ED 334 935   HE 024 771

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TITLE   Usage of Student Learning Outcomes Assessment.
PUB DATE   Nov 91
NOTE   17p.; Paper presented at the Joint Conference of the
                Illinois Association for Institutional Research and
                the Association for Institutional Research--Upper
                Midwest (Chicago, IL, November 8-9, 1991).
PUB TYPE   Reports - Research/Technical (143) --
                Speeches/Conference Papers (150)

EDRS PRICE   MF01/PC01 Plus Postage.
DESCRIPTORS   *College Outcomes Assessment; Evaluation Methods;
                Higher Education; *Institutional Research; National
                Surveys; Outcomes of Education; *Pretests Posttests;
                Program Administration; Questionnaires; Standardized
                Tests; Student Development; Student Educational
                Objectives; *Student Evaluation

ABSTRACT
                A survey questionnaire returned by 161 institutions
of higher education (an 30.5% return) addressed six areas of concern:
(1) the institution's involvement in student learning outcomes
assessment; (2) pre-assessment of students; (3) types of
post-assessment; (4) efforts to relate pre-assessment and
post-assessment; (5) attempts to do non-academic student development
assessment; and (6) administration of the assessment program.
Findings included the following: 52.8% of respondents indicated that
they did student outcomes assessment; 85.9% of these indicated they
did pre-assessment, with 75.3% using standardized assessment
instruments; 62.4% used standardized assessment instruments for
post-assessment; 31.5% were attempting to relate pre-assessment and
post-assessment of learning outcomes; 49.4% were also doing
non-academic student development assessment; and assessment was most
often administered by the Office of Institutional Research. Includes
nine references. (DB)

USAGE OF
STUDENT LEARNING OUTCOMES ASSESSMENT

BY

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JOINT CONFERENCE
"INSTITUTIONAL EFFECTIVENESS ASSESSMENT"
NOVEMBER 8-9, 1991
CHICAGO, ILLINOIS

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USAGE OF STUDENT LEARNING OUTCOMES ASSESSMENT

As pointed out by Lenning in 1980:

> The term assessment was made popular in the late 1930s by Henry
> Murray and his associates, who used it to mean the appraisal of
> individuals . . . The word assess is closely related to
> assay, which means "to examine, test, or analyze." Murphy
> (1975, p 27) pointed out that, "in its derivation, the word
> assess means 'to sit beside' or 'to assist the judge'." From
> such a perspective, assessment refers to gathering data,
> transforming data so that they can be interpreted, applying
> analytical techniques, and analyzing data in terms of alternative
> hypotheses and explanations. Based on such assessment, judgments
> about value, worth, and ways to improve can be made—the
> evaluative process. (pp 233-234)

The study reported here had as its goal to investigate institutional
student outcomes assessment programs and practices using a national sample
of collegiate institutions. As outlined in the next section, although the
interest among colleges in student outcomes assessment has clearly
increased, we do not know nearly as much as we should about how that
interest has translated into action at the campus level for the typical
college or university.

The Problem

In late 1984, the National Institute of Education (NIE) published
Involvement in Learning, in which a prominent study group called for
effective student assessment at the college level to provide feedback for
the learning process. Shortly thereafter, in early 1985, the Association of
American Colleges (AAC) published a study called Integrity in the College
Classroom that took colleges to task for not assessing the impacts of their
teaching. These reports apparently created a stir at a number of colleges,
because when NIE and the American Association of Higher Education (AAHE)

sponsored a conference on college student outcomes assessment in October of 1985, at the University of South Carolina, approximately 700 diverse college people showed up to explore what the calls for student outcomes assessment were all about.

