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Adopting the practice of systematically and strategically gathering data to inform the development and implementation of a strategic plan will ensure its achievement. This chapter presents a combination of techniques for student affairs professionals to conduct data-driven planning.

Data-Driven Planning: Using Assessment in Strategic Planning

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Data-driven planning or evidence-based decision making represents nothing new in its concept. For years, business leaders have claimed they have implemented planning informed by data that have been strategically and systematically gathered (Banta, Jones, and Black, 2009; Bresciani, 2006; Maki, 2004; Schuh and Associates, 2009; Suskie, 2009; Upcraft and Schuh, 1996). Therefore, it is safe to assume that the concepts that are included in data-driven planning have been around for years. Within higher education and student affairs, there may be less evidence of the actual practice of systematically and strategically gathering data to inform planning.

Data-driven planning is often referred to in higher education as outcomes-based program review. The Western Association of Schools and Colleges (WASC) defines outcomes-based program review as a cyclical process for evaluating and continuously strengthening the quality and currency of programs. The evaluation is conducted through a combination of self-evaluation and peer evaluation by reviewers external to the program or department and, usually, external to the organization (Jenefsky and others, 2009). The results of this process inform strategic planning.

For purposes of this chapter, data-driven planning is defined as a systematic process that gathers programmatic outcomes-based assessment data (for example, data derived from outcomes-based program review) and merges those data with trend, forecast, and capacity data, as well as institutional goals and vision. The results of this process are then used to plan resources, policies, and program design to achieve or refine the intended

institutional vision and goals. For student affairs professionals, this means that strategic planning cannot be done in isolation of university data, such as an understanding of market demand for majors, the pool of prospective students, and the institutional learning outcomes and core values. Informed by these data, student affairs professionals must align each portion of their divisional strategic planning with the overall values of the university.

For the profession of student affairs, this means that results derived from outcomes-based assessment processes inform action planning and budgeting. This also means that as the student affairs division staff members gather more data on how well they are meeting institutional priorities, they can also use the same process to demonstrate achievement of their own divisional priorities and goals. Departments within the division can use this process to demonstrate how they are meeting division priorities as well. This chapter provides an overview of the components of and steps to establishing such a process.

Steps for Data-Driven Planning in Student Affairs

When organizations embark on strategic planning, key steps must be put into place. Data-driven planning does not replace those steps; rather, it is intended to contribute to the refinement of those steps by purposefully integrating planning, assessment, and budgeting processes. For example, when an organization decides through strategic planning that it will become the first-choice regional provider of quality education for first-generation students, it begins to design goals that will help it realize that vision. The strategic plan represents the ideal of what the institutional leadership desires to achieve.

Once the strategic plan is put into place, indicators of success are articulated, and programs are often asked to illustrate how they are achieving the goals and indicators represented by the strategic plan (Drucker, 2000; Fullan and Scott, 2009; McClellan, 2009). The challenge here is that key steps, discussed in this chapter, are occasionally left out in implementation. And the result is that organizational members may become frustrated that the organization's vision or strategic plan is not being fully realized. In order to address this initial challenge, it may become important for institutional and divisional leadership to follow some basic steps for data-driven planning. The intent of sharing these suggested steps is to provide institutional and divisional leadership with a framework to consider as they adapt each step, cognizant of their own institutional culture. In many cases, institutions and student affairs divisions already have many of these pieces of data-driven planning in place; they have just not yet pulled them together into a systematic, integrated process.

In order to aid readers with determining how they can pull their processes together to formulate data-driven planning, the proposed steps that

follow are intended to be used as guidelines as opposed to procedures that must be followed in the exact order indicated. The steps are not designed as a linear process. You may find, if you follow the steps in numerical order, that when you get to, say, step 4, you may need to go back and refine steps 2 and 3 because you realized that you were collecting data that will not really inform your strategic plan. Or you may choose to engage in step 1 and then step 4 in that order to figure out how to best approach steps 2 and 3. Thus, the steps are to be used as guidelines in any order that makes sense for your division or institution. As usual, institutional and divisional leaders will need to adapt these steps in accordance with their own culture, dynamics, and resources in order to improve their data-driven planning processes (Banta and others, 2009; Bresciani, 2006; Maki, 2004; Schuh and Associates, 2009; Suskie, 2009).

