DOES THE ASSESSMENT PROCESS MEASURE UP?

By Gloria Rogers, Ph.D., ABET Senior Adjunct Director, Professional Offerings

When someone indicates that they have used another program's assessment plan as a model to develop their own plan, you might ask why the specific plan was chosen. You will generally get the reply, "Well it was on the web and the program just got accredited, so it must be good."

As educators, we are often faced with helping students know how to filter all the "stuff" on the web that they tend to reference and sometimes (to our dismay) copy. One of the ways we help them is to provide guidelines to follow as they search out credible reference materials. In the same way we do this for students, we can ask, "How do you know if someone else's program assessment plan is worth emulating (whether you found it on the web or not)? How do you know if your plan is consistent with good practice?"

The following topics are designed to guide you in the evaluation of your assessment process.

The assessment question is known and explicit. Is it clear what assessment question is being asked? Some possible questions are:

1. Have we achieved our desired student outcomes[i]?
2. Can we demonstrate the value-added that our program provides students?

Each of these questions requires a different assessment approach and emphasis in the development of measurable outcomes statements, data collection processes, analysis and evaluation process. In other words, it is important that the assessment plan includes demonstration of a clear understanding of the assessment question that is being explored. It is important to note that even if it is the first question posed, which implies summative assessment[ii], it is good assessment practice to be taking measures along the way to determine your progress BEFORE the end of the program (formative assessment[iii]) so interventions can be made if students are not making adequate progress.

If the focus is on the second question posed, assessment processes would need to be in place to conduct systematic assessment both at the beginning of the program and at key points throughout the program that would monitor the progress students are making on any one outcome.

The program's educational objectives[iv] are clearly stated, developed with the input and review of your constituents and aligned with student outcomes. Each academic program is preparing its students for post-completion study or employment. Knowing the needs of key constituents is important for the alignment of the curriculum that enables the success of the graduates early in their career. It creates an important relationship between program faculty and those practicing in the field and enables faculty to maintain curriculum relevance.

Student outcomes are defined. Because the definition of student outcomes is the most critical and often overlooked element of the assessment planning process, this is where serious effort

and/or scrutiny should take place. Regardless of what you call the statements that define your outcomes (standards, indicators, criteria, objectives, etc.), each outcome should have a few performance indicators.[v] These indicators should best represent the possible performances related to the outcome that are the focus of your program's data collection process. In the absence of a commonly agreed definition among the faculty, it is impossible to have any direct measures of student learning at the outcome level. If you are participating or considering participating in commercialized benchmarking studies that provide an opportunity to benchmark your student/alumni/employer responses regarding specific learning outcomes against those of peer institutions, remember that in the absence of a common definition of what the learning outcomes mean, the usefulness of the data are interesting but not very informative for the purpose of program improvement. That is, if a program learns that its students or alumni self-report that their level of achievement on a certain outcome is lower than their peers, what can be done with that information? Certainly, program faculty can discuss the issue and determine that they need to add additional modules or activities related to the outcome in their courses, but what would they add? What does it mean to have "an ability to function effectively as a member of a team?" What did it mean to those from your program who responded to the survey? What did it mean to the respondents of peer institutions? Is it possible that it means different things for different programs? Be cautious when the only evidence of student learning is based on self-report of ill-defined or undefined outcomes whether they are benchmarked or not. These types of data will probably not lead to meaningful program improvement.

Are educational strategies aligned with anticipated outcomes? The concept of curriculum mapping is fairly common. Aligning curriculum with educational strategies (usually through courses but not always limited to courses) provides a clear understanding of where in the curriculum students are getting opportunities to learn, practice, develop and demonstrate the performance related to the program outcomes. It also enables faculty to determine if the outcome is adequately covered throughout the curriculum. This information provides faculty with the opportunity to make informed decisions about data collection — where to collect the data, from whom to collect the data and how often to collect the data.

Assessment methods include both direct and indirect measures, and are appropriate to the program context. When choosing assessment methods, it is important to use a multi-method/multi source approach to maximize the validity and reduce the bias of any one approach. It is also important to have at least one direct method that provides for the direct examination or observation of student knowledge or skills. Although indirect measures have some usefulness, they generally cannot provide the rich information of direct measures. Which assessment methods you choose should be appropriate to your outcomes and meet your needs for validity and affordability (time, effort and money) — at least one method used should be direct.

The data collection processes are systematic and flexible. When making decisions about what outcomes to assess, how often to assess them and from whom to collect the data, it is important to remember that the focus of program assessment is on the program and not on the individual student. A timeline should be established that demonstrates multiple process cycles for each outcome that are reasonable and sustainable, and are frequent enough to provide opportunities to take action when necessary, but not so frequent that there isn't adequate time to reflect on the findings and take reasoned action. The nature of the timeline will depend on the assessment question.

Results are evaluated and appropriate action taken and/or success of outcomes achievement is validated. There is more to evaluating your success than just determining if students are attaining the outcomes. If you find that 95 percent of your students could demonstrate the anticipated learning outcomes by the time of graduation, that seems to be great cause for celebration. However, if only 35 percent of your entering students actually graduate, then it is a hollow victory. What would the program do? How would it impact the acceptable level of attainment? It is important to place the results in context of your program, who your students are and the resources you have available. The nature of your institution (open enrollment vs. selective, etc.) will dramatically impact the anticipated results and the context within which evaluation will take place. Looking for other program assessment plans to model or benchmark your own program can be a highly informative process. However, it is important not to assume that just because the "model" program is accredited that the plan is appropriate for you or that another peer reviewer may make similar judgments of the plan. If your assessment program includes the elements listed in this article, you are well on your way to establishing meaningful assessment processes, which will not only enhance the educational experience of students but also provide focused, efficient processes for your program to monitor its own progress toward excellence.

---

[i] Student outcomes are the knowledge, skills and attributes we expect our students to demonstrate by the end of the academic program.

[ii] Summative assessment is assessment taken at the end of the instructional unit (e.g., end of course, end or program) to determine the extent to which intended student outcomes have been attained.

[iii] Formative assessment is assessment done early in the program to determine the progress students are making towards achieving the intended outcomes. These data are used to guide program (or course) improvements.

[iv] For this article, program educational objectives are defined as the early career accomplishments that we expect our graduates to demonstrate in the workplace.

[v] Performance indicators are those measurable statements that indicate the performances that you are looking for as evidence of achievement of the learning outcome.