The next year, 1986, the National Governors' Conference issued a report titled Time for Results that urged the states to demand accountability from their colleges and universities in terms of documenting undergraduate student learning. AAHE, through a grant from the Fund for the Improvement of Postsecondary Education (FIPSE), subsequently formed its Assessment Forum to assist institutions with outcomes assessment through monitoring assessment activity, developing a file of resource materials, developing an assistance and referral network of colleagues, commissioning assessment-related papers, and sponsoring an annual summer conference on higher education outcomes assessment that has drawn increasing numbers of participants each year: 700 in 1987; 1,000 in 1988; 1,150 in 1989; and 1,400 in 1990. Another assessment center funded by FIPSE was the Assessment Resource Center at the University of Tennessee at Knoxville, which has a mission of disseminating information about college student outcomes assessment and related research through printed bibliographies and other materials, and through workshops. In early 1989, this center began disseminating a quarterly newsletter called Assessment Update that has been published and promoted by Jossey-Bass Publishers.

At the same time as the above was happening, FIPSE funded several dozen major institutional assessment projects, reports were being published about increasing statewide initiatives regarding college student learning (from a dozen states in 1987 to 40 or so in 1990), and the regional accrediting associations were developing policies requiring such assessment for accreditation self studies. The American Council on Education (ACE) began including items about student assessment interests and practices in its

annual survey of representative samples of colleges and universities, called
Campus Trends. ACE's successive issues of Campus Trends (El-Khawas,
1986-1990) revealed steadily increasing percentages of colleges and
universities reporting that they were conducting student outcomes assessment
activities: 1987-50%, 1988-55%, 1989-67%, and 1990-82%. Furthermore, the
ACE data revealed that by 1989 assessment activities were still the most
prevalent at public two- year colleges (87%), but the independent colleges
had come from far behind to catch the four-year public colleges in
percentage of institutions conducting such assessment (42% versus 64% in
1988; 56% versus 79% in 1989; 79% versus 79% in 1990).

A number of writers have referred to the 1985 AAHE-NIE assessment
conference as the beginning of a national "assessment movement," and reports
are that "Assessment Coordinator" has become an increasingly common campus
position. Thus, in the September/October 1990 issue of Change Magazine,
Kay M. McClenney of the Education Commission of the States could report the
following: "In most places, thankfully, the question is no longer whether
but how best to undertake assessment of student learning (p. 54)".

The potential importance, for collegiate institutions, of student
outcomes assessment has been especially well stated by Claxton, Murrell and
Porter (1987):

> The outcomes an institution looks for—and the way it goes about
> assessing them—reflect in a way few other actions do just what
> the institution believes its role is. Outcomes assessment has
> serious implications for institutional purpose, policy
> formulation, and the allocation of resources. Thus it has greater
> relevance for members of governing boards than practically any
> other topic.

There is an even more important role for student assessment than this in the
eyes of many administrators and faculty, however. That more important role
is providing stimulus and guidance for improvement in the curriculum and of
teaching.

The promise and potential are great if effective assessment of student outcomes takes place at colleges and universities across the country. Just because student outcomes assessment is taking place on a campus does not mean that it is good, effective and useful assessment, however. For example, Terenzini (1989) discusses a number of serious pitfalls that are likely to be present when studying student outcomes, if one is not careful. With regard to the ACE Campus Trends results, it is unclear how sophisticated or rudimentary the assessment programs referred to there are, and how they are organized and carried out.

There is evidence that the ACE Campus Trends results that have received so much national publicity possibly may be misleading. For example, a student outcomes and assessment survey conducted during 1987-88 by Hyman, Jamison, Woodard and Destinon (1988) of all NASPA (National Association of Student Personnel Administrators) members found 63.1% of the respondents reporting that "their institutions did not have, and were not developing, an assessment program." Only 16% reported that "their institutions were developing an assessment program," which compares to 50% reported in Campus Trends, 1987. Similarly, a national survey of community colleges conducted during 1988 (Cowart, 1990) found "exit assessment" percentages only somewhat smaller than those reported in Campus Trends, but only about 10% tried to compare post-assessment values to pre-assessment values in some manner.

