

Methodology for Designing a Program Assessment System

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This module provides an overview of the methodology for designing a Program Assessment System (PAS). It introduces how to use the methodology. It should be read by anyone planning to design a program assessment system. Before beginning the design of a PAS, it is very useful to examine all of the steps in the design methodology to gain an understanding of the entire design process. In addition to presenting the complete methodology, critical steps faculty and administrators find particularly challenging are identified and briefly discussed.

Designing a Quality Program Assessment System

The methodology for designing a program assessment system is given in Table 1 found on the next page. While the steps of the methodology are listed in a sequential fashion, in most cases it is necessary to revisit and update previous steps while working through the methodology. The purpose of the steps can be broken down into five stages:

- specifying and defining the program (steps 1-6),
- establishing program quality (steps 7 and 8),
- designing annual program assessment (steps 9-11),
- constricting a table of measures (steps 12-15), and
- documenting program quality (steps 16-20).

Each of these stages is discussed.

Stage 1 Specifying and Defining the Program

As a program continues to evolve, it is important to step back and truly understand what the program is about. Stage 1 of the methodology focuses on the key aspects of the program defining and specifying components including the essence, goals, limitations, assets and important processes.

A significant benefit of designing and implementing a program assessment system is that it gives the stakeholders of the program the opportunity to clarify the identity of the program clearly and publicly. Through this action the stakeholders both claim ownership of the program and limit others from imposing an identity on the program. This benefit is realized through the straightforward, yet challenging act of stating the essence of the program (step 1). The essence statement should be a one-sentence description of the program at the present time in terms of the processes used and the products produced. Then building on the essence statement, identify the program (step 3). A key component of the program specification is the identification of the current and future goals of the program (step 4). With a clear understanding of the goals, identifying the top products or assets of the program (step 5) and defining the processes to be used to accomplish the goals (step 6) is relatively straightforward.

Stage 2 Establishing Program Quality

The primary goal of a PAS is to enhance the quality of the program. In order to measure the quality of any program it is important to state performance criteria for that program (step 7). A strong criterion statement is stated clearly and concisely and supports one or more of the desired qualities of the program while suggesting at least one context for measurement. The objective is to identify 3-8 areas of the program that account for most of the quality of the program. The performance criteria will serve as the basis of the program assessment system by providing the framework for identifying specific attributes to be measured.

Writing performance criteria is one of the most challenging aspects of the PAS design process. In particular, many individuals have trouble seeing the connection between a quality, the meaning (or analysis) of that quality and how to express the meaning in the form of a written performance criterion. In addition, there is a common tendency to begin determining performance standards rather than focusing on identifying areas of quality in the program. It is important to identify key characteristics that determine quality for the products and processes. Using this list of characteristics, critical areas for measurement are identified and prioritized. Then the main areas of quality are clarified as statements (performance criteria) along with measurable attributes for each criterion (step 8). To facilitate writing quality performance criteria a detailed methodology has been developed (see Writing Clear Performance Criteria for a Program).

Note, writing the performance criteria for a program parallels the same process of writing the performance criteria for a course or a learning activity.

Table 1 Methodology for Designing a Program Assessment System

Specifying and Defining the Program

- Step 1 Write a one-sentence description which captures the essence of the current program.
- Step 2 Identify all program stakeholders and their interests.
- Step 3 Define the appropriate scope (boundaries) of the program; what it is and what it is not.
- Step 4 Identify the top five current goals and five future goals for the program; use a 3-5 year time frame.
- Step 5 Identify the top five products or assets of the current and future program.
- Step 6 Provide a description of key processes, structures and systems associated with the program which will help accomplish the current and future goals from step 4.

Establishing Program Quality

Step 7 Write clear performance criteria that account for most of the quality of the program. *Methodology for writing performance criteria:*

- 1. Brainstorm a list of characteristics/qualities (and values) which determine program quality.
- 2. Check with other programs/stakeholders to determine if any key characteristics are missing.
- 3. Rank the top ten qualities for the future design of the program.
- 4. Select the critical areas for measuring; prioritize to just a few (7-10), reducing out highly related qualities.
- 5. For each quality, identify a set of 3-5 important aspects.
- 6. Write statements illustrating the performance expectation that produce these qualities by describing the important aspects of the performance.
- Step 8 Identify up to three attributes (measurable characteristics) for each criterion.

