Pontenila, S., & Stephens, E., & Anderson N. C. (2025). Using A+ Inquiry as a Framework for Exploring Faculty Needs Related to Program Assessment Workload. *Intersection: A Journal at the Intersection of Assessment and Learning, Early View.*

Using A+ Inquiry as a Framework for Exploring Faculty Needs Related to Program Assessment Workload

Serena Pontenila, Ph.D., Emily Stephens, M.S., Nathan C Anderson, Ph.D.

Author Note

Serena Pontenila, https://orcid.org/0009-0005-1850-8739
Emily Stephens, https://orcid.org/0009-0002-4641-8018
Nathan C Anderson, https://orcid.org/0000-0002-4728-8967
We have no conflicts of interest to disclose

Intersection: A Journal at the Intersection of Assessment and Learning
Early View

Abstract: This paper begins by establishing the A+ Inquiry model as a theoretical lens for assessing needs related to program assessment workload by demonstrating its alignment with elements of five published frameworks associated with higher education assessment. Then, it uses the model as a frame of reference to explore faculty needs related to program assessment workload. The study examines faculty perceptions associated with five areas related to program assessment: time commitment, processes, impact, barriers, and recommendations. Quantitative and qualitative data were collected by administering an online survey to all faculty across the institution. Results revealed an average amount of time that faculty spend on program assessment efforts, tasks in assessment processes reflecting the highest and lowest levels of faculty satisfaction, a gap between perceptions of potential and actual impact of program assessment, four themes related to barriers inhibiting program assessment, and four themes related to recommendations for improving program assessment.

Keywords: *needs assessment, program assessment, program evaluation*

Introduction

Program assessment helps academic programs ensure that students are learning what they are intended to learn across the entire curriculum (Allen, 2003; Miller & Leskes, 2005). Assessing a program is often easier said than done, however, as many considerations and tasks need to be addressed to ensure the process is feasible and yields meaningful results (Banta, 2002; Hutchings, 2019). Hundley and Keith (2023b) stated that "for assessment to realize its fullest potential, leadership should insist on using credible evidence to effectively inform subsequent interventions" (p. 205). Banta and Palomba (2015) emphasized that effective program assessment relies on the generation and use of credible evidence related to resource utilization, program implementation, and outcome achievement to continuously improve programming in ways that promote student development. These areas of emphasis align with elements of comprehensive program evaluation processes, which focus on using evidence to assess the needs for a program, the theory of the program's design, the process of implementing the program, the outcomes achieved through the program, and the efficiency of resources required for the program (Anderson, 2022b; Rossi et al., 2004). Banta (2002) acknowledged the parallels between using evidence for program evaluation and using evidence for

higher education assessment by indicating that the term program evaluation is "often used interchangeably with the term assessment in higher education" (p. 289).

Implementing a comprehensive program assessment strategy is likely to affect faculty workload because generating credible evidence requires programs to intentionally allocate time, energy, funds, and other resources toward the development and application of worthwhile assessment strategies. If a program has not designed a meaningful or feasibly implementable assessment strategy or has not designated sufficient tangible and intangible resources to support program assessment practices, it has a greater risk of not adequately addressing one or more stages of a complete assessment cycle. Consequently, the program faces a challenge of potentially not using assessment results to influence positive change (Horst & Prendergast, 2020; Pike, 2002), which could cause faculty to perceive program assessment activities to be a waste of time (Bennett et al., 2023).

Purpose

The purpose of this paper is twofold: First, it establishes the *A+ Inquiry* model as a theoretical lens for assessing needs regarding program assessment workload. Then, it demonstrates how a small, Midwestern, Master's-level university used *A+ Inquiry* to develop and implement a study to explore needs related to program assessment workload at its institution. The study specifically sought to answer the following research questions (RQs):

- RQ1: How much time do faculty spend on tasks related to program assessment?
- RQ2: How satisfied are faculty with program assessment processes?
- RQ3: To what extent do faculty believe that program assessment has an impact?
- RQ4: What barriers inhibit effective implementation of program assessment?
- RQ5: What recommendations do faculty have for improving program assessment?

Significance

The institution studied in this paper had an academic assessment policy stating that all programs were required to submit a yearly program assessment (YPA) report and plan by October 1st each year. Historically, most YPAs had been submitted after the target due date, and some YPAs had even been submitted as late as a few years after the deadline. A review of anecdotal evidence in the form of comments from some department chairs and other faculty who were responsible for preparing and submitting YPAs suggested that submission delays may have been due to the time, energy, and focus required to implement assessment-related tasks. Such concerns with the amount of time required for assessment-related tasks echo the results of a prior needs assessment conducted by the institution, which revealed a need to improve the efficiency of assessment practices (Anderson, 2022a). The Academic Assessment Committee (AAC) acknowledged and discussed the concerns regarding program assessment workload at one of its regularly scheduled meetings and determined it would be helpful to learn more about faculty perceptions across the institution related to program assessment time commitment, processes, impact, barriers, and recommendations for improvement. They formed a small subcommittee to design and conduct the current study to explore the areas further.

As the university establishes a deeper understanding of faculty needs related to program assessment workload, it will become better positioned to explore and implement training, tools, resources, and other strategies for improving program assessment methods across the institution. As program assessment methods improve, assessment efficiency is likely to improve, which could help faculty more appropriately balance their program assessment responsibilities with the other responsibilities of their role. This could lead to improvements to faculty satisfaction with their work and faculty utilization of evidence to promote effective student learning and program operations.

Faculty Perceptions of Assessment

Faculty involvement in program assessment is, in part, influenced by their perceptions of assessment (Emil & Cress, 2014). If faculty perceive assessment through a positive lens, they are more likely to willingly participate in assessment practices than if their outlook is negative. Their perceptions may be influenced by a variety of factors, including their philosophical perspectives as well as an institution's leadership and culture of assessment. Examples of factors that positively influence faculty perceptions of program assessment include being adequately trained in its practices, understanding the benefits of assessment, seeing evidence of how program assessment informs quality decisions, contributing to the development of assessment plans, and having ample time and resources to implement assessment practices (Caudle & Hammons, 2018). Potential barriers to participation in program assessment include a weak culture of assessment, poorly structured assessment processes and systems, and limited time and resources (Nunley et al., 2011). Institutions can promote faculty buy-in to assessment practices by supporting faculty in their development of sufficient assessment abilities and helping ensure that faculty consider it to be useful, interesting, and important (Sujitparapitaya, 2014).

Theoretical Framework

This section provides an overview of *A+ Inquiry* and establishes the framework as a conceptual model for planning and conducting the current study by demonstrating its connections to other frameworks associated with higher education assessment.

Overview of A+ Inquiry

A+ Inquiry is a broadly applicable disciplined inquiry framework that can help facilitate processes of strategically answering questions that matter (Anderson et al., 2014; Anderson, 2022b). It may be used for purposes such as planning or conducting a study, diagnosing gaps in inquiry processes, telling an evidence-based story, providing rationale for making decisions or taking actions, or establishing common language for discussing various forms of inquiry.

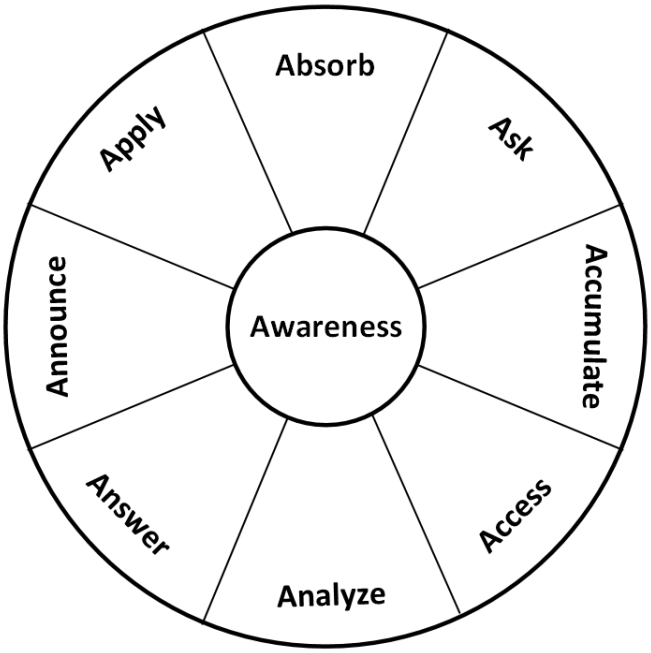
The model synthesizes common stages of inquiry processes, such as assessment, evaluation, and research. Although assessment, evaluation, and research tend to serve unique purposes, they all include stages related to identifying a need for more knowledge or understanding about something, formulating questions to guide a study that could help produce the missing knowledge or understanding, collecting and analyzing data in ways that respond to the questions, sharing the results

with applicable audiences when appropriate, and making decisions based on the findings (e.g., Booth et al., 2008; Borden, 2002; Rossi et al., 2004; Russ-Eft & Preskill, 2009).