Because of such discrepancies and an apparent incomplete picture related to assessment practices provided by Campus Trends, the study reported here was developed and carried out in the spring of 1990. Apparently, at the same time this study was being carried out, ACE was also carrying out such a study, although the results are not yet available. In the 1990 Campus Trends that was just published as this was being written, (El-Khawas, 1990) the following is reported:

4

6

It should be noted that, although assessment may be getting wide attention, these responses do not necessarily reflect a substantial level of activity. Evidence from another survey of assessment activity indicates, for example, that relatively comprehensive approaches to assessment—involving many parts of the institution and a long-term commitment to assessment methods—are found at about 30 percent of institutions (Johnson, 1990 forthcoming). (p. 13)

Methods

A survey questionnaire was developed to address six basic questions:

(1) Does the responding institution do student learning outcomes assessment;

(2) If the institution does student learning outcome assessment, do they do pre-assessment of students; and if they do pre-assessment what type of pre-assessment is being conducted; (3) If the institution does student learning outcome assessment, what types of post-assessment are being conducted; (4) Among those respondents who do both pre-assessment and post-assessment has there been an effort to relate the two assessments; (5) Are there attempts being made to do non-academic student development assessment, and (6) How is the assessment program administered. The survey was structured so respondents would give a "yes" or "no" answer to a question and then give a description on the items to which they responded "yes".

The survey form and a cover letter were pilot tested on a group of ten people from diverse institutions. As a result of the pilot test, a definitional statement concerning student learning outcomes assessment was added to the beginning of the survey, that said the following:

> For purposes of this study, student learning outcomes will deal with academic outcomes except where stated. Student learning outcome assessment will be defined as (1) assessment to determine the academic level a student has achieved overall or in certain subject matter or academic skills, or (2) academic improvement (value-added) a student has made. An example of post-assessment would be using the ACT COMP exam or the ETS Academic Profile to determine the academic level students have achieved. An example of pre-assessment would be the ACT exam to determine the entering academic level of students.

The pilot study was also used to determine the time it would take to complete the survey, which was determined to be approximately 10 minutes. A copy of the final survey form is attached.

The refined survey questionnaire, cover letter, and a self-addressed stamped envelope were then sent to a stratified (by geographic area of the country) random sample of 200 U.S. colleges and universities having members in the Association for Institutional Research (AIR). No more than one survey was sent to any one college or university; for each instituion selected having more than one AIR member, the AIR member whose title suggested the most knowledge about student assessment at the instituion was selected. A follow-up letter, survey, and self-addressed stamped envelope were sent to non-respondents three weeks following the original mailing. The AIR Central Office supplied us with mailing labels for the survey.

The population of respondents was limited to AIR members for two reasons. First, we wanted a sample of respondents that would give us a good response rate. Secondly, it was felt that institutions participating in the Association for Institutional Research would be more sophisticated and knowledgeable regarding student data collection and use.

Institutional demographic data for the areas of (1) size, (2) public versus private, (3) highest degree offered, and (4) regional accrediting body, were entered into a personal computer for each of the 200 institutions used in the study. Respondents were compared to non-respondents, using a Chi-Square test with a .05 level of significance, to determine if there was a difference between respondents and non-respondents. SPSS was used to analyze the data.

Respondent groups were then compared (using the above four demographic categories) for responses to each of the first five questions covered in the survey. A Chi-Square test, with a .05 level of significance, was used to compare the institutional groups for each question requiring a yes or no

answer. Comments related to the question were then grouped and reported as descriptive data.

Results

RESPONDENTS VERSUS NON-RESPONDENTS

A total of 161 surveys (80.5%) were returned. Respondents were compared with non-respondents on demographic characteristics in the four categories to determine if there were differences between the two groups. The four categories were (1) size, (2) public versus private, (3) highest degree offered, and (4) regional accrediting body. For each of these categories, no significant difference (p<.05) was found between respondents and non-respondents.

USE OF STUDENT OUTCOMES ASSESSMENTS

A total of 85 (52.8%) of the 161 respondents indicated that they did student outcomes assessment. Those doing student outcomes assessment were compared to those who did not do student outcome assessment across the four categories to determine if there was a relationship between certain characteristics and the use of student outcome assessment. Of the four categories, a significant difference (p<.05) between groups was found only for the category of "regional accrediting body."

