCHOLOGICAL PROCESS

All

All

- **Need to Understand**
-- **What is the Person Trying to Understand?**
--- **Link Self-Integrity to a Behavior (or Attitude) to Motivate Positive Change**
Who could I become?
Am I working together with others to accomplish personal or collective goals?
--- **Personal and Social Experiences**
Is college accessible to me?
How can I better manage this conflict?
How can I appropriately influence my teenager?
Does this school or work task have personal meaning to me?
--- **Other People and Groups**
Am I viewed through the lens of a negative stereotype?
Why did I receive critical feedback?
Which students are most likely to grow?
--- **Selves (My Own and Others')**
Is intelligence fixed or can it grow
Does struggling mean I can't do it?
Am I capable of learning or performing well?
Is this goal my own or imposed?
What were my goals?
How will I accomplish my goals?

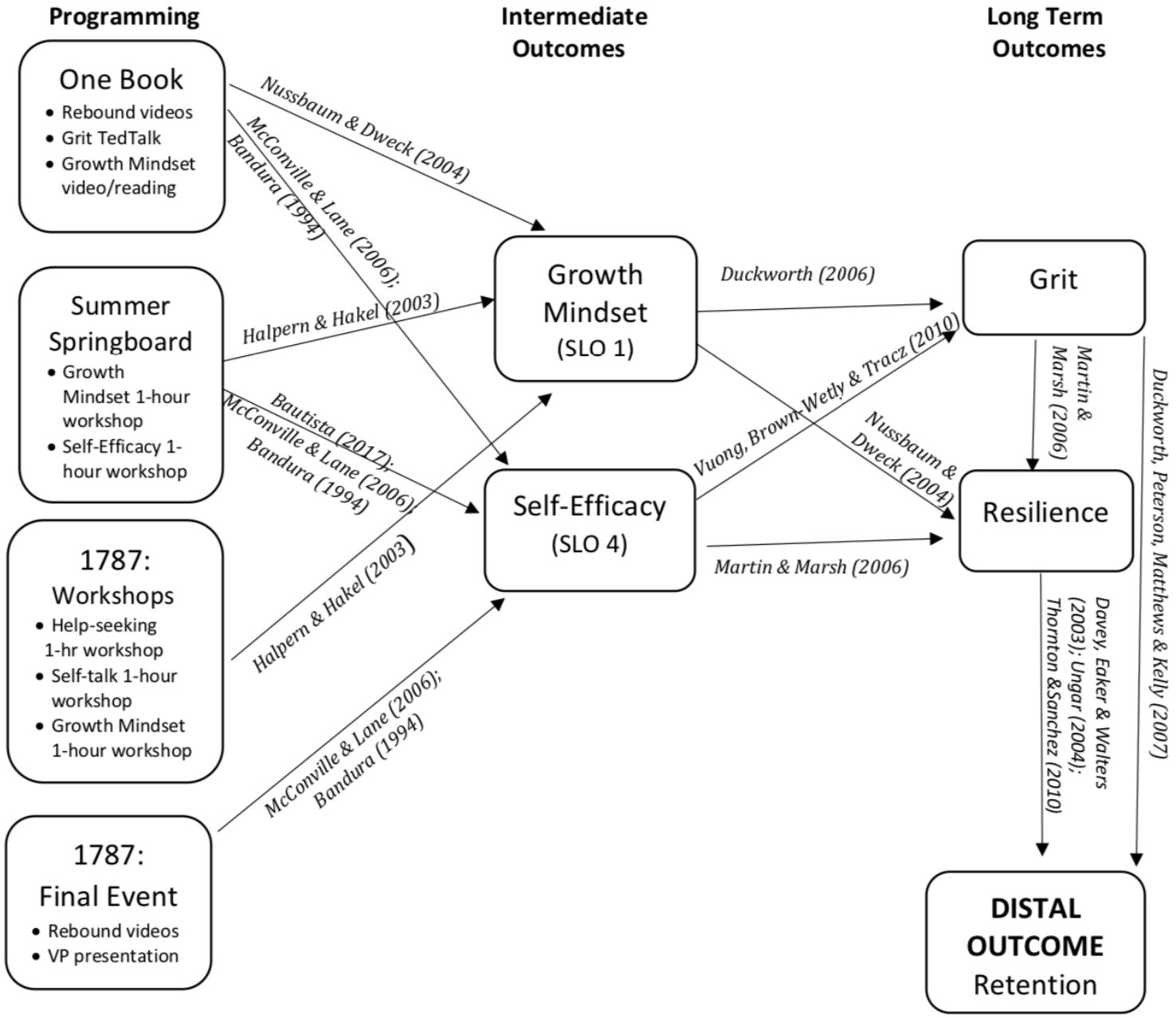
Education

All

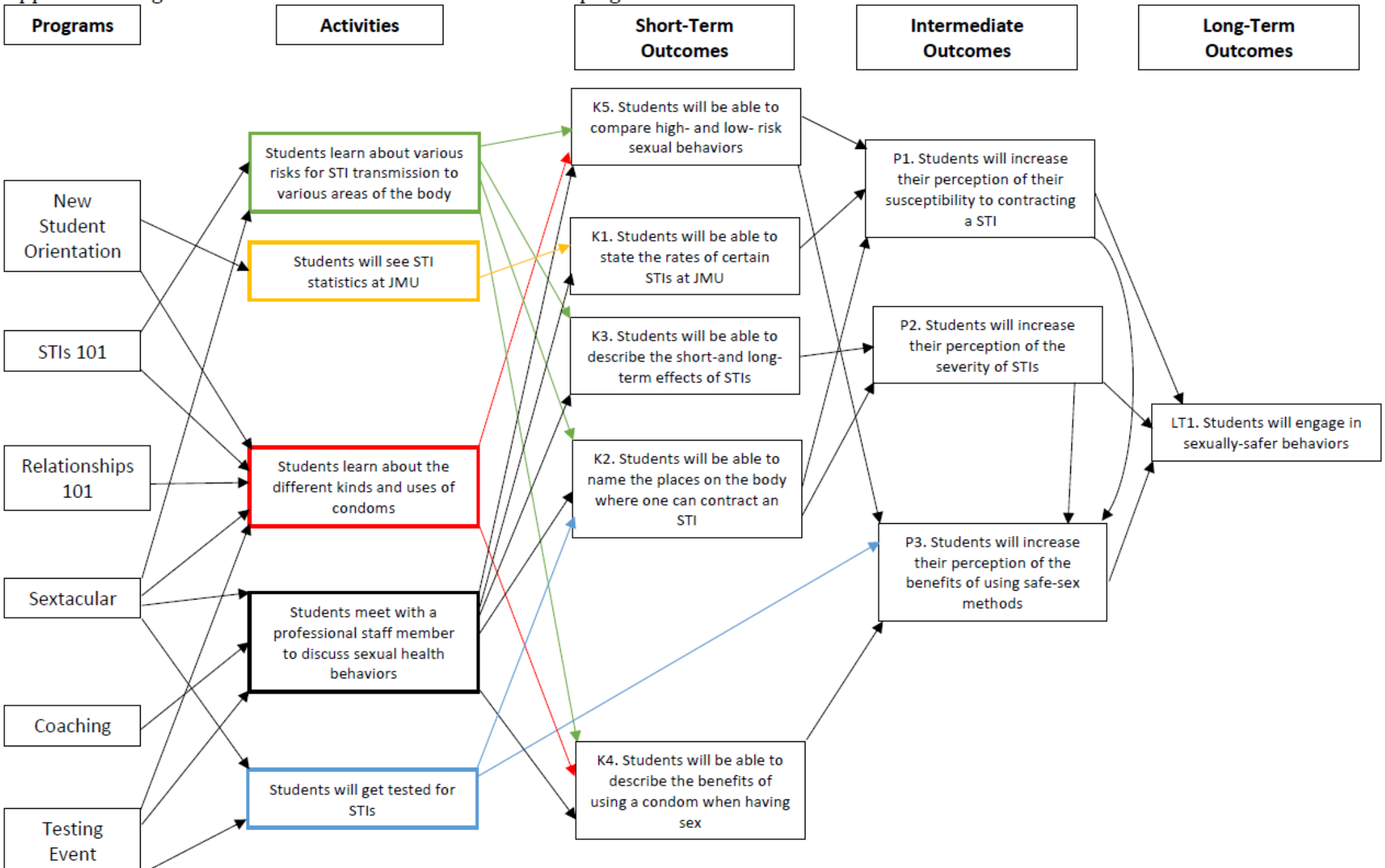
Clear filters

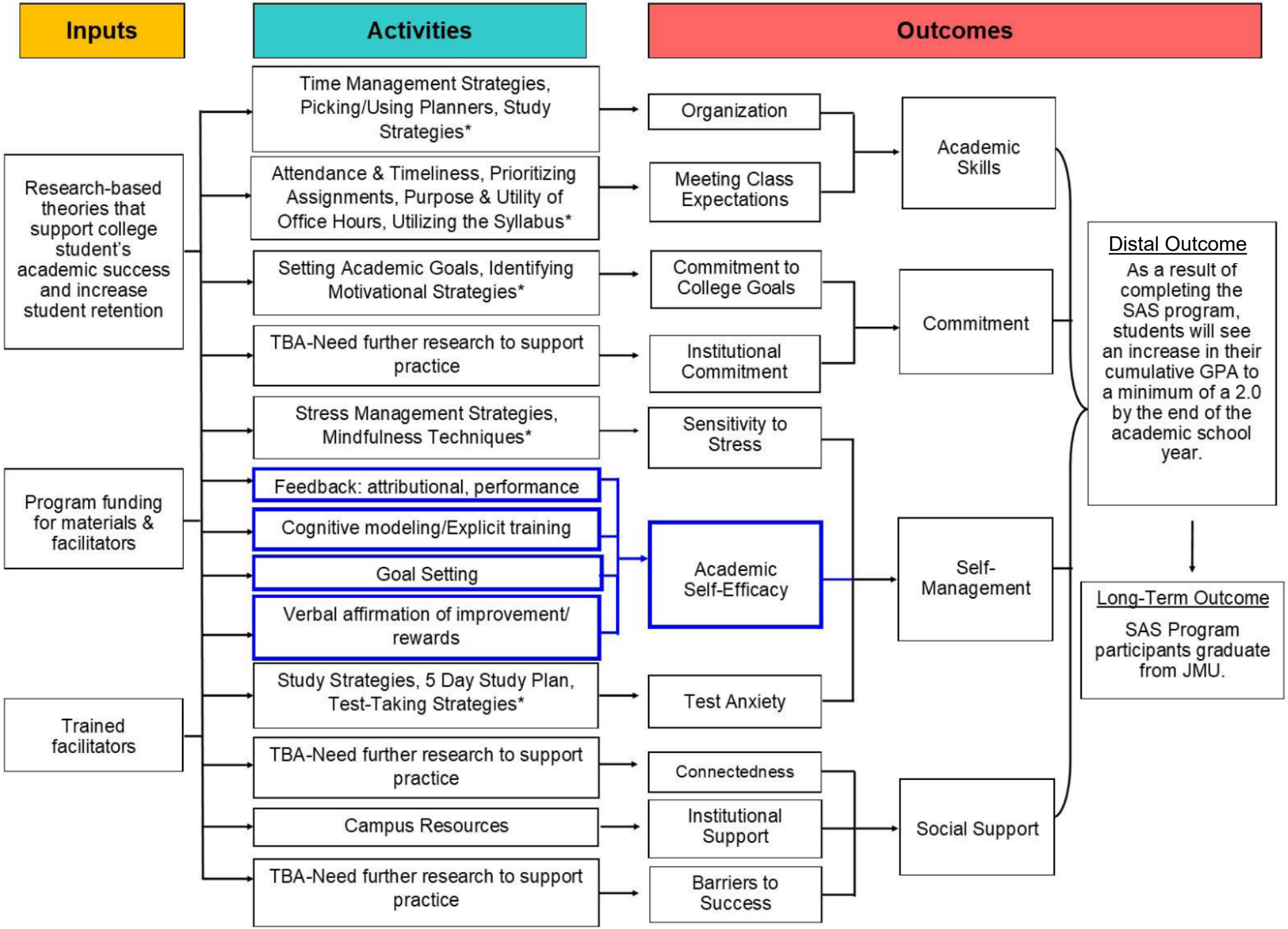
Evidence-based program theory communicates to stakeholders that you **intentionally** built programming that **should be effective** given existing **evidence**, and you can explain **why** & **how**.