Step One: Establish a Strategic Plan. Many chapters in this book discuss the importance of having a strategic plan and illustrate various ways to accomplish it. The important piece of information to note here is that there must be an institutionally and divisionally agreed-on strategic plan from which to work (Bresciani, Gardner, and Hickmott, 2009; Bresciani, 2006; Schuh and Associates, 2009). Many professionals become frustrated when there is no agreed-on direction for their organization, and thus, the following steps become even more challenging to implement (Drucker, 2000; Fullan and Scott, 2009; McClellan, 2009). In an institution that is not engaged in strategic planning and therefore lacks institutional values and goals with which to align, this process then starts at the division level.

Step Two: Gather Forecast and Trend Data Sometimes the best strategic plans and the most inspiring visions and goals can go unrealized because the planning to create those strategic goals has been done without considering what the forecast or trend data are illustrating. Forecast and trend data simply attempt to calculate or predict some future event or condition. A detailed study or analysis usually informs this type of conversation (Schuh and Associates, 2009).

The types of data used in forecasting and determining trends are typically institutionally reported. They are often collected and stored by agencies outside the institution—for example, extracts from the College Board data sets or other types of national data sets, such as those gleaned from the Common Data Set, the National Clearinghouse, or the Integrated Post Secondary Education Data System. Trend data can also be gleaned from admissions applications, the National Survey of Student Engagement, the Community College Survey of Student Engagement, the Cooperative Institutional Research Program, the College Student Experiences Questionnaire, or Your First College Year surveys. Years of gathering these types of data can illustrate certain trends that can be used in informing whether your strategic initiatives are feasible. (An example is provided later in this section.)

These types of data are often collected or stored at the institutional level. The institutional research office is a good place to start when looking to access and use data that will help in forecasting and identifying trends. If the institutional research office is too busy to assist right away, and it often is, consider contacting the Association for Institutional Research, which has a wealth of resources to assist institutional administrators with this type of institutional data gathering.

In gathering and using data for forecasting or determining trends, the idea is not to become consumed by data but rather to use the data to determine if your strategic goals can be achieved. Perhaps your university vision is to become the first-choice regional provider of quality education for first-generation students. Using this example, your strategic plan has informed a design to implement interventions that will aid first-generation students in their success, but your current plan has no goals to change its outreach processes and plans. In accessing admissions applications data and College Board data, you may discover that the number of first-generation students applying and being accepted by your institution is declining. This would indicate that your vision and your corresponding strategic plan would not be realized unless you also have some initiatives to change outreach to and recruitment of first-generation students.

Before adjusting your strategic plan to focus on a change in outreach and recruitment, you access data from the College Board to identify how many regional students are graduating from high school, taking college placement tests, and being identified as first generation. If you see that the number is high, you can then determine that efforts to develop outreach and recruitment plans may be worthwhile. However, if you discover that the first-generation students graduating from high school are low in numbers and appear to have been decreasing, you may want to reexamine your institutional vision altogether. Institutional and student affairs divisional leadership could also choose to design different types of interventions that work collaboratively with local high schools to increase the number of college-bound first-generation students.

Step Three: Conduct a Capacity Review. Trend data as well as additional types of data, such as financial records, financial forecasting, and capital assets, can also be useful in determining the institution's capacity to meet the strategic plan. Borrowing from the Western Association of Schools and Colleges (2008), a capacity review determines whether an institution has the resources to fulfill its strategic mission. In other words, can the institution function "with clear purposes, high levels of institutional integrity, fiscal stability, and organizational structures and processes to fulfill its purposes?" (p. 30).

Identifying meaningful data that indicate whether an institution or division has key institutional resources, structures, and processes in place to fulfill its institutional or divisional mission and strategic plan is important in determining whether changes need to be made in strategic priorities. Consultation with the institutional research office may enable you to identify, access, and use the most appropriate data to inform your planning.

In order to understand how to use these types of data, we return to our example. Consider that your trend data forecast an increase in first-generation graduates intending to take college entrance exams from your regional high schools, so you know you will have plenty of students applying to your college. However, the data from the College Board also indicate that these students will need more financial aid in order to attend college in the future. Your forecast data show steadily increasing tuition, and your capacity study reveals less available institutional and state grant aid. How do you factor this very real scenario into your strategic planning? What other types of data may you need to collect to make an informed decision?

The idea behind conducting short but informative capacity reviews is that if you are able to identify immediate limitations in the ability to provide the resources needed for realizing the strategic plan, then you may be able to immediately adjust your strategic plan to better reflect your capacity. Or you may choose to adjust the strategic plan to build capacity. The building of capacity to achieve the strategic plan may well become a large portion of that plan.