For the category of regional accreditation, the use of student outcome assessment (Table 1) ranged from 31% in the Western region to 68% in the Southern region. A Chi-Square test produces a value of 11.52282 with 5 degrees of freedom. Therefore, with respect to regional accreditation, there was a significant difference (p<.05) in the use of student outcome assessment.

TABLE 1
STUDENT OUTCOMES ASSESSMENT SURVEY
USAGE OF ASSESSMENT VERSUS REGIONAL ACCREDITATION

REGION	NUMBER USING ASSESSMENT	NUMBER NOT USING ASSESSMENT	TOTAL
New England	5 (42%)	7 (58%)	12
Middle States	21 (64%)	12 (36%)	33
Southern	30 (68%)	14 (32%)	44
North Central	22 (43%)	29 (57%)	51
Northwestern	3 (38%)	5 (62%)	8
Western	4 (31%)	9 (69%)	13
TOTAL	85 (52.8%)	76 (47.2%)	161

USE AND TYPES OF PRE-ASSESSMENT

Among the 85 respondents who indicated that they did student outcomes assessment, 73 (85.9%) indicated that they did pre-assessment in their student outcome assessment program. Those doing pre-assessment were compared to those not doing pre-assessment across the four demographic categories to determine if there was a relationship between certain characteristics and the use of pre-assessment. There was not a significant difference ($p < .05$) between users and non-users for any of the four categories.

With respect to types of pre-assessment used by the 73 institutions doing pre-assessment, 55 (75.3%) used standardized assessment instruments, 38 (52.1%) used college-developed assessment instruments, and 11 (15.1%) used a form of assessment not involving an assessment instrument. In many cases institutions used more than one type of pre-assessment.

Tests provided by the American College Testing Program (ACT) and the College Board (ETS) were the most common type of standardized pre-assessment instrument and were being used by 46 institutions doing pre-assessment. The most common type of college-developed tests were in the areas of math and English, with 23 institutions using their own English exam and 21 using

their own math exam. Among the institutions conducting assessment not involving an assessment instrument, most were interviewing students.

USE OF TYPES OF POST-ASSESSMENT

With respect to types of post-assessment used by the 85 institutions doing student learning outcome assessment, 53 (62.4%) used standardized assessment instruments, 44 (51.8%) used college-developed assessment instruments, and 29 (34.1%) used a form of assessment not involving an assessment instrument. As with pre-assessment, many institutions used more than one type of post-assessment.

Among those institutions using standardized instruments for post-assessment, 22 indicated they were using assessment instruments in subject areas, 14 indicated they were using either the ACT COMP or CAAP, and 8 indicated they were using the ETS Academic Profile. Among those institutions using a college-developed instrument, most were using departmental exams (19 institutions) or surveys of graduates (14 institutions). A limited number used college-wide exams in writing/English (8 institutions) and math (3 institutions). Among those institutions using a non-instrument based form of assessment, 5 institutions used interviews of graduates, 4 used performance-based assessment in the performing arts, and 2 used a capstone course.

RELATING PRE AND POST-ASSESSMENT

Among the 73 institutions who were pre-assessing students, only 23 (31.5%) were attempting to determine if there was a relationship between pre-assessment and post-assessment of student learning outcomes. Those attempting to determine if there was a relationship were compared to those

who did not make this effort across the four demographic categories to determine if there was a relationship to certain characteristics. There was not a significant difference ($p<.05$) for any of the four categories.

Among these 23 institutions relating pre- to post-assessment, 6 specifically indicated that they were comparing the results of a pre-test and a post-test. An example of this was the comparison of ACT Exam scores with scores on the ACT COMP. Six other institutions indicated that they were doing a value-added assessment, but did not give details about the process being used.