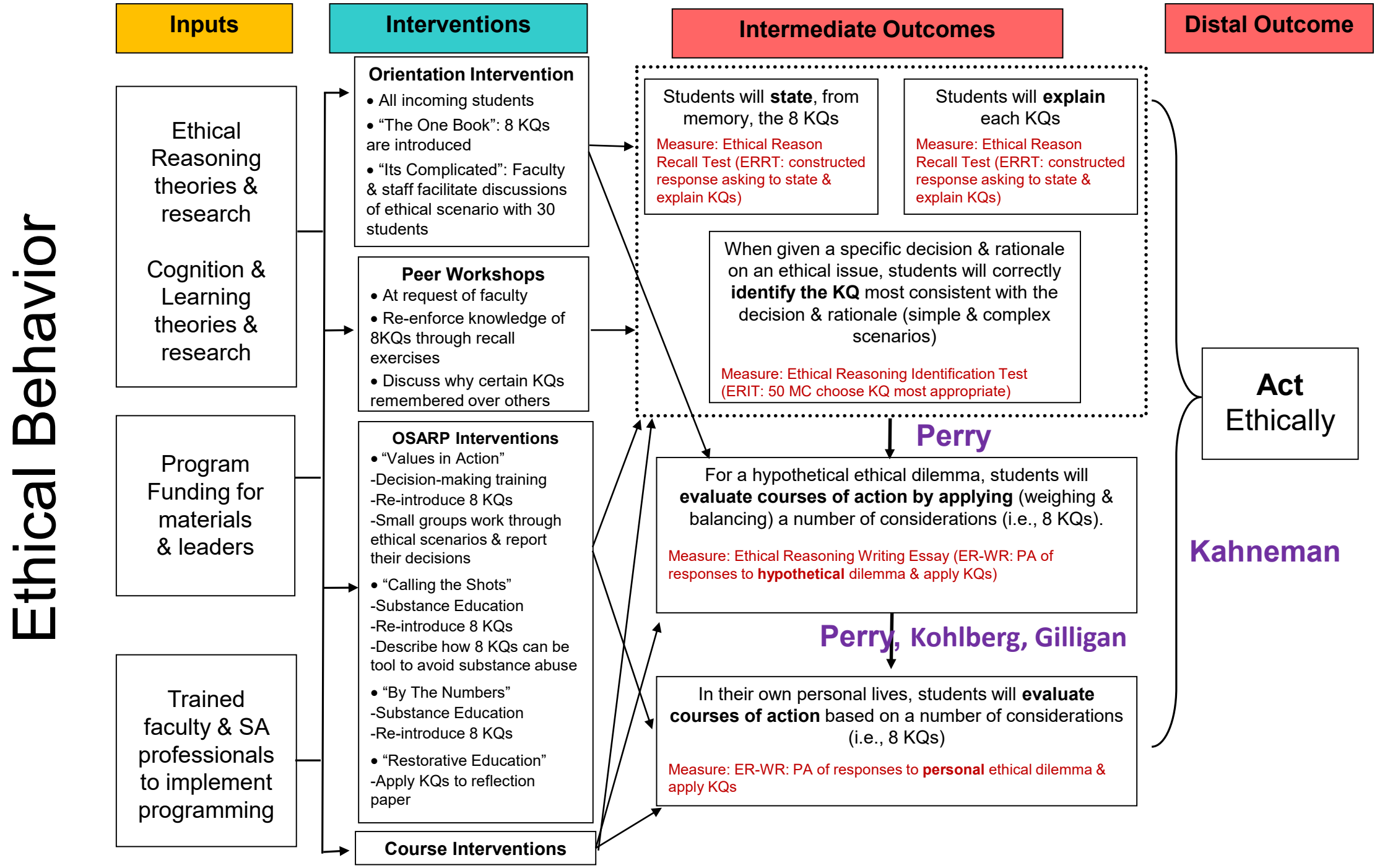
Retention


Programming
Intermediate Outcomes
Long Term Outcomes
One Book
• Rebound videos
• Grit TedTalk
• Growth Mindset video/reading
Summer Springboard
• Growth Mindset 1-hour workshop
• Self-Efficacy 1-hour workshop
1787: Workshops
• Help-seeking 1-hr workshop
• Self-talk 1-hour workshop
• Growth Mindset 1-hour workshop
1787: Final Event
• Rebound videos
• VP presentation
Growth Mindset (SLO 1)
Self-Efficacy (SLO 4)
Grit
Resilience
DISTAL OUTCOME Retention
Nussbaum & Dweck (2004)
McConville & Lane (2006); Bandura (1994)
Halpern & Hakel (2003)
Bautista (2017); McConville & Lane (2006); Bandura (1994)
Halpern & Hakel (2003)
McConville & Lane (2006); Bandura (1994)
Duckworth (2006)
Vuong, Brown-Wetly & Tracz (2010)
Nussbaum & Dweck (2004)
Martin & Marsh (2006)
Martin & Marsh (2006)
Davey, Eaker & Walters (2003); Ungar (2004); Thornton &Sanchez (2010)
Duckworth, Peterson, Matthews & Kelly (2007)

Appendix A: Logic Chart for Outcome P3 of Be STI Free Campaign




Inputs
Activities
Outcomes
Research-based theories that support college student's academic success and increase student retention
Program funding for materials & facilitators
Trained facilitators
Time Management Strategies, Picking/Using Planners, Study Strategies*
Attendance & Timeliness, Prioritizing Assignments, Purpose & Utility of Office Hours, Utilizing the Syllabus*
Setting Academic Goals, Identifying Motivational Strategies*
TBA-Need further research to support practice
Stress Management Strategies, Mindfulness Techniques*
Feedback: attributional, performance
Cognitive modeling/Explicit training
Goal Setting
Verbal affirmation of improvement/ rewards
Study Strategies, 5 Day Study Plan, Test-Taking Strategies*
TBA-Need further research to support practice
Campus Resources
TBA-Need further research to support practice
Organization
Meeting Class Expectations
Commitment to College Goals
Institutional Commitment
Sensitivity to Stress
Academic Self-Efficacy
Test Anxiety
Connectedness
Institutional Support
Barriers to Success
Academic Skills
Commitment
Self-Management
Social Support
Distal Outcome
As a result of completing the SAS program, students will see an increase in their cumulative GPA to a minimum of a 2.0 by the end of the academic school year.
