Outcomes Assessment and Program Evaluation: Partners in Intervention Planning for the Educational Environment

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Accountability of educational institutions is a current trend in academia. Outcomes assessment provides a method of evaluating educational programs to ensure they are meeting their objectives. This paper presents an overview of outcomes assessment and describes its relationship to and integration with program evaluation. It also describes the implementation of an outcomes assessment program at Kean College of New Jersey, Union, New Jersey. A model for assessment within occupational therapy programs, which parallels a model for intervention planning, is introduced and discussed.

The 1970s saw the clinical world adjust to the demands of increased documentation and justification brought on by quality assurance, diagnostic-related groups, and third-party payers who wanted measurable treatment objectives (Bloomer, 1978; Cargill, 1989; Joe, 1985; Logigian, 1989; Pagonis, 1989). In the 1980s, it was educators who faced the prospect of accountability for their interventions. As Daughdrill (1988) stated, “Americans want to know how much young people are actually learning in college—in short, if we are getting our money’s worth” (p. A52). According to Daughdrill (1988), educational costs have risen drastically in the past 10 years, and the public now views education in the same way it views other consumer products. Consumers want value for their money, and it is the educators’ responsibility to prove the value of the product they are providing. To address this concern, educators and administrators have increasingly focused on educational outcomes assessment.

Definitions
To better understand the concept of outcomes assessment and its relationship to program evaluation, these terms need to be defined. One difficulty surrounding outcomes assessment is the lack of one accepted definition (Terenzini, 1989). Outcomes assessment was defined by Lenning, Lee, Micek, and Service (1977) as any outcome of a person’s involvement with programs in an educational institution, such as academic degrees and acquired knowledge and skills. Astin (1984) viewed outcomes assessment as an exploration of the effects of college or university on students’ lives, including how their intellectual development was enhanced and what positive changes occurred in their lives. Ewell (1985) identified cognitive development, skills development, attitudinal development, and behavioral outcomes as four dimensions of outcomes assessment. He also stated that outcomes assessment can be “used to support judgments about the effectiveness of particular programs and institutions in meeting stated instructional goals” (Ewell, 1985, p. 33). Thus, outcomes assessment has come to mean the process of evaluating the effectiveness of programs through the assessment of student outcomes. This entails exploration of whether the student has met the program’s goals and objectives and how involvement in the program has affected the student’s life.

Program evaluation involves the collection of data from a variety of sources, including students, to assess the effectiveness of the program. The objective is to determine how the information can contribute to program modification and ongoing program development (American Occupational Therapy Association [AOTA], 1983a). Outcomes assessment is related to program evaluation, which is required by the Essentials and Guidelines of an Accredited Occupational Therapy Program for the Oc-
occupational Therapist (AOTA, 1983a); however, a distinction between outcomes assessment and program evaluation must be made. The biggest difference between the two is that outcomes assessment looks at the effects of the educational experience on the student both academically and personally. Program evaluation assesses the effectiveness of the program, without necessarily looking at its effect on the student. The data gathered for outcomes assessment can contribute to program evaluation because modifications to enhance the program may be based on these data.

The Kean College Approach

In 1985, Kean College of New Jersey, Union, New Jersey, was awarded a Governor’s Challenge Grant to be used toward enhancing excellence in education. One of the grant’s requirements was the development of a college-wide plan for educational outcomes assessment.

A special assessment task force was created to develop assessment guidelines, and then the Office for the Assessment of Student Learning was established to organize and facilitate the development of outcomes assessment plans campus-wide. The outcome assessments were phased in over 2 years, with a selected group of departments establishing a plan each semester until all departments were involved. Each department established a time line for developing a step-by-step plan. The sequence for development of this plan was as follows: (a) establishing program and specific course objectives that were stated in measurable terms; (b) developing an instrument or other means of assessing students’ achievement of those objectives; (c) conducting a pilot study of the instrument or measure chosen; and (d) analyzing the data and implementing change as needed. This information was to be used for the improvement and enhancement of existing programs.