A+ Inquiry leverages visualization (Gilbert, 2008; Tufte, 1990; Ware, 2000) and alliteration (Bryant et al., 1990; Lea et al., 2008; Stoll, 1940) to help strengthen understanding of stages that are included in comprehensive inquiry cycles and how they are connected to each other. The model is depicted as a cycle with eight stages bound by a hub in the center (Figure 1). The stages and hub begin with the letter A. The stages include *Absorb*, *Ask*, *Accumulate*, *Access*, *Analyze*, *Answer*, *Announce*, and *Apply*. The hub in the center is *Awareness*.

Figure 1

A+ Inquiry Diagram



Note: Adapted from "Disciplined inquiry: Using the A+ Inquiry framework as a tool for eliminating data hoarding, mindless decision-making, and other barriers to effective ESA programming," by N. C. Anderson, M. R. Brockel, and T. E. Kana, 2014, *Perspectives: A Journal of Research and Opinion About Educational Service Agencies, 20*(3).

The diagram in Figure 1 portrays the stages in a sequential order; however, the stages may not always be addressed in the same order that they are displayed. In many cases, the same stage may need to be addressed multiple times during an inquiry process. Here is a brief description of each stage.

- *Absorb*: Identify what is known and not known, yet is important to know about a context (i.e., a knowledge gap).
- *Ask*: Formulate one or more questions that, if answered, could help fill the knowledge gap identified in the Absorb stage.
- *Accumulate*: Collect primary data or verify prior collection of secondary data that could help answer the questions posed in the Ask stage.
- *Access*: Retrieve accumulated data from where they are stored or otherwise available.
- *Analyze*: Conduct analysis of the data using quantitative and/or qualitative methods.
- *Answer*: Respond to the question(s) posed in the Ask stage, identify limitations of the results, and make conclusions.
- *Announce*: Communicate the results and other applicable information to and with stakeholders as appropriate.
- *Apply:* Make decisions and take action based on the results.
- *Awareness*: When performing tasks in one stage, remain attentive to how they align with the other stages.

Alignment Between A+ Inquiry and Higher Education Assessment

Several frameworks supporting higher education assessment have been established in the literature (e.g., Cicchino et al., 2023; Gustafson et al., 2014; Horst & Prendergast, 2020; Pike, 2002; Shermis & Daniels, 2002). The frameworks aligned with *A+ Inquiry* in this section were selected for alignment due to their publication in reputable sources associated with program assessment. For example, Pike's (2002) elements of good assessment and Shermis and Daniels's (2002) research cycle both appear in Banta's (2002) book, *Building a Scholarship of Assessment*, which had been cited 479 times according to Google Scholar as of the date when this manuscript was prepared. Gustafson et al.'s (2014) Academic Assessment Cycle and Horst and Prendergast's (2022) Assessment Skills Framework both appear in the journal, *Research & Practice in Assessment*, which is committed to advancing scholarly discussion amongst higher education assessment researchers and practitioners and, at the time of this manuscript, included 18 published volumes between 2006 and 2023 (Virginia Assessment Group, n.d.). Cicchino et al.'s (2023) Assessment Cycle appeared in *Trends in assessment: Ideas, opportunities, and issues for higher education*, which was "informed, in part, by sessions at the Assessment Institute in Indianapolis, the oldest and largest U.S. event focused on assessing and improving higher education" (Hundley & Keith, 2023b, p. i).

Tables 1-6 demonstrate how the *A+ Inquiry* model aligns with Pike's (2002) elements of good assessment, Shermis and Daniels's (2002) Research Cycle, Gustafson et al.'s (2014) Academic Assessment Cycle, Horst and Prendergast's (2020) Assessment Skills Framework, and Cicchino et al.'s (2023) Assessment Cycle. Table 1 demonstrates which *A+ Inquiry* stages are generally reflected in a high-level interpretation of the key elements within each assessment framework. Tables 2-6 align specific attributes of each framework with specific *A+ Inquiry* stages. The alignment between the *A+ Inquiry* framework and other assessment frameworks occurred through a multi-stage process. The third author initially identified which *A+ Inquiry* stage(s) were related to each element of each

framework using a priori codes (Miles et al., 2020) based on the *A+ Inquiry* stages. Then, the third author presented the initial alignment to the other members of the research team, and they discussed and modified the relationships as needed until they all agreed on the alignment outlined in this manuscript.

Table 1

A+ Inquiry Stages by Assessment Framework

A+ Inquiry	Pike (2002)	Shermis & Daniels (2002)	Gustafson et al. (2014)	Horst & Prendergast (2020)	Cicchino et al. (2023)
Absorb	x	x	x	x	x
Ask	x	x	x	x	x
Accumulate	x	x	x	x	x
Access	x	x	x	x	
Analyze	x	x	x	x	x
Answer		x	x	x	
Announce	x	x		x	
Apply		x	x	x	x

Pike's (2002) Elements of Good Assessment are aligned with the *Absorb*, *Ask*, *Accumulate*, *Access*, *Analyze*, and *Announce* stages (Table 2). The first element of asking good questions is related to formulating questions in the *Ask* stage based on an important knowledge gap revealed in the Absorb stage. The second, third, and fourth elements of selecting representative participants, using appropriate measures, and identifying appropriate methods are all associated with attributes of data collection represented by the *Accumulate* stage. The fourth element of identifying appropriate methods is also related to ensuring the data are retrievable in the *Access* stage after they have been collected and implementing appropriate data analysis techniques in the *Analyze* stage. The fifth element of communicating results aligns with tasks related to disseminating and discussing results in the *Announce* stage.

Table 2

A+ Inquiry Aligned with Pike's Elements of Good Assessment

Pike (2002, p.131)	A+ Inquiry
1. Asking good questions	Absorb, Ask
2. Selecting representative participants	Accumulate
3. Using appropriate measures	Accumulate
4. Identifying appropriate methods	Accumulate, Access, Analyze
5. Communicating results	Announce

Shermis and Daniels's (2002) Research Cycle steps are aligned with all *A+ Inquiry* stages (Table 3). Step 1, state the general issue or problem, relates to identifying the knowledge gap in the *Absorb* stage. Step 2, find out what others have learned, and step 2a, define the target population, relate to identifying what is already known about the context in the *Absorb* stage. Step 3, specify the objectives/hypotheses, relates to identifying what new knowledge or understanding needs to be created in the *Absorb* stage and then converting the knowledge gap – in this case, not knowing whether the objectives/hypotheses are being achieved – into guiding questions for further exploration in the *Ask* stage. Step 3a, specify sample design, relates to selecting participants in the *Accumulate* stage. Step 4, define the operational plan and specify variables, is associated with specifying which type of data need to be collected and how the data will be collected in the *Accumulate* stage. Step 4a, implement the sample selection procedures, and step 5, data collection strategies, also represent the *Accumulate* stage. Step 7, analyze data and interpret results, relates to conducting analysis of the data in the *Analyze* stage and responding to the *Ask* stage questions in the *Answer* stage and identifying limitations and implications of the results. Step 8, prepare reports, presentations, press release, occurs in the *Announce* stage when preparing the results from the *Answer* stage for distribution to applicable stakeholders. Step 9, disseminate and help others use results, is related to the dissemination of results in the *Announce* stage and the decisions and actions informed by the results in the *Apply* stage.

