Helping Students Learn Better: Elevating Program Theory & Implementation Fidelity in a University-level Context

Kristen Smith, PhD

University of North Carolina—Greensboro

&

Sara Finney, PhD

James Madison University

Our Example: Ethical Reasoning in Action

- Desired Student Learning Outcome of QEP: Students will act ethically
- Major university undertaking
- Experts in ethical reasoning, philosophy, & assessment engaged in multi-year endeavor to:
 - Articulate what students need to know, think, & do to act ethically
 - Design programming to impact these outcomes
 - Assess implementation of programming
 - Design measures of these outcomes
 - Assess SLOs
 - Use results for learning improvement

Ethical Reasoning in Action: QEP

- Desired Student Learning Outcome: Students will act ethically
- Major university undertaking
- Experts in ethical reasoning, philosophy, & assessment engaged in multi-year endeavor to:
 - Articulate what students need to know, think, & do to act ethically
 - Design programming to impact these outcomes
 - Assess implementation of programming
 - Design measures of these outcomes
 - Assess SLOs
 - Use results for learning improvement

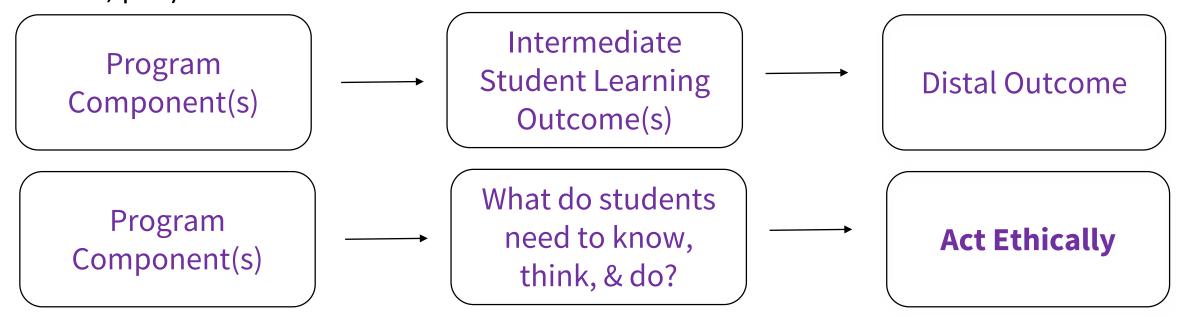
Ethical Reasoning in Action: QEP

- Desired Student Learning Outcome: Students will act ethically
- Major university undertaking
- Experts in ethical reasoning, philosophy, & assessment engaged in multi-year endeavor to:
 - Articulate what students need to know, think, & do to act ethically
 - Design programming to impact these outcomes
 - Assess implementation of programming
 - Design measures of these outcomes
 - Assess SLOs (before & after students experience programing)
 - Use results for learning improvement

Outcomes Assessment

Ethical Reasoning: Program Theory

- Program Theory:
 - "the construction of a plausible and sensible model of how a program is supposed to work"
 - "clarifies the set of cause-and-effect relationships" believed to connect the things students do (i.e., programming) to the outcomes they are expected to achieve (Bickman, 1987, p. 5)



"Strong" Program Theory undergirds links with theory/research (Pope, Finney, & Bare, 2019)

Intermediate Outcomes

Distal Outcome

Act Ethically

Intermediate Outcomes

Distal Outcome

Ethical Reasoning theories & research

Cognition & Learning theories & research

Program
Funding for
materials
& leaders

Trained faculty & SA professionals to implement programming

Act Ethically Ethical Reasoning theories & research

Cognition & Learning theories & research

Program
Funding for
materials
& leaders

Trained faculty & SA professionals to implement programming

Ability to Engage in a
Deliberate Ethical
Reasoning Process

Act
Ethically

Intermediate Outcomes

Distal Outcome

Ethical Reasoning theories & research

Cognition & Learning theories & research

Program
Funding for
materials
& leaders

Trained faculty & SA professionals to implement programming

Ability to Engage in a Deliberate Ethical Reasoning Process **Act** Ethically

Kahneman, 2011

By engaging in a deliberate ethical reasoning thought process, students' avoid a quick, default, confirmatory decision on how to behave.

Ethical Reasoning theories & research

Cognition & Learning theories & research

Program
Funding for
materials
& leaders

Trained faculty & SA professionals to implement programming

What key questions should I (we) use to evaluate the ethical dimensions of a situation?