In addition to establishing guidelines, the assessment task force developed a number of principles regarding implementation that fostered the assessment program’s success and encouraged faculty involvement in the process. Several principles addressed the use of assessment data. For example, information gathered would be the sole property of the department; it did not have to be shared with the assessment office or the college administration. Assessment results would not be used to compare faculty, departments, or schools, nor would they be used to evaluate faculty for retention, tenure, or promotion. Assessment results would be used by individual departments to strengthen the programs offered, not as a means of controlling students’ passage into or out of a program.

The assessment office did organize information-sharing sessions to encourage collegial sharing of both process and content of assessment efforts. These sessions were well received and have continued on an ongoing basis.

As those of us in the Occupational Therapy Department began the task of formulating an assessment plan, it became apparent that the Essentials and Guidelines of an Accredited Educational Program for the Occupational Therapist provided an excellent structure for us. The Essentials requires each program to have general program objectives as well as specific behavioral and measurable course objectives. Because Essentials and Guidelines of an Accredited Educational Program for the Occupational Therapist is reviewed approximately every 5 years, any outcomes assessment program based on it will remain current and consistent with the practice of the profession. Because occupational therapy is a practice profession, it is crucial that the educational preparation of therapists be responsive to the ever-changing clinical environment. This requires curriculum reviews and, if necessary, program revisions at least as often as the Essentials are revised. Usually, however, the review process occurs at the time the program applies for continuing accreditation.

The Essentials also requires continuing program evaluation to ensure course and instructor effectiveness. This program evaluation can provide the seeds for an outcomes assessment program. The assessment of student learning is implied, though not explicitly required, in the Essentials. This assessment can be accomplished through the evaluation of the students’ performance on course work. Because students must sit for the National Certification Examination (which is based on the Essentials) to become occupational therapists, their exam results provide another measure of student learning. However, these measures provide limited information. Therefore, exploration of attitudinal development and behavioral outcomes is also needed to assess the full effect of the educational program on the student.

The Essentials requires general program objectives as well as instructional objectives for each course. To form an assessment plan, these must be modified to include specific behavioral objectives that can be achieved by the students upon completion of the program. Setting such objectives and then evaluating students’ performances on both a course-by-course and programmatic basis sets the stage for an outcomes assessment program.

The assessment process is similar to the process used regularly by occupational therapists in clinical practice. Occupational therapy education, therefore, is uniquely prepared for educational outcomes assessment. In clinical practice, occupational therapists continually gather data on patients through formal and informal evaluation techniques and use these data to establish goals and objectives for their patients. Occupational therapists then devise intervention plans to assist their patients in meeting these goals and objectives. Educational outcomes assessments are carried out in much the same way.
and can be approached in a manner similar to treatment planning.

A Conceptual Model for Outcomes Assessment

We used a conceptual model for treatment planning designed by Pelland (1987) as the basis for providing an analogous structure for a model of the integration of outcomes assessment with program evaluation. When outcomes assessment and program evaluation are combined, they can be viewed as intervention planning for the educational environment. According to Pelland’s model, the treatment planning process begins with the selection of frames of reference or models to guide treatment. Pertinent information on the patient is then collected and analyzed, and the patient’s strengths and limitations are identified. A treatment plan, which includes short- and long-term goals stated in behavioral terms, is devised and implemented. The therapist then evaluates the effectiveness of the approach over the course of treatment (Pelland, 1987). The entire process is usually subject to the rules and regulations of the therapist’s particular agency or institution, as well as outside regulatory agencies. Treatment plans and other documentation are often reviewed by a variety of professionals representing those agencies to ensure adherence to regulations of the Joint Commission of Accreditation of Hospitals as well as the requirements of third-party payers and quality assurance standards.

Based on Pelland’s (1987) treatment planning model, we devised a model for the integration of outcomes assessment and program evaluation in an occupational therapy program. This model, which is shown in Figure 1, follows objectives to be established according to individual program philosophy and curriculum design while providing multiple feedback mechanisms. The model shows where feedback may occur and how outcomes assessment data can be used in program evaluation.

