Expanding Assessment Practices: A Practical Approach for Applying Program Theory and Implementation Fidelity

Integrating Curriculum, Instruction, and Assessment Planning and Analysis Processes through Collaboration and Coaching

Assessment Institute 2022 Conference

October 9 , 2022

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Reasons for Attending?

Familiarity with Program Theory and Implementation Fidelity?

Discuss reasons

Workshop Agenda

- Introducing Program Theory (PT) and Implementation Fidelity (IF) "At Scale" in assessment scholarship/literature
- Modifying elements of the process for practical application to assessment process
  - Case Study 1: application to an ongoing institution-wide program
  - Case Study 2: application to an on-going course-based example for different purpose

Basic Program Theory, Implementation Fidelity, and Assessment Integrated

A collaborative process - faculty (primary drivers), centers for teaching, assessment practitioners, and others

- **identify candidate -** program, a group of faculty, individual faculty member, or student affairs unit
- **select or develop well-articulated outcomes** of concern
- **use research or theory for planning intervention/strategies** to foster outcomes
- **identify specific points in the curriculum (PT) to foster outcomes** with intervention/strategies
- **construct plan** to determine if **strategies are implemented as planned** in the designated courses **(IF)**
- **Compare planned intervention/strategy and assessment results**

My Reasons for Exploring

Value of assessment continues to be questioned
    Reporting **or** Enhancing/Cultivating Learning

Continuous improvement is central to assessment

Implementation Fidelity combined with Program Theory, with modifications, promising for assessment practices

My Reasons for Exploring

Trudy Banta and colleagues reported in *Designing Effective Assessment* (2009) assessment reports' focus on improving assessment processes - little evidence of **improving student learning**

- Although gains in the past 10+ years, still often a reporting focus
  - SLO performance results
  - changes made (often assumed)
- **Reactive or Proactive**?
- **Can not assert the specific contributors to change or improvement**

Propose modifying Program Theory (PT) and **Implementation Fidelity (IF) to** positively impact assessment practices and meaningful decision making

- **Result** in assessment being **more proactive**

- Enable faculty members to **seamlessly align** teaching strategies and curriculum planning with assessment practices

- **Enable assertion** that instructional strategies contributed to change/improvement

- Through partnerships, curriculum, instruction, and assessment practices are **integrated**

Assessment "leaders" transition to relationship builders, with much less emphasis on the reporting structure and evaluation of the reports. EMPHASIS – Learning. Role- guided the PT/IF process

Integrated Program Theory, Implementation Fidelity, and Assessment Processes and Results

Potential for:

- *seamlessly, strategically, and systematically unifying curricular, instructional, and assessment planning and analysis, typically throughout program*

- *more accurately determines if an intervention or changes in teaching strategies impact student learning*

At this point

What sounds appealing?

Concerning?

Impact assessment practices:

- Systematically connecting the three essential practices (PT, IF, Assessment) to support or **improve student learning**

- **Raising the caliber** of assessment plans and processes

- Helping programs **provide credible evidence to claim** program positively impacts the specific student learning expected and desired

Remaining Workshop Focus

- 1st Fundamental processes of Program Theory (PT) and Implementation Fidelity (IF)
  - **Ideal approach for *Improving Student Learning At Scale****
- **2nd Modification of ideal approach - needed to be viable for assessment practices**
  - **Practical application – 2 case studies**
    - **Case Study 1 – Institution-wide Program - in progress - apply PT and IF**
    - **Case Study 2 – Common required course – in progress**

*References – at end of slides

Ideal application for achieving "**learning at scale**"- assumptions:

- **Horizonal and vertical impact – All students**
- **Improvement**, not change, oriented
- **Well-constructed** student learning **outcome**(s)
- **Measures** constructed or selected - outcomes and rubric scholarship-based development
  - **Valid** for uses of results
    - Align with the outcome of interest
    - Information for determining growth/improvement and outcome features needing attention
  - Produce **reliable** evidence
    - Repeatable regardless of scorers or context
- **Collaborative Process – developing strategies/intervention from Research or Theory**

Basic steps in **Ideal Process** for achieving **Learning at Scale**

Collaboratively assessment specialists, program faculty, and centers for teaching and learning

1. Identify appropriate candidate

2. Identify and **clearly articulate outcomes** of concern

3. Research literature for strategies/interventions to foster outcome

4. Ensure measures are constructed/selected using test construction or rubric development guidelines and align with outcome components and for the intended use of results

5. Develop intervention/plan to foster these outcomes sequentially (Steps 1-3, Program Theory) *

6. Develop a process/tool – Are **strategies selected implemented as planned? (IF)***

7. Compare IF evidence to **assessment res**ults collected from valid and reliable tools - improvement* (Baseline needed)

*modifications suggested for broader assessment use

Based on "Improving Learning at Scale" Fulcher and Prendergast (2021)

Sounds daunting and resource intensive
Practical Application Needed for Assessment Practices

Such as, when:
- Focus is **not at scale**
- New or revised program **has varying degrees of success**
  > **Case Study 1**
- **Common courses** with **varying degrees of student achievement**
- Time/resource constraints, but **desire benefits to learning over reporting**
- Desire to make credible arg**ument that strategies/intervention contribute to change**
  > **Case Study 2**

Sounds daunting and resource intensive
Practical Application Needed for Assessment Practices

Discuss additional or **specific purposes** for introducing PT and IF into assessment practices for broader use.