- Fairness How can I (we) act justly, equitably, and balance legitimate interests?
- Outcomes What possible actions achieve the best short- and longterm outcomes for me and all others?
- Responsibilities What duties and/or obligations apply?
- Character What actions help me (us) become my (our) ideal self (selves)?
- Liberty How do I (we) show respect for personal freedom, autonomy, and consent?
- Empathy How would I (we) act if I (we) cared about all involved?
- Authority What do legitimate authorities (e.g. experts, law, my religion/god) expect?
- Rights What rights, if any, (e.g. innate, legal, social) apply?

Intermediate Outcomes

Distal Outcome

Ethical Reasoning theories & research

Cognition & Learning theories & research

Program
Funding for
materials
& leaders

Trained faculty & SA professionals to implement programming

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)

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)

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

Intermediate Outcomes

Distal Outcome

Ethical Reasoning theories & research

Cognition & Learning theories & research

Program
Funding for
materials
& leaders

Trained faculty & SA professionals to implement programming

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's Scheme of Ethical Development

- Traditional students are dualistic thinkers conceiving ethical decisions as right or wrong
- To engage in a *Deliberative Ethical Reasoning Process*, we need to expose students to multiple considerations associated with a decision
 - Expose them to a more complicated reasoning process
- We teach them 8 considerations (8KQs)

Act Ethically

THE EIGHT KEY QUESTIONS

Fairness • Outcomes
Responsibilities • Character • Liberty
Empathy • Authority • Rights



Inputs

Interventions

Intermediate Outcomes

Distal Outcome

Act

Ethically

Ethical Reasoning theories & research

Cognition & Learning theories & research

Program
Funding for
materials
& leaders

Trained faculty & SA professionals to implement programming

Students will **state**, from memory, the 8 KQs

Measure: Ethical Reason Recall Test (ERRT: constructed response asking to

state & explain KQs)

each KQs Measure: Ethical Reason Recall Test (ERRT:

constructed response asking to state & explain KQs)

Students will explain

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 Scheme of Ethical Development Kohlberg's Stages of Moral Development Gilligan's Ethics of Care Theory

- Simply knowing the 8KQs won't result in acting ethically—need to improve reasoning *skills*.
- Need to invoke cognitive dissonance to spur growth in ethical reasoning.
- Thus, stimulate dissonance by wrestling with how all 8 considerations apply to a dilemma.

Intermediate Outcomes

Distal Outcome

Ethical Reasoning theories & research

Cognition & Learning theories & research

Program
Funding for
materials
& leaders

Trained faculty & SA professionals to implement programming

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

Intermediate Outcomes

Students will state, from

memory, the 8 KQs

Recall Test (ERRT: constructed

Measure: Ethical Reason

response asking to state &

explain KQs)

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

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

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

Perry, Kohlberg, Gilligan

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)

Kahneman

Act

Ethically

Intermediate Outcomes

Distal Outcome

Ethical Reasoning theories & research

Cognition &

Learning

theories &

research

of ethical scenario with 30 students

Orientation Intervention

- All incoming students
- "The One Book": 8 KQs are introduced
- "Its Complicated": Faculty & staff facilitate discussions

Peer Workshops

- At request of faculty
- Re-enforce knowledge of 8KQs through recall exercises
- Discuss why certain KQs remembered over others

Program Funding for materials

& leaders

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

Trained faculty & SA professionals to implement programming

Focus on Semester-Long Courses

Faculty	# of Students	Domain	Brief Description of Course	Course Type
1	77	Health Sciences	Upper level students; Required course for major; Ethics in class title	Lecture
2	18	Philosophy	Lower level students; General Education Class; Fulfills Cluster 1 requirement; Ethics in class title	Lecture
3	7	Justice Studies	Upper level students; Elective Course	Seminar; Community Service Learning
4	7	Integrated Science & Technology	Upper level students; Elective Course	Seminar; Community Service Learning
5	42	Education	Upper level students; Course for minor	Lecture; Community Service Learning
6	40	Health Sciences	Upper level students; Required course for major	Lecture