Table 3

A+ Inquiry Aligned with Shermis and Daniels's Research Cycle

Shermis and Daniels (2002, p.149)	A+ Inquiry
1. State the general issue or problem	Absorb
2. Find out what others have learned	Absorb
2a. Define the target population	Absorb
3. Specify the objectives/hypotheses	Absorb, Ask
3a. Specify sample design	Accumulate
4. Define the operational plan and specify variables	Accumulate
4a. Implement the sample selection procedures	Accumulate
5. Data collection strategies	Accumulate
6. Data analysis preparation	Access, Analyze
7. Analyze data and interpret results	Analyze, Answer
8. Prepare reports, presentations, press release	Answer, Announce
9. Disseminate and help others use results	Announce, Apply

The steps in Gustafson et al.'s (2014) Academic Assessment Cycle are grouped into four categories and align with all stages of the *A+ Inquiry* framework (Table 4). The four categories are Student Learning/Customer Service Outcomes, Gathering of Assessment Data, Analysis of Findings, and

Resulting Program Changes. The steps in the Student Learning/Customer Service Outcomes category focus on establishing outcomes to be assessed and planning data collection methods, which relate to identifying a need to know more about something in the *Absorb* stage – in this case, a need to know the extent to which the outcomes are being achieved, converting the knowledge gap related to outcomes into questions that are answerable with data in the *Ask* stage, creating a plan for data collection in the *Accumulate* stage and ensuring the data can be retrieved in the *Access* stage after they are collected, and developing a strategy for analyzing the data in the *Analyze* stage. The steps in the gathering of assessment data category relate to implementing the data collection plan in the *Accumulate* stage. The steps in the Analysis of the Findings category relate to implementing the data analysis strategy in the *Analyze* stage and interpreting the results of the analysis in the *Answer* stage. The steps in the *Resulting Program Changes* category relate to disseminating assessment results in the *Announce* stage and taking actions in response to assessment results in the *Apply* stage.

Table 4

A+ Inquiry Aligned with Gustafson et al.'s Academic Assessment Cycle

Gustafson et al. (2014, p.72)	A+ Inquiry
Student Learning/Customer Service Outcomes	Absorb, Ask, Accumulate, Access, Analyze
Gathering of Assessment Data	Accumulate
Analysis of the Findings	Analyze, Answer
Resulting Program Changes	Announce, Apply

Horst and Prendergast's (2020) categories of domains in their Assessment Skills Framework align with all stages of the *A+ Inquiry* framework (Table 5). The *prerequisite knowledge* category relates to identifying what is already known about the context in the *Absorb* stage. *The foundational assessment knowledge and skills* category relates to knowing how to explain and navigate the nuances of a comprehensive assessment process reflected by the complete *A+ Inquiry* model. Skill area 1, *specify student learning outcomes*, aligns with identifying a knowledge gap in the *Absorb* stage reflecting a need to know more about the extent to which student learning outcomes were achieved and then converting the knowledge gap in the *Ask* stage to questions that could be answerable with data. Skill area 2, *create and map programming to outcomes*, is related to establishing the setting and activities required for data collection in the *Accumulate* stage. Skill area 3, *select and design instruments*, is related to determining which instruments will be utilized for data collection in the *Accumulate* stage. Skill area 4, *examine implementation fidelity*, represents all stages of the A+ Inquiry framework. For example:

- Absorb: A program is being implemented, but the fidelity of its implementation is unknown.
- Ask: To what extent is the program being implemented with fidelity?
- Accumulate: Collect implementation fidelity data.
- Access: Retrieve collected fidelity data in preparation for analysis.
- Analyze: Analyze fidelity data in relation to the question posed in the Ask stage.

- Answer: Respond to the question, "To what extent is the program being implemented with fidelity?" based on the data analysis results.
- Announce: Share and discuss the implementation fidelity findings with applicable stakeholders.
- Apply: Make decisions related to program implementation based on the results.

Skill area 5, *collect outcomes information*, relates to implementing data collection methods in the *Accumulate* stage. Skill area 6, *analyze data, interpret and report results, & maintain information*, relates to conducting analysis of the data in the *Analyze* stage, making meaning of the results in the *Answer* stage, distributing the results to applicable audiences and locations in the *Announce* stage. Skill area 7, *use results to improve student learning*, relates to making decisions and taking actions to support positive changes in the *Apply* stage. Skill area 8, *assessment in practice – additional skills for assessment*, relates to knowing, promoting, and effectively implementing comprehensive, high-quality assessment strategies encompassing all stages of the *A+ Inquiry* model.

Table 5

A+ Inquiry Aligned with Horst and Prendergast's Assessment Skills Framework

Horst and Prendergast (2020, p. 3.)	A+ Inquiry
Prerequisite knowledge	Absorb
Foundational assessment knowledge and skills	All
Skill Area 1: Specify student learning outcomes	Absorb, Ask
Skill Area 2: Create and map programming to outcomes	Accumulate
Skill Area 3: Select and design instruments	Accumulate
Skill Area 4: Examine implementation fidelity	All
Skill Area 5: Collect outcomes information	Accumulate
Skill Area 6: Analyze data, interpret and report results, & maintain information	Analyze, Answer, Announce
Skill Area 7: Use results to improve student learning	Apply
Skill Area 8: Assessment in practice – additional skills for assessment	All

The elements of Cicchino et al.'s (2023) Assessment Cycle align with the *Absorb*, *Ask*, *Accumulate, Analyze*, and *Apply* stages (Table 6). The first element, *learning is designed based on student learning objectives or outcomes*, relates to identifying a need for more knowledge in the *Absorb* stage related to whether the objectives or outcomes are being achieved, converting the knowledge gap into key assessment questions in the *Ask* stage that are possible to answer with data, and creating learning activities to be implemented in the *Accumulate* stage as a component of the data collection procedure. The second element, in the context of redesigned learning, students demonstrate knowledge and skills by creating assessable artifacts, relates to the data collection procedure in the *Accumulate* stage as students demonstrate or produce something tangible that can be measured with an assessment instrument. The third element, *standards and evaluation tools are created to evaluate these artifacts*

and these tools are normed across reviewers, relates to the instruments utilized to collect data in the *Accumulate* stage. The fourth element, *student achievement of the learning objective is evaluated*, is related to using the assessment instrument to assign a value that reflects the level of student performance related to what they produced or otherwise demonstrated. The fifth element, *assessment data is analyzed*, relates to conducting analysis of the assessment in the *Analyze* stage and using the results in the *Answer* stage to generate findings that respond to the key assessment questions posed in the *Ask* stage. The sixth element, interventions (adjustments to design and delivery of learning activities) are planned and implemented, represents decisions made and actions taken in the *Apply* stage.

Table 6

A+ Inquiry Aligned with Cicchino et al.'s Assessment Cycle

Cicchino et al. (2023, p. 50)	A+ Inquiry
1. Learning is designed based on student learning objectives or outcomes	Absorb, Ask, Accumulate
2. In the context of redesigned learning, students demonstrate knowledge and skills by creating assessable	Accumulate
3. Standards and evaluation tools are created to evaluate these artifacts and these tools are normed across	Accumulate
4. Student achievement of the learning objectives is evaluated	Accumulate
5. Assessment data is analyzed	Analyze, Answer
6. Interventions (adjustments to design and delivery of learning activities) are planned and implemented	Apply

A+ Inquiry Example of Student Learning Outcome Assessment

A+ Inquiry may be utilized to support the planning and implementation of methods to assess student learning outcomes. The following example summarizes the assessment of a student learning outcome for a fictitious Bachelor of Science (BS) in Disciplined Inquiry program through an *A+ Inquiry* lens.

- *Absorb:* The BS Disciplined Inquiry program prepares students to develop and lead research, evaluation, and assessment strategies in a variety of career fields. One of the program's student learning outcomes (SLOs) is SLO 2.1: Students will formulate questions that can be answered through disciplined inquiry. The program set a target for 80% of students to achieve success in formulating answerable questions. The program would like to know more about how well it prepares students to formulate answerable questions in relation to its target.

- *Ask:* The program formulates the following question in relation to the knowledge gap identified in the *Absorb* stage: To what extent is the program's target being achieved? More specifically,

to what extent is there a difference between the program's target (80%) and the actual percentage of students demonstrating success in formulating answerable questions?