Long-Term Outcome
SAS Program participants graduate from JMU.


Ethical Behavior
Inputs
Interventions
Intermediate Outcomes
Distal Outcome
Ethical Reasoning theories & research
Cognition & Learning theories & research
Program Funding for materials & leaders
Trained faculty & SA professionals to implement programming
Orientation Intervention
• All incoming students
• "The One Book": 8 KQs are introduced
• "Its Complicated": Faculty & staff facilitate discussions of ethical scenario with 30 students
Peer Workshops
• At request of faculty
• Re-enforce knowledge of 8KQs through recall exercises
• Discuss why certain KQs remembered over others
OSARP Interventions
• "Values in Action"
-Decision-making training
-Re-introduce 8 KQs
-Small groups work through ethical scenarios & report their decisions
• "Calling the Shots"
-Substance Education
-Re-introduce 8 KQs
-Describe how 8 KQs can be tool to avoid substance abuse
• "By The Numbers"
-Substance Education
-Re-introduce 8 KQs
• "Restorative Education"
-Apply KQs to reflection paper
Course Interventions
Students will state, from memory, the 8 KQs
Measure: Ethical Reason Recall Test (ERRT: constructed response asking to state & explain KQs)
Students will explain each KQs
Measure: Ethical Reason Recall Test (ERRT: constructed response asking to state & explain KQs)
When given a specific decision & rationale on an ethical issue, students will correctly identify the KQ most consistent with the decision & rationale (simple & complex scenarios)
Measure: Ethical Reasoning Identification Test (ERIT: 50 MC choose KQ most appropriate)
Perry
For a hypothetical ethical dilemma, students will evaluate courses of action by applying (weighing & balancing) a number of considerations (i.e., 8 KQs).
Measure: Ethical Reasoning Writing Essay (ER-WR: PA of responses to hypothetical dilemma & apply KQs)
Perry, Kohlberg, Gilligan
In their own personal lives, students will evaluate courses of action based on a number of considerations (i.e., 8 KQs)
Measure: ER-WR: PA of responses to personal ethical dilemma & apply KQs
Act Ethically
Kahneman

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Website with Program Theory videos, Powerpoints, and examples (www.jmu.edu/assessment/sass/)