James Madison University's Ethical Reasoning Rubric

Insufficient 0	Marginal 1	Good 2	Excellent 3	Extraordinary 4	Score			
A. Ethical Situation: Ide	entifying ethical issue in its co							
No reference to decision option(s).	Implicit reference to decision options AND/OR little context given regarding decision option(s).	Explicit but unorganized reference to decision option(s) and context.	Clear description of decision option(s) and context.	Meets criteria for Excellent AND Context treated with nuance Builds tension with organization and word choice.				
B. Key Question Refere	nce: Mentioning the 8 KQs or							
Reference to zero or only one key question.	Vague references to key questions OR only <u>two</u> key questions referenced.	References <u>four</u> key questions.	References <u>six</u> key questions.	References all <u>eight</u> key questions.				
C. Key Question Applica	 ability: Describing which of tl	he 8 KQs are applicable or no	t applicable to the situatio	and why				
No rationale provided for the applicability or inapplicability of any KQs to the ethical situation.	Provides a rationale for the applicability or inapplicability of two key questions to the ethical situation.	Provides a rationale for the applicability or inapplicability of <u>four</u> key questions to the ethical situation.	Provides a rationale for the applicability or inapplicability of <u>six</u> key questions to the ethical situation.	For all <u>eight</u> questions provides a rationale for its applicability or inapplicability to the ethical situation.				
D. Ethical Reasoning: A		e applicable KQs, then Criteri	a "D" and "E" can be score	I no higher than (1) "Marginal"**				
No attempt to analyze any of the referenced key questions.	Analysis attempted using two or more key questions. Typically incorrect ascription of the key questions to the ethical situation. Account is unclear, disorganized, or inaccurate.	Analysis attempted using three or more key questions. Basically accurate ascription of the key questions to the ethical situation. Account is unclear or disorganized.	Analysis attempted using three or more key questions. Accurate ascription of the key questions to the ethical situation. Account is clear and organized.	Meets criteria for Excellent AND Nuanced treatment of key questions, for example: elucidates subtle distinctions uses analogies or metaphors considers different issues within same key question.				
SPECIAL NOTE: If Cr	 iterion "D" is scored a θ or 1 t	 hen Criterion "E" can be scor	 red no higher than (1) "Mas	;inal"				
	Veighing the relevant factors a							
No judgment is presented OR judgment presented with no rationale.	Uses products of the analysis and provides some weighing to make a decision. Account is unclear, disorganized, or inaccurate.	Conveys weighing approach using analysis products. Provides an intelligible basis for judgment.	Meets criteria for Good AND Logically terminates in decision that will be reached.	Meets criteria for Excellent AND Products of analysis weighed to make judgment compelling.				

Faculty agreed students should meet

Extraordinary standard for the intermediate outcome "In their own personal lives, students will evaluate courses of action based on a number of considerations (i.e., 8 KQs)"

Thus, they had to **build programming** that should support students meeting this expectation.

James Wadison University⊚ 2014

Articulating Program Theory

Program Component(s)

What do students need to know, think, & do?

Act Ethically

Reviewing 8KQ

Example Specific Feature: Map 8KQ to content area standards or other work

Halpern & Hakel, 2003

State & **explain** from memory the 8 KQ

Perry, 1970

Act Ethically

Case Study

(Dilemma Discussion)

Example Specific Feature: Discuss how the 8KQs are or are not applied in a case study Bebeau, 1993; Halpern & Hakel, 2003 **Identify** the KQ most consistent with the decision & rationale

Perry, 1970

Act Ethically

Articulating Program Theory

Analyze/ break apart KQs

Example Specific Feature:
Understand nuances within KQ &
show how multiple perspectives
can compete/interact within the
same KQ

Bebeau, 1993; Halpern & Hakel, 2003; Wilhelm, 2010 For a PERSONAL
ethical dilemma, evaluate
courses of action by
applying (weighing &
balancing) a number of
considerations (i.e., 8KQs)

Perry, 1970; Gilligan, 1982; Kohlberg, 1969, 1977, 1981; Schmidt et al., 2009 Act Ethically

Apply 8KQs and make a decision using 8KQ as rationale

Example Specific Feature: Arrive at or grapple with a particular conclusion or decision Halpern & Hakel, 2003 For a PERSONAL
ethical dilemma, evaluate
courses of action by
applying (weighing &
balancing) a number of
considerations (i.e., 8KQs).

Perry, 1970; Gilligan, 1982; Kohlberg, 1969, 1977, 1981; Schmidt et al., 2009 Act Ethically

Snapshot of Implementation Fidelity Checklist

Program Component	Duration in min. (Actual)	Responsiveness 1 = Low (unengaged) 3 = Medium 5 = High (engaged)	Specific Features	Adh eren ce Y/N	Quality 1 = Low (confusing) 3 = Medium 5 = High (clear)	Comments/ Observations
			Elaborate or unpack each of the 8KQ (e.g., reviewing the handbook, lecturing, PPTs, video clip, discussion,)			
			Read/Review SLOs			
Review			Read/Review rubric			
8 KQs			Students experience a "check point" to check their own knowledge of the 8KQ (maybe use Bill's "ERIT" items??; crossword puzzle or word find; ball activity, news stories)			
-			Map 8KQ to some other work (can be something disciplinary like standards or something societal like policies or media or something practical, or something personal, news stories, onto class community or rules of engagement, etc.)			
			Critique/edit/comment/annotate the 8KQ (e.g., could be wiki, could be collectively done in class, what do you like about 8KQ? What would you change about them?; collective knowledge building)			
			Provide/discuss/present example of a decision making process with AND without ethical reasoning ("ethical reasoning" is defined as being able to use 2+ KQ)			