Annual Program Assessment

- Step 9 Self-assess the program for the previous academic year.
- Step 10 All stakeholders should provide feedback (strengths, areas for improvement, and insights) about the performance program.
- Step 11 Produce an annual assessment report.

Constructing Table of Measures

- Step 12 Create the structure for a table of measures (see Table 2).
 - Fill in the first two columns (criteria and attributes) with information from steps 7 and 8.
- Step 13 Prioritize the attributes to the most significant through appropriately weight each attribute.
- Step 14 Identify means for collecting data.
- Step 15 Identify a key instrument associated with each chosen attribute to measure the performance reflected in the data collected.

Documenting Program Quality

- Step 16 Determine current benchmarks and future targets for each attribute to document annual performance.
- Step 17 Assign accountability (to an individual) for each attribute to assure targets for performance are met.
- Step 18 Create an index for measuring overall success.
- Step 19 Obtain stakeholder buy-in of the program assessment system through their assessment of the system.
- Step 20 Annually assess the program assessment system.

Stage 3 Annual Program Assessment

An important aspect is to shift from thinking about doing assessment (planning) to implementing an assessment system. This is not an all-or-nothing process, and it is not necessary to wait until the PAS design process is completed before initiating assessment. Once the performance criteria have been identified, a pragmatic approach to implementation is to design an annual assessment report around the performance criteria. Begin by assessing the program for the previous academic year (step 9). The SII Method *(see SII Method for Assessment Reporting)* provides a useful format for this self-assessment. At this point in the process, it is important to include all of the stakeholders in the program assessment process (step 10). Complete the assessment by generating an annual assessment report (step 11).

Once you apply the performance criteria to the performance of the program over the previous year, the clarity of how to progress with the next step (designing measures) is enhanced dramatically. Further, the annual assessment report will serve as a model for annual reports generated in the future.

Stage 4 Table of Measures

The heart of the mechanism for measuring quality is the "Table of Measures" (see Table 2) that is a template for completing the PAS design process. It focuses on what really matters in the program, the measurable characteristics (or attributes) that align with the performance criteria (from steps 7, 8, and 12). An essential component of the process of building the Table of Measures is the act of prioritizing and weight the attributes to identify the most important while eliminating the non-essential ones (step 13).

For each attribute, determine if an instrument exists to measure performance (steps 13-15). Examples of instruments include: rubrics, alumni surveys, grants, publications, retention and graduation data, placement data, satisfaction surveys, and portfolios. If no instrument exists for a given attribute, then one must be built.

Stage 5 Documenting Program Quality

The final stage in the methodology focuses on the documentation of the program quality through the tracking of the quality of the attributes. For each attribute, it is helpful to make comparisons with benchmarks of current performance as well as to targets established for future performance (step 16). In addition, to share and distribute the responsibility for meeting targeted performance levels, it is important to assign the accountability for each attribute to a specific program member (step 17) and establish criteria for measuring overall success (step 18).

All participants and stakeholders involved in the program should be given the opportunity to provide assessment feedback (strengths, areas for improvement, and insights) (step 19) before full implementation of the program assessment system. In addition to improving the quality of the program assessment system, this helps to build commitment and trust which is essential for successful implementation of the system.

Assessment is a vital component to methodologies. Assessment provides the feedback mechanism which allows for building upon strengths and taking action to make improvements. It is important not to overlook the need to assess the program assessment system itself. Thus, a complete assessment system involves using various forms of assessment (formative, summative, and real-time) on all aspects of the program and the program assessment system itself (step 20).

Concluding Thoughts

The benefits to a program that are derived from a welldesigned and successfully implemented program assessment system significantly outweigh the time and energy invested in the design of the system. Nevertheless, the design process can be an intimidating impediment to establishing an assessment-based program. The methodology for designing a program assessment system provides a clear progression of steps to assist even a novice in this endeavor. The end result will be an efficient program assessment system focusing on the key attributes that determine quality performance.

Accountability				
Target				
Benchmark				
Instrument				
Means				
Weight				
Attribute				
Criterion				

Table 2