

Advising with a Strong Assessment Component Helps Students Achieve their Educational Goals

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Advising is a form of teaching that is inherently student centered and works well with a facilitated learning approach. Traditional methods for educational evaluation, such as Ralph W. Tyler's goal-based evaluation, Michael Scriven's goal-free evaluation, and Robert Stake's responsive evaluation, can be employed to determine how well students are achieving their goals. Formative and summative evaluations relying on ongoing communication and campus-wide collaboration are essential components of educational evaluation in advising. This article presents guidelines for evaluation that can be used in a variety of settings and illustrates the process by examining advising in an academic support program at a small New England college.

In recent years higher education has focused on assessment for examining learning outcomes as well as for accountability. Advisors, whether professionals in an advising center or faculty, are an important part of such assessment: Advising affords an opportunity for teaching and learning no less important to the student's higher education than that offered through the traditional curricula and classrooms.

For many students, advisors are the only institutional agents who seem to know what is required to negotiate the academic path to graduation. In a sea of ambiguity, somebody with definitive answers is a life-saver! Few others know students as well as their academic advisors. Thus, academic advisors are uniquely qualified to help students decide not only what classes to take, but also what to make of college. (Kuh, 1997, p. 9)

In addition to information on college regulations and degree requirements, advising provides an arena for teaching skills in communication, goal setting, metacognition (self-monitoring of cognitive progress), and problem solving. A study by Daller, Creamer, and Creamer (1997) clarified the role of academic advisors in educating college students. They identified three advising styles, each with a distinct primary goal: teaching, scheduling, and counseling. Advisors whose style had teaching as its primary goal integrated academic and personal issues. They were aware of

their advisees' backgrounds, communicated personal interest in their advisees, and related advising sessions to previous discussions. They evidenced an overall goal of educating students for self-sufficiency. Although all three styles clearly involve teaching to some extent, the Daller et al. study indicated that many academic advisors practice advising primarily as a teaching process. Therefore, methods and techniques for educational assessment and evaluation can be useful to academic advising.

In recent years a great deal has been written about conducting evaluation in education. This information at times has been confusing. Lee J. Cronbach (1983, p. 102), in writing on evaluation for course improvement, provided direction regarding this topic:

We may define evaluation broadly as the *collection and use of information to make decisions about an educational program*. This program may be a set of instructional materials distributed nationally, the instructional activities of a single school, or the educational experiences of a single pupil.

Although the terms "assessment" and "evaluation" are sometimes used interchangeably, they traditionally refer to separate practices (Banta, 1999). Assessment refers to the process of measuring an educational program, quantitatively or qualitatively, in reference to some variable. Evaluation refers to a methodical examination of the value of an educational enterprise.

Many guidelines for conducting educational evaluation exist. Among them is the Tyler rationale for evaluation, which first received national recognition in the 1940s. Ralph W. Tyler, sometimes referred to as the "father of educational evaluation" (Madaus, Scriven, & Stufflebeam, 1983, p. 8), developed a general rationale for evaluating teaching and learning that is timeless and adaptable to most instructional situations. Emphasizing the necessity of defining objectives and collecting data to determine whether they have been reached, he stressed the importance of goal-based evaluation (Tyler, 1949). Michael Scriven (1974) proposed a complementary evaluation procedure that can be integrated with a goal-based methodology: goal-free evaluation.

Scriven's evaluation allows other outcomes produced, as well as preplanned goals and objectives, to be studied. Another procedure, Robert Stake's responsive evaluation (Stake, 1983), also recognizes the need to address outcomes evolving outside of those planned. This evaluation design places emphasis on the analysis of qualitative information and on observations by program participants. In addition, the "Nine Principles of Good Practice for Assessing Student Learning," developed in 1992 under the auspices of the American Association for Higher Education, offer useful guidelines that build upon and complement the Tyler rationale, Scriven's goal-free evaluation, and Stake's responsive evaluation. They also reflect the importance of collaboration across campus divisions in providing and assessing effective curricular and cocurricular teaching and learning.

Conducting Assessment and Evaluation During Advising

The nondirective teaching model (Joyce & Weil, 1980), based in large part on Carl Rogers's student-centered teaching (Rogers, 1965), offers a facilitated instructional approach that can be adapted to the advising process as it relates to teaching. Other approaches can be used as long as they focus on the needs of the learner. A student-centered approach to teaching calls for skill in formative and summative evaluation.