Figure 1. A conceptual model for integrating outcomes assessment and program evaluation for occupational therapy education. Note. a(American Occupational Therapy Association, 1983a). bSpecific measurable objectives should be set and shared with students. cBy determining if students have met these objectives at this stage, an effective outcomes assessment measure has been included. dThrough the use of students’ feedback and outcome measures of students’ performance at this stage, effective outcomes assessment measures have been incorporated.

to be specified, an outcomes assessment’s “meaningful instructional objectives must be stated in terms of student behavior, and they must specify the type of behavior a student will engage in (or be able to engage in) when he has satisfactorily achieved the objective” (Kean College Presidential Task Force on Student Learning and Development, 1986, p. 23).

Curriculum design determines course content. Specific course objectives must be stated, as again as measurable student outcomes. The Kean College Assessment Guidelines state that, “minimally acceptable standards of student performance necessary to satisfy the objectives should be specified in advance and made apparent to the students at the beginning of the course or at the beginning of a discrete segment of it” (Kean College Presidential Task Force on Student Learning and Development,
The particular methods for achieving the objectives are developed by the course instructor. The Guide to the Self Study Report for an Educational Program for the Occupational Therapist (AOTA, 1983b), based on the Essentials, provides a format for ensuring that all content requirements are met. This is done through a matching of each course in the curriculum with the specific Essential that it meets.

Fieldwork Level I objectives are determined in accordance with course objectives and individual fieldwork centers. Fieldwork Level II objectives are determined by clinical facilities in conjunction with the Fieldwork Evaluation to effectively reflect didactic course material and objectives.

Each educational program must devise methods for determining outcomes assessment within courses and the program as a whole. Methods for outcomes assessment within courses may include written and practical examinations, papers, case studies, and students’ presentations. It can also include students’ self-evaluations of their learning during the course. Methods for outcomes assessment of the program may include National Certification Examination results, performance on fieldwork; performance in specific courses that require integration of academic knowledge with clinical practice; and surveys of students, faculty, alumni, and employers. Evaluation of professional behavior has also been suggested as an outcomes assessment measure (Hughes & Opacich, 1990).

At Kean College of New Jersey, the outcomes assessment process requires many of the preliminary steps that can be used to implement comprehensive outcomes assessment and program evaluation. The occupational therapy curriculum at Kean College includes three senior seminars. These seminars are designed to integrate previously and newly acquired academic knowledge with clinical practice. All of these seminars include a Level I fieldwork experience. Both the student’s individual performance and his or her ability to meet the three seminars’ stated objectives were used as measurement instruments to assess student learning. The department faculty also decided to evaluate students’ performance in the clinical setting to determine whether students had met general program objectives. This was considered a good measurement of whether the academic program was meeting a main objective of educating students to become effective occupational therapists. An evaluation form was developed to assess students’ performance during their Level I experiences in each of the three seminars. Self-awareness, interpersonal skills, understanding of theory, ability to apply theory in practice, participation in the supervisory process, communication skills, and professional behavior were all assessed.

Having these types of assessment data is important because they can show if consistent problems exist in one area for the majority of students. The data can also show any individual student’s consistent deficits over the course of the curriculum. These findings could indicate an area of the curriculum that requires further development or modification. Additionally, supervisors’ comments might indicate that an aspect of the curriculum requires modification.

In the case of Kean College, students were generally rated high for performance, but were found by several supervisors to have limited understanding of a variety of current clinical media. These outcomes assessment data were the catalyst for further program evaluation, and a decision was made to modify existing media courses within the program.

Summary

Occupational therapy educational programs are in an excellent position to implement comprehensive outcomes assessment and program evaluation measures. The Essentials and Guidelines of an Accredited Educational Program for the Occupational Therapist already requires many of the preliminary steps that can be used to determine specific student outcomes, including general program objectives, specific course objectives, and ongoing program evaluation. The model proposed in this article may provide a mechanism for starting a departmental outcomes assessment program. Further, an outcomes assessment program can be used as part of an
References


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Overall program evaluation. The use of this model may also facilitate the educational program's review of the curriculum required for the accreditation process.

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