- *Accumulate*: Students in Inquiry (INQ) 495 prepare a capstone paper with a section requiring them to write questions that could be answered through assessment, evaluation, or research processes. The professor scores the answerable questions section of each student's capstone paper on a scale from 1-4 using the Disciplined Inquiry Capstone Project Rubric. If a student scores a 3 or higher, they are considered successful. The professor submits each score in an online rubric form that automatically compiles the scores in a spreadsheet upon submission.
- *Access*: The professor receives the capstone rubric scores from the spreadsheet where they were automatically stored upon submission of the online rubric forms.
- *Analyze*: The professor calculates the number of students assessed and the number of students scoring at least 3. They divide the number scoring a 3 by the number of total students to calculate the actual percentage of students achieving success. Then, they calculate the difference between the actual and target percentages.
- *Answer*: The professor documents the actual and target percentages and the percentage point difference between them. They write a narrative interpretation of the results, which describes the limitations and implications of the results.
- *Announce*: The professor disseminates a summary of the results to program faculty through an email, a program meeting, or other channel of communication; to the wider campus community and office of institutional assessment through a yearly program assessment report; and to the external program reviewers through a self-study. The results are discussed with stakeholders as appropriate.
- *Apply*: The program makes decisions related to program content, delivery, and/or assessment methods based on the program assessment results related to SLO 2.1.
- *Awareness*: The BS Disciplined Inquiry program demonstrated awareness of all stages of the *A+ Inquiry* model as they navigated a comprehensive process of collecting and analyzing data to fill an important knowledge gap that helped inform decisions related to program effectiveness.

Summary

This section provided an overview of the *A+ Inquiry* framework, aligned its stages with key attributes of higher education assessment frameworks, and demonstrated how it could be utilized to summarize a comprehensive process of assessing a student learning outcome. The alignment and example collectively help establish *A+ Inquiry* as a conceptual lens for assessing faculty needs related to program assessment workload.

Method of Inquiry

The current study is classified as a needs assessment since it focused on identifying areas where needs exist as well as potential solutions that could help respond to the needs (Fitzpatrick et al., 2023; Cuiccio

& Husby-Slater, 2018; Salant & Dillman, 1994). It utilized an online survey to collect data that could help answer the five research questions guiding this study.

Sample

The sample included 92 faculty members that were sent a link to an online survey. The survey was open from March 15, 2024, to April 29, 2024. The survey link was sent to all full-time and part-time faculty members, which was 336 in total. Qualtrics was used to create and regulate the survey. The options "by invitation only" was enabled and "allow duplicate responses" was disabled to avoid duplicate or multiple responses from faculty. This approach resulted in 92 responses. The number of responses that included complete answers varied by the question and are included in the description of the research question responses. Due to the univariate nature of the research questions, the responses were analyzed using descriptive statistics to determine the mean of the overarching question, the frequency distribution of the overarching question, and, when applicable, the mean of each sub-question using Microsoft Excel (Bhattacherjee, 2019).

Instrument

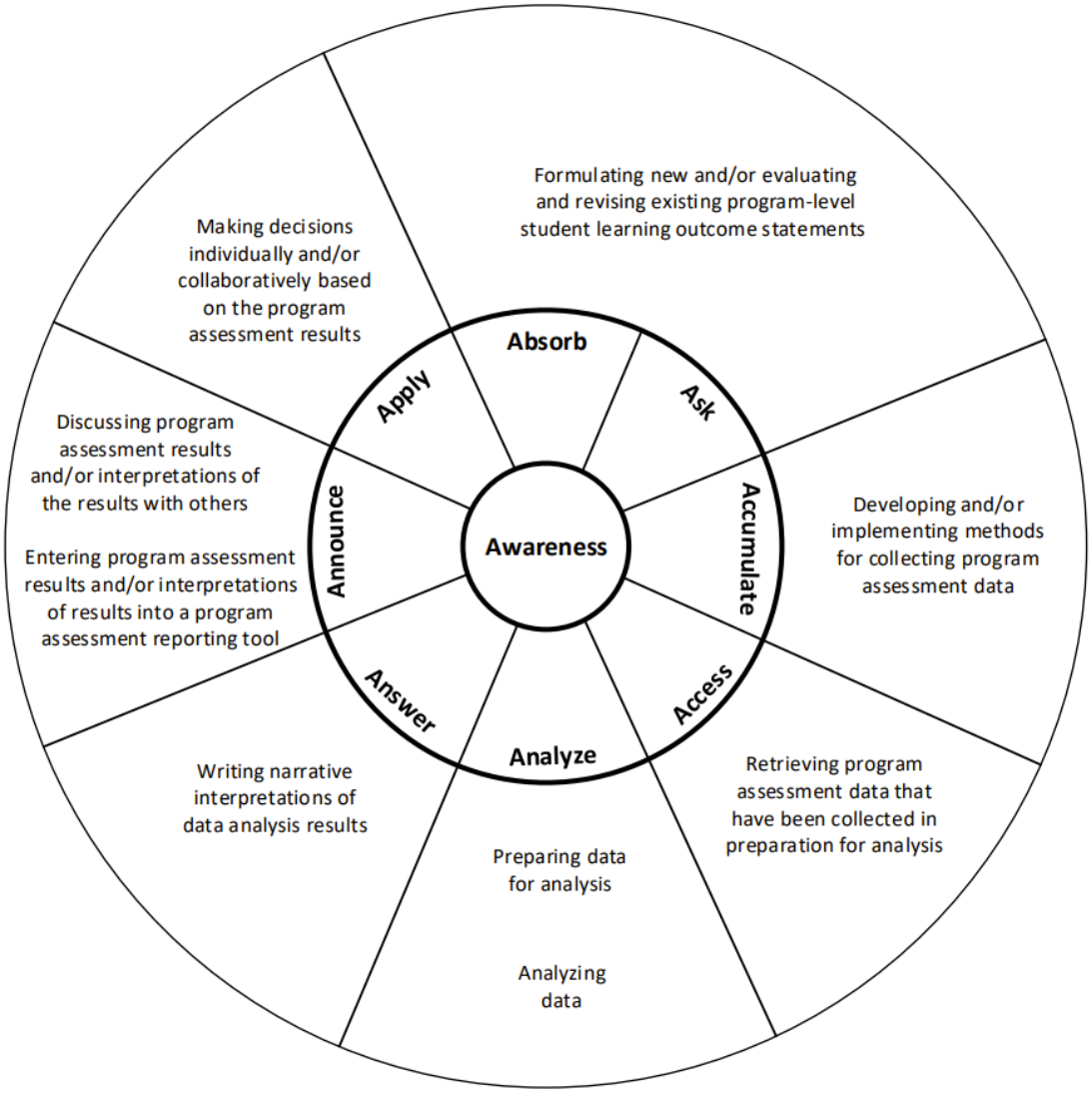
The survey was created using a combination of close-ended and open-ended questions that were written to collect specific information related to the research questions (Kasunic, 2005; Salant & Dillman, 1994). The survey included four demographic items, three items related to RQ 1, 10 Likert-type items related to RQ 2, four Likert-type items related to RQ 3, one open-ended item related to RQ 4, and one open-ended item related to RQ 5. See the Appendix for the complete survey. This study utilized the *A+ Inquiry* framework as a theoretical lens to write the survey items related to RQs 1-5. Connections between the *A+ Inquiry* framework and each RQ are described here.

The survey items for RQ 1 were intended to yield information related to how much time faculty spend on tasks related to program assessment. Although the survey items related to RQ 1 only generally represent program assessment and do not capture details related to specific assessment tasks, any assessment-related task or set of tasks that faculty would have considered as they formulated their response to the survey would have likely aligned with one or more of the *A+ Inquiry* stages.

The survey items for RQ 2 were intended to yield information related to the level at which faculty are satisfied with program assessment related tasks. The *A+ Inquiry* stages informed the development of the task-oriented statements. The alignment between the stages and the survey items related to RQ 2 is depicted in Figure 2. The stages appear in the inner ring, and the survey items are listed in the outer ring.