Formative evaluation is used for making decisions during program implementation while summative evaluation allows questions to be answered regarding learning outcomes, issues of accountability, and program adoption or continuation (Joint Committee on Standards for Educational Evaluation, 1981). Formative evaluation is of particular importance for teaching and learning because through this process educational strategy is revised as needed during instruction.

Tyler (1949) said that changes in student behavior must be observed to determine whether goals have been achieved. He warned that evaluating student performance only at the conclusion of an instructional program is insufficient to identify and confirm changes in behavioral patterns. Therefore, several appraisals are needed. Evaluation was suggested at the beginning of the program of instruction, at regular intervals during its implementation, and at its conclusion. Tyler emphasized that because instructional programs have several objectives, assessment of each objective will generate multiple data. Therefore, he

reasoned the end result should include analyses of all data rather than a single score.

Evaluation in advising should begin with a baseline assessment that provides an inventory of individual student needs. This can be achieved by reviewing admissions records, College Board scores, or results of college placement examinations and by conducting conferences with the advisees. The sources for this information is limitless. For example, data can come from family or friends, high school counselors, coaches of various athletic teams who have recruited the advisees, freshman orientation staff who have acquainted themselves with these new students, and even financial aid officers. Information acquired from this initial assessment establishes the groundwork for the next step, planning the individualized educational strategy for advisees.

In articulating specific educational objectives for the student, the individualized plan serves as a guide for both advisor and advisee throughout the student's college experience. Its objectives might include specific ways to adapt the educational experience to students who have a hearing or visual impairment, who require remediation in some subjects but not others, or who possess the requisite skills for academic success but whose sense of failure is so great it threatens their progress. An educational strategy benefits successful students too; for example, natural leaders with histories of academic excellence may need guidance to build upon such ability. However, an effective plan must be revised continuously as new information from formative evaluation data is received. For example, as evaluation results indicate that a student's writing skills have reached an acceptable level, remediation may be eliminated, or as an advisee gains greater self-confidence, a heavier course load may be scheduled.

Establishing channels of communication is vital to formative evaluation. Regular conversations between advisor and advisee, which can be by telephone, electronic mail, or personal meetings, are essential. Relying only on the requisite contact for course registration is not enough to ensure that advising is a successful instructional process. Advisors should take notes to document these contacts and provide data for assessment. Educators responsible for both curricular and cocurricular instructional activities should be included in formative evaluation. Advisors can encourage course instructors and tutors to discuss concerns and successes students are experiencing. Likewise, other key persons, such as the dean

of students, the director of counseling, and the director of athletics, can be notified of an advisor's interest in their input. Another important source of information in evaluating an advisee's progress with the college experience can be off campus, such as family or friends identified by the student as being significant to his or her well-being. Establishing rapport with off-campus sources can be critical in crisis intervention and in developing an effective plan for meeting a student's needs.

Conducting a midterm check with advisees' course instructors is one of the most useful activities for formative evaluation. The advisor may have engaged in several previous conversations with these instructors. However, this check is of special importance because the instructors are asked to give the student preliminary grades. Sometimes they are actual grades; other times they are the instructors' best guesses. These grade reports provide all concerned with a concrete sense of how the student is progressing at a key time during the semester. Instructors are invited to make suggestions for the student's improvement and are provided, if necessary, useful information regarding the student's instruction. The advisee is informed of these suggestions as well as other information received from the midterm check. This assessment provides far more insight into advisees' progress than do failing notices or formal warnings, which commonly are distributed at this time of the semester.

Whatever the actions taken to gather data for formative evaluations and revision of educational strategies, students must be made aware that ongoing communication with others regarding their educational experience is part of the evaluation process.

Students are not passive recipients of information and influence. Students need to be empowered to seek out and sift through information pertinent to their needs. Part of this empowerment would entail students' giving feedback to parts of the system that influence them. When feedback occurs, students are neither products of the system nor merely customers—they become participants. (Tukey, 1996, p. 9)

Through active student participation, metacognition and self-assessment become an important part of the overall evaluation process. John H. Flavell (1979) presented a model for metacognition and cognitive monitoring that enables students to assess and evaluate themselves with

reference to their educational objectives. Thus, through self-monitoring of cognitive progress, self-assessment becomes an important part of the overall evaluation process.