Snapshot of Implementation Fidelity Checklist

Program Component	Duration in min. (Actual)	Responsiveness 1 = Low (unengaged) 3 = Medium 5 = High (engaged)	Specific Features	Adh eren ce Y/N	Quality 1 = Low (confusing) 3 = Medium 5 = High (clear)	Comments/ Observations
			Review/Refresh 8 KQ			
Case Study			Identify where/how each of the 8KQ are/ are not applied within the case			
(Dilemma Discussion)			Give/discuss rationale for how each of the 8KQ are/are not applied			
			Engage in reflection (e.g., could be formal or informal, written, oral, group, what issues did you have, what was easy/hard)			
			Identify/discuss which (if any) aspects of the case are "compelling?" To what extent or degree was the case "compelling?"			

Results of Study

- Gathered implementation fidelity data to better understand what intervention or program features students actually experienced
- Gathered longitudinal outcomes assessment data using psychometrically sound instruments to assess changes in students' learning over the semester
- Integrated fidelity and outcomes data: (Smith, Finney, & Fulcher, 2019)
 - Some faculty implemented the programming or intervention with higher quality
 - Students in some courses appeared to be more engaged/responsive
 - All students demonstrated improvements in their learning over time; however, students in some courses improved more than students in others
 - Courses where intervention was delivered with both high quality and high student perceived responsiveness/engagement tended to have greater learning improvement

Useful Resources

Implementation Fidelity & Outcomes Assessment for Ethical Reasoning

Smith, K. L., Finney, S. J., & Fulcher, K. H. (2019). Connecting assessment practices with curricula and pedagogy via implementation fidelity data. *Assessment and Evaluation in Higher Education*, 44, 263 – 282.

Smith, K.L., Finney, S. J., & Fulcher, K. H. (2017). Actionable steps for engaging assessment practitioners and faculty in implementation fidelity research. *Research & Practice in Assessment*, 12, 71-86.

Program Theory

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.

Implementation Fidelity

Finney, S. J. & Smith, K. L. (2016). Ignorance is not bliss: Implementation fidelity and learning improvement. *National Institute for Learning Outcomes Assessment: Guest Viewpoints*. Retrieved from https://illinois.edu/blog/view/915/309716

Fisher, R., Smith, K. L., Finney, S. J., & Pinder, K. (2014). The importance of implementation fidelity data for evaluating program effectiveness. *About Campus*, 19, 28-32

Gerstner, J. J. & Finney, S. J. (2013). Measuring the implementation fidelity of student affairs programs: A critical component of the outcomes assessment cycle. *Research & Practice in Assessment*, 8, 15 – 28.

Useful Resources (cont.)

Ethical Reasoning Assessment Instruments

Smith, K. L., Fulcher, K. H., & Sanchez, E. H. (2015, September). Ethical reasoning in action: Validity evidence for the Ethical Reasoning Identification Test (ERIT). *Journal of Business Ethics*, 144(2), 417-436.

Ames, A. J., Smith, K. L., Sanchez, E. R. H., Pyle, L. K., Ball, T. C., & Hawk, W. J. (2016). Impact and persistence of ethical reasoning education on student learning: Results from a module-based ethical reasoning educational program. *International Journal of Ethics Education*, 2(1), 77-96.

Sanchez, E. R. H., Fulcher, K. H., Smith, K. L., Ames, A. J., & Hawk, W. J. (2017, March-April). Defining, teaching, and assessing ethical reasoning in action. *Change: The Magazine of Higher Learning*, 49(2), 30-36.

Thank you!

Smith, K.L. & Finney, S. J. (2019, Nov). Helping students learn better: Elevating program theory and implementation fidelity in a university-level context. Paper presented at the annual meeting of Association for the Study of Higher Education, Portland, OR.

Publication of this work:

Smith, K.L. & Finney, S.J. (2020). Elevating program theory and implementation fidelity in higher education: Modeling the process via an ethical reasoning curriculum. *Research and Practice in Assessment*, 15, 1-13.