Figure 2

A+ Inquiry Alignment with Survey Items Related to RQ2



One item is aligned with the *Absorb* and *Ask* stages: Formulating new and/or evaluating and revising existing program-level student learning outcome statements. The outcome statement reflects a knowledge gap that program would be filling through a program assessment process. For example, in this stage, the program establishes an outcome statement, but it does not know whether the students are achieving the outcome. The knowledge gap of not knowing if the outcome is being achieved may be converted to a question in the *Ask* stage—e.g., To what extent is the outcome being achieved?—which helps guide the assessment process. One item is aligned with the *Accumulate* stage: Developing and/or implementing methods (e.g., instruments, data collection procedures) for collecting program assessment data. One item is aligned with the *Access* stage: Retrieving program assessment data that have been collected in preparation for analysis. Two items are aligned with the *Analyze* stage:

Preparing data for analysis; and analyzing data. One item is aligned with the *Answer* stage: Writing narrative interpretations of data analysis results. Two items are aligned with the *Announce* stage: Entering program assessment results and/or interpretations of the results into a program assessment reporting tool; and Discussing program assessment results and/or interpretations of the results with others. One item is aligned with the *Apply* stage: Making decisions individually and/or collaboratively based on the program assessment results. No items were explicitly aligned with the *Awareness* hub; however, the researchers demonstrated awareness of all stages in the *A+ Inquiry* framework by ensuring that each stage was aligned with at least one item.

The instrument development process included stages for establishing face and content validity (Cohen et al., 2018). Face validity was established by the research team—all of whom were current assessment practitioners—collectively developing the initial iteration of the survey items and then sharing them with the Academic Assessment Committee for review and approval. As face validity was being established, the research team worked on establishing content validity by aligning the survey items with the stages of the *A+ Inquiry* framework. Given that the *A+ Inquiry* stages had been aligned with multiple published higher education assessment frameworks, aligning the survey items with *A+ Inquiry* helped ensure they reflected practices recognized in scholarly assessment literature. To determine reliability, Cronbach's alpha was calculated using the Anova: Two-Factor Without Replication function in Microsoft Excel and then dividing the Error Mean Squared (*MS*) by the Rows *MS*. Cronbach's alpha was selected to determine reliability because it is common practice in research to determine reliability by looking at internal consistency (Taber, 2018).

Data Analysis

The quantitative data for RQs 1-3 were analyzed by calculating descriptive statistics, such as frequencies and measures of central tendency (Cohen et al., 2018). The qualitative data for RQs 4-5 were analyzed by reading and coding the responses to identify themes related to each research question (Cresswell, 2014; Miles et al., 2020; Ngulube, 2015). In Vivo Coding, a qualitative analysis method in which words or short phrases are extracted from the participants' responses, was completed to develop a concise set of themes and sub-themes from responses to RQ4 and RQ5 (Creswell, 2014; Miles, et al., 2020). Participants' responses were coded and integrated into corresponding themes, ensuring their perspectives remained authentic and central to the analysis. The coding process involved reviewing participants' exact responses to open-ended survey questions, identifying common codes, and allowing themes and sub-themes to emerge. Initial coding was completed by the second author, followed by first and third author analysis to ensure alignment between codes, themes, and sub-themes.

Results

Of the 92 respondents, 55 answered questions related to time spent on program assessment tasks, satisfaction with assessment processes, and perceived impact of assessment activities. Of the 55 participants, 49 were full-time and tenured or tenure-track faculty, and 6 were part-time faculty. The

results of the data analysis are presented in relation to the research questions that address time spent on program assessment tasks, satisfaction with program assessment processes, perceived impact of program assessment, barriers inhibiting program assessment, and recommendations for improving program assessment.

Time Spent on Program Assessment Tasks

RQ1 focused on the amount of time that faculty spent on tasks related to program assessment. Two survey questions addressed RQ1. The first question asked the number of hours that faculty expected to spend on all tasks, and the second question asked the percentage of time faculty expected to spend on assessment tasks. The mean number of hours that faculty expected to spend on all tasks was 1,586.06 per year, the median amount of hours that faculty expected to spend on all tasks was 1725 per year, and the standard deviation was 847.34. The mean percentage of time that faculty expected to spend on assessment tasks was 13.04, the median percentage was 10, and the standard deviation was 11.10. The means were multiplied to determine the amount of time in hours that faculty expected to spend on assessment tasks. The result was 206.82 hours per year or 6.46 hours per week based on a 32-week academic year.

Satisfaction With Program Assessment Processes

RQ2 focused on faculty satisfaction with processes related to program assessment. To calculate means, responses were replaced with numerical values as follows:

- The response, I do not implement this task, was replaced with a null value so it did not affect the means of those who did implement the task.
- The response, Highly dissatisfied, was replaced with 1.
- The response, Dissatisfied, was replaced with 2.
- The response, Satisfied, was replaced with 3.
- The response, Highly satisfied, was replaced with 4.

The mean value for satisfaction of all tasks was 2.69. Table 7 depicts the number of complete responses by satisfaction level for all tasks.

Table 7

Total Responses by Satisfaction Level for All Tasks

Response	***n***	***%***
Highly Dissatisfied	38	9%
Dissatisfied	110	26%
Satisfied	220	52%
Highly Satisfied	54	13%
Grand Total	422	100%

The table provides an overview of the satisfaction levels in response to all the questions associated with RQ2: How satisfied are faculty with program assessment processes? The overall mean for satisfaction with program assessment processes was 2.69 with a *SD* of .83. The 10-item instrument used to measure process-oriented tasks met the researchers' expectations by demonstrating high reliability with a Cronbach's alpha coefficient of .95.

Table 8 depicts the percentage of respondents marking satisfied or highly satisfied as well as the mean response, with values 1, 2, 3, and 4 for the question, "To what extent are you satisfied or dissatisfied with your process of implementing each of the following tasks related to the specific purpose of program-level assessment?"

Table 8

Percent Satisfied or Highly Satisfied and Mean by Task

Task	***n***	***%***	***M***	***SD***
Formulating new and/or evaluating and revising existing program-level student learning outcome statements	43	77%	2.84	.75
Developing and/or implementing methods (e.g., instruments, data collection procedures) for collecting program assessment data	44	57%	2.61	.78
Retrieving program assessment data that have been collected in preparation for analysis	43	65%	2.65	.84
Preparing data for analysis	43	65%	2.65	.87
Analyzing data	42	67%	2.76	.82
Writing narrative interpretations of data analysis results	42	62%	2.69	.81
Entering program assessment results and/or interpretations of the results into a program assessment reporting tool	37	62%	2.54	.87
Discussing program assessment results and/or interpretations of the results with others	44	66%	2.73	.79
Making decisions individually and/or collaboratively based on the program assessment results	43	65%	2.72	.85
Other program assessment tasks	41	63%	2.66	.91

Perceived Impact of Program Assessment

RQ3 focused on faculty perceptions of program assessment impact. The instrument used measures to determine the perceived potential impact and the perceived actual impact. To calculate means for potential impact, responses were replaced with numerical values as follows:

- Null responses were not included.
- The response, No potential, was replaced with 1.
- The response, Low potential, was replaced with 2.
- The response, Moderate potential, was replaced with 3.
- The response, High potential, was replaced with 4.

The mean value for both potential impact questions was 3.02 and *SD* was .831. The 4-item instrument used to measure impact met the researchers' expectations by demonstrating acceptable reliability with a Cronbach's alpha coefficient of .71. Table 9 depicts the number of responses by level of potential for the impact of assessment, and Table 10 includes the percentage of respondents marking moderate potential or high potential and the mean response by type of assessment.

Table 9

Perceived Potential Impact of Assessment – Student Learning and Operations Combined

Response	***n***	***%***
No Potential	4	4%
Low Potential	24	22%
Moderate Potential	46	43%
High Potential	34	31%
Grand Total	108	100%

Table 10

Combined Percent Moderate or High Potential and Mean by Assessment Type

Question	***n***	***%***	***M***	***SD***
To what extent do you believe that effective program-level assessment methods have potential to positively impact STUDENT LEARNING within an academic program?	54	80%	3.13	.825
To what extent do you believe that effective program-level assessment methods have potential to positively impact the OPERATIONS of an academic program?	54	69%	2.91	.830

To calculate means for actual impact, responses were replaced with numerical values as follows:

- Null responses were not included.
- The response, Highly negative impact, was replaced with 1.

- The response, Negative impact, was replaced with 2.
- The response, No impact, was replaced with 3.
- The response, Positive impact, was replaced with 4.
- The response, Highly positive impact, was replaced with 5.

The mean value for both perceived actual impact questions was 3.56 with a *SD* of .713. Table 11 depicts the number of responses by perceived level of actual impact of assessment for student learning and operational assessment combined, and Table 12 includes the percentage of respondents marking positive impact or highly positive impact and the mean response by type of assessment.