Summative evaluation is conducted at the end of each semester and academic year to determine the extent to which objectives were met and to decide how effective the advising process has been. Results can be used in planning for the upcoming semester or academic year as well as for accountability. Data for summative evaluation can be acquired from various sources. The following questions provide a useful guideline for summative evaluation: Have advisees satisfied the college's academic requirements? How do their grade-point averages (GPAs) compare to the overall average of students at the institution and those of state and national averages? How well are the students being retained? How does this retention information compare to college, state, and national averages? How many courses were attempted and completed? To what extent have advisees met their personal goals based on advisor and student assessments? Were results other than those anticipated through specified goals evidenced? Do advisees express satisfaction with their educational experiences at the college? Have they pursued graduate school or acquired employment supporting their career goals? What do other educators on campus say about the advisees' experiences? Official college records, student surveys, exit interviews, conferences, and advisors' personal observations offer means for collecting data necessary for summative evaluation.

Illustrating the Process

The numerical data acquired for this illustration were not part of an experimental study. They were gathered to measure student learning and to determine which program goals had been reached. The statistics used in this article are means acquired during the 1995 academic year from a comprehensive, coed, public college in New England that is representative of similar colleges in other parts of the United States. This small college offers numerous baccalaureate and master's degree programs. Its enrollment consistently represents approximately 3,000 full-time students who are primarily residents of the institution's home state. Undergraduate admission is selective, and mean SAT scores for freshmen generally are consistent with the national mean. Despite efforts to diversify, students of color have traditionally represented only a small percentage of the total student body, and women make up

60–70% of enrollments. Although the College has a general mission statement, it is not specific to advising. The following statistics are presented to illustrate the process of educational assessment and evaluation, not to promote any particular program. Admissions staff and the registrar provided the raw data used for quantitative assessment. The Disadvantaged Student Program (DSP) staff completed the evaluation.

For this illustration, the college experiences of participants in the DSP were selected. The program provided opportunity for higher education through intensive academic support to students from backgrounds that place them at an educational disadvantage. These students did not fully meet criteria for admission to the college. For this reason, they were considered at-risk for achieving academic success in their courses. Although academic support included tutoring, advising served as the driving force for the program. As a condition of their acceptance, DSP students were required to enter the program as first-time freshmen with an undeclared major and were assigned the program's director as their academic advisor. Although some declared their major after only 1 year, advisees generally completed 2 to 3 years of instruction before doing so. At this time they were assigned to an advisor within their major but continued to receive DSP academic support. Forty-four advisees were enrolled in the DSP program, with approximately one half of them entering freshmen. Twenty-nine percent were White, and immigrant students and those whose primary language was not English made up 45%. Students ranged from 17 to 35 years of age, although most entered college directly from high school. The mean SATV score was 300 and mean SATM score was 350. Program students commonly required 5–6 years to satisfy the requirements for a baccalaureate degree.

The primary audience for program evaluation consisted of DSP advisees and their advisor as well as faculty members and other support staff who worked with them in the delivery of instructional services at the College. Assessment and evaluation were conducted to improve student learning by pointing to needed changes in the instructional process before it was completed or prior to repeated implementation of the DSP program. A secondary audience consisted of the College's Academic Vice President, the state's Board of Higher Education, and the state legislators, who shared responsibility for funding the program and thus were interested in evaluation for the purpose of accountability.

Although to some extent the evaluation plan was goal-free, it emphasized a goal-based methodology. The predetermined objectives of the program were for at least 60% of the participants to a) satisfy the College's academic requirements for full-time enrollment as specified in the College catalogue, b) be retained first to second year at a rate not less than that of the College's general population, and c) experience success in college, an important goal because many of the program's participants had a history of academic failure. Objectives were specific to the needs of individual advisees and universal in that they addressed issues fundamental to effective learning for any student (Angelo, 1999).

Assessment and evaluation procedures for satisfying degree requirements and retention were based on analysis of quantitative data. To determine whether students were academically successful, an analysis of qualitative information, utilizing both goal-free and responsive evaluation, was employed.

Because their major purpose was to make active changes in instruction to improve student learning, a team consisting of the primary audience internally completed the assessments and evaluations. DSP educators recognized that subjectivity could invalidate the results of the evaluation. However, because the team members were driven by different agendas, the range of biases characteristic to the different subgroups would correct any tendency toward subjectivity. Referring to the importance of being responsive in evaluation, Stake (1983, p. 299) said,

... the evaluator should not rely only on his own powers of observation, judgment, and responding. He should enlist a platoon of students, teachers, community leaders, curriculum specialists, etc.—his choice depending on the issues to be studied and the audiences to be served. The importance of their information and its reliability will increase as the number and variety of observers increase.