Modify for broader practical assessment use

Remaining workshop – Devoted to **adapting the ideal process for practical application** to assessment for student learning use **AND guiding the process "locally"**

Will follow the basic PT and IF steps, some **closely**, some with modifications - *Guiding Practical Applications - Handouts*

Closely follow:

- Articulating **student learning outcomes**
- **Researching scholarship** for selecting and fostering the targeted learning outcomes
- Following **measurement development guidelines**

Sounds daunting and resource intensive
Modify for broader practical assessment use

Modifications and flexibility may be needed to:

- **Construct intervention/select strategies** from scholarship selected
- **Develop IF tool** to determine if intervention/strategies are followed as planned - "tool" loosely defined
- **Compare assessment results with intervention Implemented** – both "real time" and at specific points

Practical Case Study 1: Program in Progress

Program context – some aspects were "At Scale" and followed "Ideal approach"

Phased-in, **flexible, voluntary** university-level initiative (not at scale)

Primary goal: Improve students' analysis, synthesis, and argumentation skills demonstrated through effective writing in disciplines – three courses modified. Needed: Critical Thinking elements specified

- **Faculty development emphasis**
  - **Summer Retreats** and **"Kick Off"** meetings, **assumed** "best practices" **implemented** in the three upper- level classes
  - Introduced **"Course Reflection" for this purpose - instructional or results focus?**
- Institutional level Outcome and Rubric
  - adaptable for program use
- At Scale marginally emphasized (3 courses within a program, 2 required)
  - variation

NEEDED to MODIFY the IDEAL, with close alignment

Case Study 1: *Identify Candidate* – Program in progress**

Who, Why, How?

Who? *University-wide – "Think in Ink"*

Why? After three years of varying results, a practical/modified approach of the **Ideal** needed*

- Flexibility needed to be preserved
- Evidence for improvement in some programs
- **Baseline** data from university-level assessment

*Identified needs to 1) Refine CT elements **and/or 2) document implementation of strategies chosen from scholarship**

** *Guiding a Practical Application – Handouts*

Discuss

Case Study 1: Guide *Articulation of Clear and Specific Outcomes*

Institutional-level outcome

Effective communication in the disciplines
- Team of faculty members, specific administrators, including myself developed
- Revised an institutional rubric to align with outcome, which included critical thinking components

Critical thinking outcome needed specificity for analysis, synthesis, argumentation components

Team of faculty members - used critical thinking literature to guide

Case Study 1: Facilitating selection of relevant *Scholarship through Collaborations*

"Guide Collaborations" and "Guide Planning for Scholarship and Strategy Selection" combined

Existing operational strategies

> **Summer retreat** - External consultant provided **best practice** guidance - faculty planned strategy use – extended from 3 to 4 days

A small team of faculty members, learning center representative, and myself:*

- **Researched scholarship to foster analysis, synthesis, and argumentation and selected most promising**

- **Modified the retreat agenda** to **discuss selected literature**

- **Literature discussions** in small groups as well as with the entire group – **to identify key strategies/components** for wide application.

- **Selected *strategies from research*** and a method for determining **strategy *implementation***

*Hypothetical plan

Case Study 1: **Strategy Selection continued**

During Summer Retreat

*Select Key teaching strategies for **inclusion in all participating programs**

Additional elements identified for possible academic program selection

Peer review – **Key component** - apply in each program

- had promise of improving effective writing and critical thinking outcomes (literature)
- frequent use of peer review in courses

Two other strategies in combination with peer review – more effective

*Hypothetical

Case Study 1: Strategy selection continued

During Summer Retreat

*Each program:

- **Selected strategies in addition to peer review** most appropriate for the 1st – 3rd **level courses**

- **Began drafting peer review activities and assignments** for progressively building critical thinking outcome components

*Hypothetical

Case Study 1: Guide Use of Measurement Construction or Selection Guidelines from Literature

Ensure alignment with Outcomes and intended Use of Results

Analytic rubric developed to reflect effective writing and critical thinking thinking associated with writing implemented at the University for institutional-level outcome

- Developed over multiple years and followed Huba and Freed's rubric guidelines*
- Multiple teams of faculty members representing multiple institutions

Rubric modified to provide more specificity to the Think in Ink critical thinking outcome components to inform teaching **

*Learner-Centered Assessment on College Campuses, 2000
** Hypothetical change

Case Study 1: Plan Implementation Fidelity Tool

"Generic" Checklist developed

- separately, small team of faculty members, learning center representative, and myself – to be self-applied by faculty members

- Other components for each program

- Example checklist targets most effective strategies and includes **how to implement**

- **Show –** remains daunting?

Course reflection - alternative to checklist

DISCUSS other approaches to ascertain fidelity

Hypothetical Practical Example : Plan Fidelity Check "Tool"

DISCUSS other approaches to ascertain fidelity

Course Reflection example

Hypothetical Practical Example : Integrate IF checklist and Assessment results

5. Analyze fidelity of strategy selection and student learning evidence together

Supporting role of assessment office:

Annually, student learning outcome data from summer scoring compared to implementation/implementation fidelity data collected

- institutional – level analysis compared to baseline and trends
- data - disaggregated by program – more detailed analysis

Potential – assist programs with the analysis process or provide data analysis guidance

Real time, ongoing, formative assessment reflected in Course Reflection

Provides evidence of implementation of selected instructional strategies methods, activities, and assignments compared to gains

CASE STUDY 2
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