Table 11

Perceived Actual Impact of Assessment – Student Learning and Operations Combined

Response	***n***	***%***
Highly negative impact	1	<1%
Negative impact	4	2%
No impact	43	34%
Positive impact	53	55%
Highly positive impact	7	9%
Grand Total	108	100%

Table 12

Percent Positive or Highly Positive Actual Impact and Mean by Assessment Type

Question	***n***	***%***	***M***	***SD***
To what extent do you believe that yearly program assessment actually impacts STUDENT LEARNING within your program?	54	60%	3.63	.70
To what extent do you believe that yearly program assessment actually impacts the OPERATIONS of your program?	54	52%	3.50	.72

Barriers Inhibiting Program Assessment

RQ4 focused on faculty perceptions of barriers. Participants were asked to provide open-ended responses regarding barriers that may inhibit effective implementation of program assessment. Participants' responses were coded and integrated within the following themes: complexity and misalignment; resource limitations; lack of integration and clarity; and faculty engagement/interest. See Table 13 for a synthesis of themes and sub-themes. Results indicated effective implementation of program assessment is inhibited by several key barriers.

Table 13

Barriers Inhibiting Program Assessment by Number of Quotes

Themes	Sub-Themes	*n*
Complexity and Misalignment	Setting goals; managing data; measuring outcomes; changing implementation	11
Resource Limitations	Time constraints; staffing shortages; large workloads with limited capacity to complete assessment tasks	24
Lack of Integration and Clarity	Lack of training on assessment processes; unclear expectations	11
Faculty Engagement and Interest	Faculty buy-in; levels of engagement; effort expelled towards program assessment tasks	7

Complexity and Misalignment

Participants consistently highlighted the complexity and misalignment of assessment processes as a barrier inhibiting program assessment processes (n=11). Supporting evidence within this theme included difficulty with data collection and analyses, lack of time to appropriately analyze the data for meaningful and informed practice, ensuring data is interpretable, ensuring the data from program assessment supports teaching and learning, setting appropriate goals for program assessment, and how to understand and use data to make programmatic changes. One participant stated, “not enough time to collect, analyze and report data and not enough time to sit with the results and work with them to make changes or improvements to the department”, while another participant reported: Many faculty do not have a good understanding of program evaluation and how to ensure that data are interpretable. I see many faculty wanting to look at raw data and try to draw conclusions through “brainstorming” rather than using actual factual, interpretable data to draw factual conclusions by using acceptable analysis procedures.

Resource Limitations

Resource limitations were the most common barriers reported across responses (n=24). Time constraints, staffing shortages, and unmanageable workloads were commonly reported as barriers that inhibit program assessment. Lack of time was the most common response (n=15). Workloads seem to be already unmanageable, and participants expressed frustration with having limited to no time to complete all workload responsibilities. When the time is found, tasks may be done inefficiently. Inadequate staffing was considered a barrier as the shortage in staffing across various departments makes it difficult to complete program assessment tasks. Some participants discussed additional accrediting and licensing requirements on top of the university program assessment which exacerbates the challenges of finding the time, staff, and space in workloads to complete all tasks with efficiency. One participant emphasized this theme through the response, “not enough time to collect, analyze, and report data and not enough time to sit with the results and work with them to make changes or

improvements to the department." Another participant stated, "when assessment is viewed as another task to do, with low direct impact for my job, it will not get done well."

Lack of Integration and Clarity

The overarching barriers under this theme included lack of training and support regarding assessment processes along with unclear expectations (n=11). Many responses also indicated lack of time as a barrier to completing assessment processes with efficiency since assessment tasks are additional work requirements on top of their already demanding jobs. Participants discussed their frustration with this additional work considering it is not integrated within their daily job responsibilities. One participant said, "I believe assessments need to be seamlessly integrated into the process that I do right now to effectively complete my job." One participant's response regarding a barrier of "the disconnect between our campus YPA process and our accreditation process" sheds light on the increased responsibilities some programs have for assessment and the desire to integrate more of the tasks to meet the needs of both assessment processes in a more seamless and efficient way.

Faculty Engagement and Interest

Faculty engagement and interest included varying levels of faculty buy-in, engagement, and effort put towards program assessment tasks. Lack of training, support, and knowledge of assessment processes contributed to this theme as faculty not as involved in assessment tasks as others are less interested and willing to participate in the process. One respondent indicated, "I do not feel connected to the project. We don't discuss any of this in our department. It seems to be remote, something done in a different universe." Another participant stated, "It tends to be a last thought, rather than a first thought."

Recommendations for Improving Program Assessment

RQ5 focused on recommendations for improving program assessment. Participants were asked to provide open-ended responses regarding recommendations for improving program assessment. Participants' responses were coded and integrated within the following themes: resource optimization; simplification and integration of processes; data communication and use; and alignment and relevance. See Table 14 for a synthesis of themes and sub-themes. Responses offered several recommendations for improving program assessment, which are outlined below.

Table 14

Recommendations for Improving Program Assessment by Number of Quotes

Themes	Sub-Themes	*n*
Resource Optimization	More training, support, and time	13

Simplification and Integration of Processes	Training on how to integrate assessment processes within regular departmental activities; making	8
Data Communication and Use	Training on how to use data for effective decision-making	4
Alignment and Relevance	Training on how to align assessment data with program needs and how the data is relevant to	5

Resource Optimization

Resource optimization included more training and support on assessment processes and time to complete program assessment tasks. More training, support, and time (n=13) were commonly occurring responses and the most popular of the recommendations suggested for improving program assessment. One participant responded with "include it in someone's load so it actually gets done," another stated, "time release for faculty who complete the YPA and additional assessment repots," while several others simply indicated the need for more time to complete assessment tasks properly.

Simplification and Integration of Processes

Simplification and integration of assessment processes included learning how to integrate assessment processes within regular departmental activities and how to make assessment tasks more manageable. This theme connects well with heavy workloads, time, and lack of integration as barriers to program assessment. One participant said, "Simplify, organize, and make it part of monthly department/program meetings." Another said, "More support and a simplification of the tasks would help." Many responses (n=8) indicated recommendations to streamline assessment tasks, unify methods and practices, and simplify tasks as much as possible.

Data Communication and Use

Data communication and use included recommendations on how to use data for effective decision-making. Many responses (n=4) discussed making sure the data is appropriate to implement changes for programmatic improvement and that the data is easily digestible to the consumers. Selecting the right data to collect, collecting the data efficiently, and using the data to make changes were all common recommendations made by participants. One participant reported, "Gathering authentic, meaningful, actionable data is very difficult at the macro level of an institution." Another said, "We are overwhelmed with data rather than the take aways we can have from the data," and suggested that it is important to make the data easily digestible to users.

Alignment and Relevance

Alignment and relevance included how to align assessment data with program needs and how to ensure the data is relevant to teaching, learning, and improving programs. It is critical that programs see the impact of assessment on program improvement. Aligning goals with program needs, selecting the appropriate type of data and collection method, and understanding how this data will impact the

program are critical to program assessment. If those who are heavily involved in assessment tasks can see the clear benefits, have the support, and align goals with program needs, the purpose and impact of program assessment will be clearer. One participant remarked, "Someone needs to give faculty a vision showing why this matters and a goal for what this could ideally look like if implemented well." Faculty want to see how data can be used to make effective program changes, as shown in another participant's statement, "Align methods and practices so we can focus improvement in areas that actually affect student learning."

Discussion

Effective program assessment can contribute to ongoing quality programming; however, doing it well requires sufficient time, buy-in, and resources. While the amount of time faculty spend on program assessment tasks varies, the participants in this study spent, on average, around six and a half hours per week on program assessment. Their time may be spent on formulating or revising outcome statements, collecting and analyzing data, interpreting and reporting results, making decisions and taking actions based on the findings, and/or a variety of other assessment-related tasks. The estimation of time spent is, of course, only a very rough approximation based on self-reported perceptions of time allocated to assessment tasks by respondents that included full-time faculty who were highly active in program assessment as well part-time faculty who had minimal or no involvement in the practice. Subsequent studies with more robust research designs could help generate more accurate estimates of time spent on program assessment tasks.