Through interactive descriptions and judgments among a variety of knowledgeable sources on campus, an acceptable degree of internal validity could be achieved in evaluating the changes in behavior patterns of DSP advisees.

Evaluation was conducted as Tyler recommended: at the beginning of program instruction, at regular intervals during its process, and at its conclusion. A high level of monitoring was required for DSP students, and formative evalua-

tion was conducted during each semester utilizing all the formal and informal techniques specified in the previous section. Summative evaluation was conducted at the conclusion of each semester and academic year. An analysis of program participants' performances was completed, and results were compared to the College's academic requirements as well as to statistics regarding the achievement of all its students. Data were evaluated further in view of individual student objectives. Results were used in developing educational strategies for the upcoming year. Summative evaluation of multiple data generally revealed that the predetermined goals of the program for the academic year 1995 were achieved. Cumulative GPA on a 4-point scale for entering freshmen averaged 2.16, and for returning advisees the mean GPA was 2.32. The required GPA by the College for freshmen was 1.75 and for all others, 2.00. On average, 70% of DSP advisees, both freshmen and returning students, consistently met the College's academic requirements. The average number and type of courses attempted and completed per semester for most students satisfied the College's regulations for full-time enrollment. Mean first to second year retention rates exceeded that for the College's overall population: 87% of DSP advisees were retained and 70% of the general population stayed at the College. Thus, despite their initial academic disadvantage, most DSP advisees satisfied the College's academic requirements and were retained from the first to second year at higher rates than were students in general. Interviews and observations conducted by the team of evaluators indicated that most advisees were experiencing success in college.

A Case Study

Because DSP students were at a significant academic disadvantage, graduation rates were not considered an adequate measure of success. Program students often dropped out due to financial, personal, or academic reasons. Some returned to graduate; others did not. Much of the growth they experienced as a result of their time at college could not be quantitatively assessed and evaluated through such measures as graduation rates. A qualitative approach, where responsive questions were asked, was considered a more insightful measure; for instance, changes in personal growth could be evaluated based on answers given during informal interviews to questions such as: "Had students' confidence about their abilities to learn improved after experiencing col-

lege?" "Had they enhanced their understanding of themselves, and could they more successfully relate to the world at large?" "Were they better able to understand their goals and articulate their thoughts?" The following case study portrays a student who benefited from such qualitative assessment.

"P" was a 17-year-old high school senior when his College advisor first met him. He was applying for admission to the College. The oldest son of a Vietnamese family who had been airlifted from the country during the fall of Saigon, "P" had been having difficulty meeting the demands placed on him by his family and new country. Not surprisingly, his academic record reflected the stress of extra responsibilities from being the eldest male child and from adjusting to the cultural demands of a foreign country. Despite poor grades throughout his secondary school years, admissions personnel and DSP staff believed that he had strong potential that could be realized in college. Therefore, he was accepted into the College's Disadvantaged Students Program.

In June, the Admissions Department forwarded to P's academic advisor copies of his complete application file. This provided information about his high school grades, College Board scores, attendance records, extracurricular activities, and included a personality profile by his high school guidance counselor. The advisor contacted him to discuss P's interests and concerns, selection of courses for preregistration, financial aid application, and housing choices. During this time P signed a release form permitting his advisor and support staff to discuss his needs and academic progress with other professionals involved in his education. By the time his first semester began, P had engaged in several contacts with his academic advisor, and the foundation for the advisor-advisee relationship had been established. In addition, the collection of data for baseline assessment was completed and an individualized educational strategy prepared.

P was a bright and enthusiastic young man with a great sense of humor. He was quick thinking and creative in his approach to problem solving. Although English was his second language, his knowledge of it was sufficient for him to have done well in school. The DSP staff believed that by closely involving P in planning his own education and by providing him with extensive tutoring and feedback regarding his academic progress, he would become engaged in his studies and be successful. For his first semester P enrolled in introductory courses in sociology and geography and a

basic writing course. Peer tutors were scheduled to work with him under supervised conditions for 2 hours per week for each course. Observation and informal interviews involving P, his tutors, and the academic support staff were regular and ongoing. His instructors were aware that he was receiving tutoring and were consulted periodically. Regular meetings between P and his advisor, although usually brief and unscheduled, were held at least every other week, as suggested by the nondirective teaching model (Joyce & Weil, 1980); his advisor's teaching role was that of a facilitator for learning. At midterm his instructors were asked to give him a grade, actual or estimated, to assess his progress. They were invited also to make recommendations and to share any concerns or successes experienced from working with P. Following this interaction, a meeting with P was held to discuss results of the midterm assessment.