Step Four: Articulate Indicators of Success. Leaders who are operationalizing their strategic plans may clearly articulate the goals derived from the plan, yet not have clearly identified the indicators of success that directly relate to the goals derived from the strategic plan. Rather than just selecting indicators of success that are easy to measure, consider starting by spending time describing what a successful strategic plan looks like when it is implemented (Banta and others, 2009; Bresciani and others, 2009; Bresciani, 2006; Maki, 2004; Schuh and Associates, 2009; Suskie, 2009).

Indicators of success "are quantifiable measurements, agreed to beforehand, that reflect the critical success factors of an organization. They help an organization define and measure progress toward organizational goals" (Reh, 2009, paras. 1, 2). Such indicators are typically gathered and disseminated at the institutional level, but what types of data should an institution collect in order to be able to provide such indicators of success?

Returning to our example, what would it look like when your institution is the first-choice regional provider of quality education for first-generation students? The initial inclination of planners is to jump to performance indicators that articulate expectations for numbers of admits, persistence, graduation, and career placement rates. These indicators are easy to measure and certainly would make sense to report in relationship to achievement of this vision. But what else do we know about first-generation learners? Would we also want to be able to determine how well the environment welcomes first-generation learners and their families and

guardians? How integrated are the services and interventions designed to support these learners (Kuh and Associates, 2005)?

The idea of this step is to indicate purposefully which indicators will be institutionally identified to determine success of the strategic plan (for example, persistence rates, placement rates) and which will be gleaned from more specific programmatic outcomes-based assessment results (for example, evidence of the effectiveness of various and specific student support programs).

Step Five: Prioritize Action Plans to Meet the Strategic Goals. Assuming that your organizational strategic plan has articulated goals or objectives, consider prioritizing them if possible. (Chapter One details steps for goal setting and action planning.) This will assist with prioritizing the action plans that operationalize the strategic plan, which in turn helps prioritize the resources that will enable the strategic plan to come to fruition. When institutional leadership prioritizes the strategic plan goals, faculty and staff are more likely to feel empowered in prioritizing their investment of their own time in their action plans in order to meet the strategic plan (Banta and others, 2009; Bresciani and others, 2009; Bresciani, 2006; Jenefsky and others, 2009; Schuh and Associates, 2009; Suskie, 2009).

In order to prioritize decisions that align with organizational goals, values, and strategic initiatives, criteria must be considered that will assist in the alignment of proposed action plans to the organizational goals, values, and strategic initiatives. Although this chapter cannot anticipate the types of criteria that may best represent various organizational structures, the following questions, adapted from Fred McFarlane (personal communication, February, 12, 2007), former department chair of administration, rehabilitation, and postsecondary education at San Diego State University, may assist institutions in formulating their own criteria:

- How well does the proposed action plan fit with our organizational goals, values, and strategic initiatives?
- Within that fit, how will the action plan benefit current students (for example, residential students, commuters, first generation)?
- How will the proposed action plan affect future students (for example, recruitment, new student populations, and their progression from undergraduate to graduate degrees)?
- How will the proposed action plan increase the impact of the department in relationship to the goals and sustaining objectives of the department and the division?
- How will we know whether the proposed action plan will be effective in increasing the impact of the department on the students?
- Does the proposed plan meet the criteria in that it is consistent with our values and beliefs (for example, access, equity, and student success), financially viable (for example, does it cover the costs, and

can it be leveraged for continued development; note that one-shot efforts take a great deal of time and often diffuse resources and energy), consistent with our professional development, and consistent with our passion and commitment to student learning and development?

Posing such questions begins to develop criteria for prioritizing current outcomes as well as the great ideas for improvements that result from engaging in outcome-based assessment (see step 7).

Step Six: Align Division Resources with Institutional **Priorities.** This step may appear a bit similar to previous steps, but nevertheless it is important to consider. The prioritization of the division resources toward strategic initiatives influences the availability of resources to improve more refined levels of action plans. And the decisions to refine the actions plans are informed by results of outcomes-based assessment (see step 7). If your institution is bound by a governance structure that gives you very little room to allocate resources in accordance with your strategic plan, then this step will be very quick for the institution to complete, because you are constrained by an inability to prioritize the resources on your own. If the institutional governance allows more flexibility in the allocation of resources, then the idea is to make available certain resources for the improvement and refinement of strategic priorities that can be allocated based on the results of outcomes-based assessment or on the proposals of innovative action plans to improve strategic indicators and initiatives.