Given the nature of assessment as a "process of providing credible evidence of resources, implementation actions, and outcomes undertaken for the purpose of improving the effectiveness of instruction, programs, and services in higher education" (Banta & Palomba, 2015, p. 2), it seems that all faculty would be inclined to see potential for the practice of program assessment to be positively impactful; however, the results of this study suggest there are mixed feelings regarding its value. Most respondents see potential for program assessment to be valuable, but 20% of faculty do not think effective assessment could have a positive impact on student learning and around 30% do not think it could have a positive impact on program operations. The survey was not designed to measure *Awareness* explicitly, but these findings beg the question of whether faculty with unfavorable perspectives toward the potential impact of assessment are aware of all stages that make up a comprehensive assessment process. Consequently, targeted training and resources related to the theory and purpose of assessment may be worthwhile to consider in some cases.

Faculty who do not see potential for assessment to have a positive impact may be more inclined to experience frustrations with the practice (Greene, 2023) and perceive it to be a "time waster" (Bennett et al., 2023, p. 13) It's unclear why the faculty who do not see potential for program assessment to have a positive impact would not find value in processes of describing what they intend for students to learn in their program, collecting and analyzing information related to student learning, and making decisions that promote the quality of their program based on the results. Beyond the scope of student

learning, it's unclear why the same faculty with negative perceptions regarding the potential impact of assessment would not find value in identifying needs related to their program (needs assessment), designing their program to include strategies that are appropriate to meet the needs (theory assessment), knowing which resources are required and accessible for efficiently implementing the strategies (efficiency assessment), knowing whether the program strategies are being appropriately implemented (process assessment), and knowing whether implementation of the strategies is associated with positive results related to the need (outcome assessment). Perhaps some of the negative responses regarding the potential impact of assessment may be due to narrow interpretations of the practice that do not consider a comprehensive program assessment approach that comprises a broad array of mixed methods related to assessing program needs, theory, efficiency, processes, and outcomes. Additional studies are recommended to further explore these areas.
While many faculty see potential for program assessment to positively impact student learning (80%) and program operations (69%), the actual impact of program assessment does not seem to be meeting its potential. Only 60% of faculty perceive it to actually have a positive impact on student learning, and only 52% perceive it to actually have a positive impact on program operations. The gap between perceptions of potential and actual impact suggests that some programs might not be sufficiently using assessment results to influence positive changes (Horst & Prendergast, 2020; Pike, 2002) and may be, in part, related to faculty satisfaction with implementing program assessment tasks.

Between 57% and 77% of respondents reported being satisfied with their implementation of each of the nine tasks included in the survey. The highest level of satisfaction was associated with formulating or revising outcome statements (77%). The lowest levels of satisfaction were associated with collecting data (57%), writing interpretations of data analysis results (62%), and entering results into a reporting tool (62%). Lower levels of faculty satisfaction may be partially explained by some of the barriers revealed through comments on the survey. For example, some faculty might have lower levels of satisfaction with some tasks because they do not understand program assessment expectations, are not adequately trained on assessment processes, or do not have enough time to effectively implement the tasks alongside the other requirements of their role. These types of challenges echo similar barriers outlined in previous studies (e.g., Caudle & Hammons, 2018; Nunley et al., 2011).

The survey results related to recommendations help illuminate strategies that could help improve perceptions of impact and satisfaction with program assessment tasks. They suggest there is room for improving processes that align with all stages of the *A+ Inquiry* framework. Providing training and resources on how to integrate assessment processes within regular departmental activities could include an emphasis on selecting and embedding appropriate technologies into everyday workflows for data collection, retrieval, analysis, and reporting, which could increase efficiencies related to the *Accumulation*, *Access*, *Analyze*, *Answer*, *Announce*, and *Apply* stages. Training on using data for effective decision-making could help increase the capacity of faculty to address the *Apply* stage and, therefore, close the assessment loop (Banta & Blaich, 2011). Allocating resources and efforts toward

these areas could promote enhancements to faculty assessment abilities and, consequently, improve their buy-in to assessment practices (Sujitparapitaya, 2014).

Limitations

Although the results provide some insight into program assessment workload, they should be interpreted with caution as they only represent perceptions of some faculty at one institution at a single point in time. Some of the invited faculty may not have participated because they lacked time or did not have strong opinions of program assessment one way or the other. The results may have been different if more faculty had responded, if the study had been conducted at one or more other institutions, or if the data had been collected at a different point in time.

Conclusion

This paper established *A+ Inquiry* as a framework for planning a study to assess needs related to program assessment and then demonstrated an example of how an institution assessed needs through the lens of the model. The results provided the institution with insights that could help inform strategies for promoting improvements to program assessment. Advisable next steps for the institution would be to implement strategies as responses to the identified areas of improvement, assess the implementation and effectiveness of their strategies, and continue implementing periodic needs assessments through an *A+ Inquiry* lens to keep a pulse on areas of program assessment that may need additional support. Deeper explorations into the data—e.g., examining correlations between perceptions of impact and time spent or between satisfaction and perceptions of actual and perceived impact—may generate useful insights into why faculty feel the way they feel about assessment. In addition to a recommendation for the institution in this paper to continue using *the A+ Inquiry* framework to help guide the assessment of needs related to program assessment, other institutions may consider adapting the survey in this study or utilizing the *A+ Inquiry* model as a frame of reference to inform the development of other methods for identifying needs and potential solutions related to program assessment workload at their own institutions.

References

Allen, M. J. (2003). *Assessing academic programs in higher education*. Wiley.

Anderson, N. (2022a, February). *Report on the condition of academic assessment at Minot State University*. Minot State University.

Anderson, N. (2022b). Synthesizing frameworks and tools to develop a plan for evaluating an online data utilization curriculum for teachers. *Evaluation and Program Planning, 94*. https://doi.org/10.1016/j.evalprogplan.2022.102148

Anderson, N. C., Brockel, M. R., & Kana, T. E. (2014). Disciplined inquiry: Using the A+ Inquiry framework as a tool for eliminating data hoarding, mindless decision-making, and other barriers to effective ESA programming. *Perspectives: A Journal of Research and Opinion About Educational Service Agencies, 20*(3).

Banta, T. W. (2002). *Building a scholarship of assessment*. Jossy-Bass.

Banta, T. W., & Blaich, C. (2011). Closing the assessment loop. *Change: The Magazine of Higher Learning, 43*(1), 22-27.

Banta, T. W., & Palomba, C. A. (2015). *Assessment essentials: Planning, implementing, and improving assessment in higher education* (2nd ed.). Jossey-Bass.

Bennett, L. K., Sloan, K., & Varner, T. L. (2023). Faculty and assessment practitioner needs for student learning outcomes assessment in higher education. *Intersection: A Journal at the Intersection of Assessment and Learning, 4*(2).

Bhattacherjee, A. (2019). *Social science research: Principles, methods, and practices* (Revised ed.). Author. https://usq.pressbooks.pub/socialscienceresearch/

Booth, W., Colomb, G., & Williams, J. (2008). *The craft of research* (3rd ed.). The University of Chicago Press.

Borden, V. M. H. (2002). Information support for assessment. In T. W. Banta (Ed.), *Building a scholarship of assessment* (pp. 167-181). Jossey-Bass.

Bryant, P. E., MacLean, M., Bradley, L. L., & Crossland, J. (1990). Rhyme and alliteration, phoneme detection, and learning to read. *Developmental Psychology, 26*(3), 429-438.

Caudle, L., & Hammons, J. O. (2018). Strategies for increasing faculty involvement in institutional or program assessment. *Community College Journal of Research and Practice, 42*(1), 49-61. https://doi.org/10.1080/10668926.2017.1281176

Cicchino, A., O'Donnell, K., Schofield, R., & Gilbert, B. (2023). When done well: A primer on where we are and where we are going in high impact practices (HIPs). In S. P. Hundley & C. J. Keith (Eds.), *Trends in assessment: Ideas, opportunities, and issues for higher education* (pp. 46-68). Routledge.

Cohen, L., Manion, L., & Morrison, K. (2018). *Research methods in education* (8th ed.). Routledge.

Creswell, J. W. (2014). *Research design: Qualitative, quantitative, and mixed methods approaches* (4th ed.). Sage.