P concluded his first semester by passing all courses, although with a GPA barely satisfying College academic requirements. During his second semester, P reenrolled in the language course, having received a D in it during the first term. Again, he was assigned tutoring 2 hours per week for each subject. The process for communicating with P, his peer tutors, and his instructors was repeated. Unfortunately, although raising his grade in the writing course to a C, he received D's in his other classes, and therefore, did not receive the required cumulative GPA for his freshman year. Interviews with P's course instructors and tutors confirmed the conclusions drawn from baseline assessment and from the formative evaluation conducted by his advisor: P had adequate skills to succeed in college. In addition, he seemed to genuinely have a college education as his goal. Why, then, was he underachieving?

P, who was articulate and free with his views, frequently dropped in to chat with his advisor. His mother also telephoned periodically. These interactions revealed a gifted but troubled young man who was extremely angry over having been forced to leave Vietnam, a situation worsened by his father's inability to join his family. A great deal of pressure and responsibility had been placed on P as the eldest son, and he was convinced that he had failed in this role. His advisor asked if he would be willing to meet with one of the counselors provided by the College. He agreed, and P's advisor made the referral. During his third semester at the College, P worked with the counselor and continued his studies. With P's permission, his counselor consulted with his

advisor as needed. P thought his counselor was unable to relate to his problems, and his grades did not improve. However, the experience convinced P to locate a psychologist off campus who was better suited to his needs.

After 2½ years of failing to meet the College academic requirements, P was suspended. This was a joint decision by an academic review committee of which P's advisor was a member. P was suspended in the hope that he would continue working with his psychologist until he was able to successfully confront the demands of his course work. Although P did not return to school for 3 years, he did continue with psychotherapy. During this period, he acquired full-time employment with the civil service. Eventually, he returned to College through continuing education, declared his major, and received a B.A. degree in economics. It was a slow process, requiring many more years than most students need to complete an undergraduate degree. Throughout this time he maintained contact with his advisor, and his individual educational strategy was continuously revised in response to ongoing assessments of P's needs.

For P, the advising process was the linchpin for his success in college. Through continuous assessment and evaluation, P's advisor guided him through or around the obstacles that threatened to stop him from attaining his academic objectives. Although this was accomplished to a certain extent through evaluation of quantitative data, the evaluation of qualitative information gained from informal observations and ongoing interviews with him by his advisor, even after P had dropped out of college, had the greatest impact on his eventual graduation. In a letter written shortly before receiving his B.A., P expressed the importance of his advisor to his college success.

My first two years at college was [*sic*] difficult, but I was able to remain enrolled. My advisor was able to help me through some of the rougher parts of school. . . . The third year became much more complicated and I began failing classes. I was asked to leave school. My advisor took this somewhat personally, I believe. She refused to let me quit. She would call me periodically to offer her encouragement for me to regroup and return to school. This was a period of depression for myself. Without her help and encouragement, I probably would have entirely given up. . . .

P experienced greater challenges than many students in completing degree requirements.

However, his story provides an excellent example of the importance of assessing and evaluating students as individuals who may not follow the prescribed formula of most college advisees and who, although successful, may not provide evidence for satisfying predetermined program goals.

Conclusion

The impact of academic advising for teaching and learning can be a major component of college student success. Given their responsibility for involving others in advising (NACADA, 1996), advisors are in a key position to contribute toward a "seamless learning" environment (Kuh, 1997, p. 9) that reinforces curricular and cocurricular learning. Advising for student learning becomes more than an avenue to transmit the information necessary for course registration and degree requirements; it allows the building of close, trusting relationships between advisors and advisees through which insight is gained into student needs that may not be discovered elsewhere. Advisor understanding of the advisee becomes the source of instructional goals that serve as the driving force behind developing a personal educational strategy for each advisee and provides the basis for assessment and educational evaluation that permits continuous improvement and crisis intervention. Through assessment, advisors consider the total student and recognize that the home, social group, and cultural background, as well as demands of school, influence the student's learning.

A teaching approach to advising can be labor intensive, and depending on their workload, advisors may not be able to employ all the possibilities of this method; however, a partial approach can be applied with positive results. Regardless of the type of student, major, or size of program, advisors who use a strong assessment component and a teaching approach can help students achieve their educational goals.

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