Step Seven: Implement Outcomes-Based Assessment Program Review. Implementing outcomes-based assessment plans for the action plans to achieve the strategic plan will help in gathering meaningful data about how well you are achieving your strategic plan. If assessment is done well, the results will yield specific information on what needs to be improved in order to refine the strategic indicators articulated in step 4 (Banta and others, 2009; Bresciani, 2006; Bresciani and others, 2009; Jenefsky and others, 2009; Maki, 2004; Schuh and Associates, 2009; Suskie, 2009).

The following sections set out typical components of an assessment plan and report.

Program Name. The program name helps indicate the scope of the assessment project. Are you planning on assessing a series of workshops within the leadership development center, or on evaluating the entire leadership development center? Often it is difficult to determine the scope of an assessment plan (Schuh and Associates, 2009). When in doubt, organize the plan around programs that have autonomous outcomes (Bresciani and others, 2004; Bresciani and others, 2009).

Program Mission or Purpose. List the program mission or purpose statement. It may also be helpful to provide a one- or two-sentence

explanation of how this program mission or purpose aligns with the department, college, division, or university's mission within which it is organized. Setting this out will help explain how the program aligns with institutional values and priorities.

Program Goals. Goals are broad, general statements of what the program wants students to be able to do and to know or what the program will do to ensure what students will be able to do and to know. Goals are not directly measurable. Rather, they are evaluated directly or indirectly by measuring specific outcomes derived from the goals (Bresciani and others, 2004; Bresciani and others, 2009). The further alignment of each goal to department, college or division, or university goals or strategic initiatives generated from the strategic plan assists with the communication of priorities and allows programs to show how they are operating within stated priorities. In addition, the alignment of each goal with professional accreditation standards, if applicable, allows you to determine how this program intends to meet higher-level organization goals and strategic planning initiatives.

Outcomes. Outcomes are more detailed and specific statements derived from the goals. They specifically are about what you want the end result of your efforts to be. In other words, what do you expect the student to know and do as a result of, for example, a one-hour workshop, one-hour individual meeting, Web site instructions, or series of workshops? Outcomes do not describe what you are going to do to the student, but rather how you want the student to demonstrate what he or she knows or can do (Bresciani and others, 2004; Bresciani and others, 2009).

In addition, you want to be able to align each outcome with a program goal. This alignment allows you to link your outcomes to department, college or division, or university goals and strategic initiatives, as well as professional accreditation standards. Such alignment allows you to determine how this program intends to meet higher-level organization goals and strategic planning initiatives.

Planning for Delivery of Outcomes. This is where action planning comes into the process. Here is where you describe or simply draw a diagram that explains how you plan for the student to learn what you expect the student to learn in order for the outcome to be met. Do you plan for the students to learn what you expect them to in a workshop, one-on-one consultation, or a Web site? Simply indicate all the ways in which you provide students the opportunity to achieve the learning outcome. Identifying where outcomes are being taught or delivered also provides reviewers with opportunities to identify where that outcome may be evaluated.

Evaluation Methods and Tools. Often the evaluation method or tool section of the assessment plan can be intimidating to practitioners. This section is not intended to include detailed research methodology. It is intended to simply describe the tools and methods (for example, observation with a criteria checklist, survey with specific questions identified,

essay with a rubric, role-playing with a criteria checklist) you will use to evaluate the outcomes of participants in specific programs. In this section, you identify the sample or population you will be evaluating, identify an evaluation method or tool for each outcome, and include the criteria that will be used with the tool to determine whether the outcome has been met—for example:

- If the tool to measure an outcome is a survey, which questions in the survey are measuring the outcome?
- If the tool is a test, which questions measure the outcome?
- If the tool is an observation, what are the criteria that you apply to the observation in order to identify whether the outcome has been met?

Add limitations of the evaluation method or tool if necessary. Limitations are reminders to you and the reviewer that while the evaluation process may not have gone extremely well, you recognize the limitations and have documented them to be considered in decision making or for improvements to be made the next time. In addition, select other institutional, system or national data (for example, enrollment numbers, faculty-to-student ratios, retention rates, graduation rates, utilization statistics, satisfaction ratings, National Survey of Student Engagement scores) that will be used to help you interpret how and whether the outcome has been met.