Cuiccio, C., & Husby-Slater. (2018). *Needs assessment guidebook: Supporting the development of district and school needs assessments*. State Support Team.

Emil, S., & Cress, C. (2014). Faculty perspectives on programme curricular assessment: Individual and institutional characteristics that influence participation engagement. *Assessment & Evaluation in Higher Education, 39*(5), 531-552. http://dx.doi.org/10.1080/02602938.2013.855998

Fitzpatrick, J. L., Sanders, J. R., Worthen, B. R., & Wingate, L. A. (2023). *Program evaluation: Alternative*

approaches and practical guidelines (5th ed.). Pearson.

Gilbert, J. K. (2008). Visualization: An emergent field of practice and enquiry in science education. In J. Gilbert, M. Reiner, & M. Nakhleh (Eds.), *Visualization: Theory and practice in science education* (pp. 3-24). Springer.

Greene, G. (2023, January 24). The terrible tedium of 'learning outcomes': Accreditors' box-checking and baroque language have taken over the university. *The Chronicle of Higher Education*. https://www.chronicle.com/article/the-terrible-tedium-of-learning-outcomes

Gustafson, J. N., Daniels, J. R., Smulski, R. J. (2014). Case study: One institution's application of a multiple methods assessment framework. *Research & Practice in Assessment, 9*, 58-73.

Horst, S. J. & Prendergast, C. O. (2020). The assessment skills framework: A taxonomy of assessment knowledge, skills, and attitudes. *Research & Practice in Assessment, 15*(1), 1-25.

Hundley, S. P., & Keith, C. J. (2023a). Themes, perspectives, and meta-trends in assessment. In S. P. Hundley & C. J. Keith (Eds.), *Trends in assessment: Ideas, opportunities, and issues for higher education* (pp. 184-206). Routledge.

Hundley, S. P., & Keith, C. J. (Eds.). (2023b). *Trends in assessment: Ideas, opportunities, and issues for higher education*. Routledge.

Hutchings, P. (2019, January). What faculty need to know about assessment (Assessment Brief). University of Illinois and Indiana University, National Institute for Learning Outcomes Assessment (NILOA). https://www.learningoutcomesassessment.org/wp-content/uploads/2019/08/Assessment-Brief-Faculty.pdf

Kasunic, M. (2005). *Designing an effective survey.* Carnegie Mellon Software Engineering Institute.

Lea, R. B., Rapp, D. N., Elfenbein, A., Mitchel, A. D., & Romine, R. S. (2008). Sweet silent thought: Alliteration and resonance in poetry comprehension. *Psychological Science, 19*(7), 709-716.

Miles, M. B., Huberman, M., & Saldana, J. (2020). *Qualitative data analysis: A methods sourcebook* (4th ed.). Sage.

Miller, R., & Leskes, A. (2005). *Levels of assessment: From the student to the institution*. Association of America Colleges and Universities.

Ngulube, P. (2015). Qualitative Data Analysis and Interpretation: Systematic Search for Meaning. In Mathipa, E. R. & Gumbo, M. T, (Eds.), *Addressing research challenges: Making headway for developing researchers* (pp. 134-153). Mosala-MASEDI Publishers & Booksellers CC.

Nunley, C., Bers, T., & Manning, T. (2011, July). *Learning outcomes assessment in community colleges* (Occasional Paper No. 10). University of Illinois and Indiana University, National Institute for Learning Outcomes Assessment (NILOA).

Pike, G. R. (2002). Measurement issues in outcomes assessment. In T. W. Banta (Ed.), *Building a scholarship of assessment* (pp. 131-147). Jossey-Bass.

Rossi, P. H., Lipsey, M. W., & Freeman, H. E. (2004). *Evaluation: A systematic approach* (2nd ed.). Sage.

Russ-Eft, D., & Preskill, H. (2009). *Evaluation in organizations: A systematic approach to enhancing learning, performance, and change* (2nd ed.). Basic Books.

Salant, P. & Dillman, D. A. (1994). *How to conduct your own survey*. John Wiley & Sons.

Shermis, M. D., & Daniels, K. E. (2002). Web applications in assessment. In T. W. Banta (Ed.), *Building a scholarship of assessment* (pp. 148-166). Jossey-Bass.

Stoll, E. (1940). Poetic alliteration. *Modern Language Notes, 55*(5), 388-390.

Sujitparapitaya, S. (2014). Achieving faculty buy-in: Motivation performance in learning outcome

assessment. *Journal of Case Studies in Accreditation and Assessment, 3*, 1-22.

Taber, K. S. (2018). The use of Cronbach's Alpha when developing and reporting research instruments in science education. *Research in Science Education, 48*, 1273–1296. https://doi.org/10.1007/s11165-016-9602-2

Tufte, E. R. (1990). *Envisioning information*. Graphics Press.

Virginia Assessment Group. (n.d.). *About*. Research & Practice in Assessment. https://www.rpajournal.com/about-us/

Ware, C. (2000). *Information visualization: Perception for design*. Morgan Kaufmann Publishers.

Appendix: Survey

MSU employment status

- Part-time
- Full-time

MSU faculty status

- Part-time
- Full-time

Are you responsible for authoring or co-authoring a YPA?

- Yes
- No
- Don't Know

Which YPA planning and reporting tool does your program use?

- SPOL
- MS Word YPA Template
- Other: _____
- I don't know

Approximately how many total hours do you expect to spend on teaching, scholarship, service, and other tasks that are related to the requirements of your role as a faculty member during the 2023-2024 year? (Must a whole number)

- ____

Considering the total amount of time that you expect to spend on implementing all the teaching, scholarship, service, and other tasks related to your role as a faculty member during the 2023-2024 year, approximately what percentage of your total time do you expect to spend on tasks in each category? (must add up to 100%) [RQ1]

Category	% of time
Teaching	
Service	
Scholarship	
Other tasks related to your role	

Considering the total amount of time that you expect to spend on all the teaching, scholarship, service, and other tasks related to your role as a faculty member during the 2023-2024 year, approximately what percentage of your total time do you expect to be focused on tasks related to program assessment (i.e., the systematic collection and analysis of program-level information for program-level improvement purposes)? [RQ1]

Category	% of time
Program Assessment tasks	

To what extent are you satisfied or dissatisfied with your process of implementing each of the following tasks related to the specific purpose of program-level assessment? [RQ2].

Task	Highly dissatisfied	Dissatisfied	Satisfied	Highly satisfied	I do not implement this task

Formulating new and/or evaluating and revising existing program-level student learning outcome statements					
Developing and/or implementing methods (e.g., instruments, data collection procedures) for collecting program assessment data					
Retrieving program assessment data that have been collected in preparation for analysis					
Preparing data for analysis					
Analyzing data					
Writing narrative interpretations of data analysis results					
Entering program assessment results and/or interpretations of the results into a program assessment reporting tool (e.g., Microsoft Word YPA template, SPOL)					
Discussing program assessment results and/or interpretations of the results with others					
Making decisions individually and/or collaboratively based on the program assessment results					
Other program assessment tasks					

To what extent do you believe that effective program-level assessment methods have potential to positively impact student learning within an academic program? [RQ3]

- No potential
- Low potential
- Moderate potential
- High potential

To what extent do you believe that effective program-level assessment methods have potential to positively impact the operations of an academic program? [RQ3]

- No potential
- Low potential
- Moderate potential
- High potential

To what extent do you believe that yearly program assessment actually impacts student learning within your program? [RQ3]

- Highly negative impact
- Negative impact
- No impact
- Positive impact
- Highly positive impact

To what extent do you believe that yearly program assessment actually impacts the operations of your program? [RQ3]

- Highly negative impact
- Negative impact
- No impact
- Positive impact
- Highly positive impact

What barriers inhibit optimal implementation of YPA processes for your program? [RQ4]

_____

What are your recommendations for improving YPA methods for your program specifically and/or for the institution as a whole? [RQ5]

_____

Comments

_____

About the Authors

Serena Pontenila, Assistant Professor, Department of Math, Data, and Technology, Minot State University, serena.pontenila@minotstateu.edu

Emily Stephens, Assistant Professor, Department of Communication Sciences and Disorders, Minot State University, emily.stephens@minotstateu.edu

Nathan C Anderson, Institutional Assessment, Minot State University, n.charles.anderson@gmail.com