Implementation of Assessment Process. This is the planning section for the implementation of the assessment process. Not everything has to be evaluated every year. You can simply evaluate two or three outcomes each year, which will create a multiyear assessment plan, of which the final year of the assessment plan feeds into the comprehensive program review process. Identify who is responsible for doing each step in the evaluation process. Outline the time line for implementation, including the years in which each outcome will be evaluated (so as not to indicate that everything must be evaluated every year). Also include which year you will be reviewing all prior outcomes data results (for example, comprehensive program review year) for a holistic program review discussion.

In addition, identify other programs that are assisting with the evaluation and when they are assisting. Include time lines for external reviewers (including professional accreditation reviews, if applicable) and for communication across departments or colleges. Identify who will be participating in interpreting the data and making recommendations, along with a time line for implementing the decisions and recommendations. Finally, be sure to outline how lines of communication will flow. Who will see the results, when will they see the results, and who will be involved in determining whether the results are acceptable?

Results. Summarize the results for each outcome as well as the process to verify, validate, or authenticate the results. This may include how results were discussed with students, alumni, other program faculty and administrators, or external reviewers. Link the results generated from the outcomes-based assessment results to any other program, college, or institutional performance indicators.

Reflection, Interpretation, Decisions, and Recommendations. This section summarizes the decisions and recommendations made for each outcome and illustrates how you determined if the results were satisfactory. It therefore requires describing the process used to inform how the level of acceptable performance was determined and why it was determined as such.

Illustrate how decisions and recommendations may be contributing to the improvement of higher-level goals and strategic initiatives. Identify the groups that participate in the reflection, interpretation, and discussion of the evidence that led to the recommendations and decisions. It may then be helpful to summarize the suggestions for improving the assessment process, tools, criteria, and outcomes. Finally, be sure to identify when each outcome will be evaluated again (if the outcome is to be retained and who is responsible).

Documentation of Higher-Level Feedback. This section is designed to document how results are used and how the results are disseminated throughout the institution. The intent is to document conversations and collaborations that are being implemented in order to systematically and institutionally improve student learning and development. Include the routing of the recommendations or decisions (for example, who needs to see the recommendations or be involved in the decision making) if resources, policy changes, or other information was required outside the scope of the program. For example, if you are the program coordinator and the decisions you and your students recommend require the approval of the department director, then you need to indicate that the approval of the decision must flow through the departmental director.

Appendixes. Include any appendixes that may help illustrate the manner in which you evaluate your program. For example, you may want to include the curriculum alignment or outcome and delivery map or the tools and criteria to evaluate each outcome. You may also choose to include any external review of the plan, results, or decisions and what was concluded from that external review. Include any budget plans and resource reallocation or allocation documents as well (Bresciani, 2010).

Step Eight: Allocate and Reallocate Resources to Help Realize the Goals. Jenefsky and others (2009) discuss in detail how outcomes-based program review provides an effective way for institutional leadership to use systematically collected data to inform specific decisions for improving strategic plan initiatives. Thus, the findings and recommendations from step 7 can be used as evidence to inform decision-making processes at

various levels in the institution (for example, from the program level through the university level).

In order to frame this discussion, remember that some suggestions to improve strategic initiatives can occur with very little resource reallocation (for example, resequencing process steps, refinements in the criteria for student evaluation, or reorganization of workshop material). Other findings may point to a need for a larger reallocation of resources, ranging from staff development for assessment to hiring more staff or faculty members to fill unmet needs.

Step Nine: Make It All Systematic. The final step in this process is to make the entire data-driven planning process systematic. This requires institutional leadership to schedule periodic holistic reviews of their processes in order to ensure that they are working together to inform datadriven planning. There are several things to consider when creating a systematic, sustainable, and data-driven planning process. The first is to build collaborations across departments, colleges and divisions, and hierarchical structures so that information can flow in an environment of trust. Second, review position descriptions and personnel review processes to ensure that faculty and staff are constantly reminded of the importance of engaging in data-driven planning, given professional development opportunities to learn how to do this well, and rewarded for using data to inform decisions. Third, maintain the integrity of the data by being forthright with how data will be used for planning purposes, resource reallocations, and professional development opportunities. Fourth, consistently use data and provide systematic processes for communicating how the data are used for informing decisions and planning. This will motivate faculty and staff engagement in the process. Finally, identify strategies to keep morale high when someone's program is not selected as an institutional priority.

Conclusion

Ensuring these steps are followed will more than likely lead your institution to establishing an effective data-driven planning process. The gathering and analysis of data also has the potential to strengthen the implementation of a well-documented plan. The ongoing cycle of evaluation and assessment will ensure the plan's effectiveness.

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