USE OF NON-ACADEMIC STUDENT DEVELOPMENT ASSESSMENT

A total of 42 (49.4%) of the 85 institutions doing student learning outcomes assessment indicated they were doing non-academic student development assessment. Those institutions doing non-academic student development assessment were compared to those who did not across the four demographic categories to determine if there was a relationship. For the category of "highest degree offered" there was a significant difference ($p<.05$) between groups.

When comparing institutions based on the highest degree offered, the use of non-academic student development assessment (Table 2) ranged from 30% among those institutions granting associate's degrees to 75% among those granting doctorates. A Chi-Square test produces a value of 10.14115 with 3 degrees of freedom. Therefore, with respect to highest degree offered, there was a significant difference ($p<.05$) in the use of non-academic student development assessment.

TABLE 2
STUDENT OUTCOMES ASSESSMENT SURVEY
USAGE OF NON-ACADEMIC STUDENT LEVELOPMENT ASSESSMENT

HIGHEST DEGREE OFFERED	NUMBER USING	NUMBER NOT USING	TOTAL
Associate	6 (30%)	14 (70%)	20
Bachelor	4 (36%)	7 (64%)	11
Master	14 (47%)	16 (53%)	30
Doctorate	18 (75%)	6 (25%)	24
TOTAL	42 (49.4%)	43 (50.6%)	85

Among those institutions which conducted non-academic student development assessment, the most common form of assessment was the use of questionnaire surveys to graduates, with 27 institutions using surveys. Other isolated types of assessment included using focus groups, studying retention, and follow-ups on types of employment of graduates.

ADMINISTRATION OF ASSESSMENT PROGRAMS

Respondents were asked to describe the way in which their assessment program was organized and administered. Seventy-three (85.5%), of the 83 respondents who indicated they did assessment, responded to this question. Respondents indicated, in general, the office responsible for assessment. A total of 20 institutions indicated that the assessment program was run by the Office of Institutional Research, 15 indicated the Office of Academic Affairs, 9 indicated individual departments, and 5 indicated committees. Two institutions did indicate that their program was state mandated and that assessment results were monitored by the state governing board.

Conclusions

1. Student learning outcomes assessment is occurring at about half (52.8% in this study) of colleges and universities sophisticated or advanced enough to

have an office of institutional research. This study specifically asked for assessment related to academics, and this may account for the lower level of institutions reporting that they did assessment than reported in other studies.

2. Most institutions that conduct pre-assessment of students use standardized assessment instruments (85.9% in this study). The most common instruments used were those provided by the American College Testing Program (ACT) and the College Board (ETS). Institutions that used other forms of pre-assessment tended to use those in conjunction with the standardized assessment instruments.

3. Among institutions conducting student learning outcomes assessment, there is division regarding the type of post-assessment conducted. Almost two-thirds (62.4%) indicate they use standardized assessment instruments, over one-half (51.8%) indicate they use college-developed instruments, and over one-third (34.1%) indicate they use non-instrument based forms of assessment. The standardized tests used are divided between subject exams and general exams such as the ACT COMP and the ETS Academic Profile.

4. Few institutions are comparing pre-assessment results, and post-assessment results, in and effort to determine the effect the college's education on it's students. In this study, only 23 of the 161 respondents indicated that they tried to related pre-assessment and post-assessment results, and in several of those cases where the attempt was being made the comments did not clearly describe how the relationship was determined.

5. Non-academic student development assessment is more common at doctoral degree granting institutions and least common at institutions granting associate's degrees. In this study, 75% of the institutions granting doctoral degrees did student development assessment while only 30% of the institutions granting associate's degrees did student development assessment. Unexpectedly, no significant difference was found between the public and the private institutions.

6. Assessment programs are generally administered through the Office of Institutional Research or through the Office of Academic Affairs.

7. At colleges and universities, very few assessment programs exist which are designed to evaluate the effect of the college's education on the student's learning. While 85 of the 161 respondents indicated that they did student learning outcome assessment, only 73 indicated that they did pre-assessment of student. Of the 73 institutions that indicated that they did pre-assessment, only 23 indicated that they made an effort to relate pre-assessment to post-assessment. Of the 23 institutions indicating that they made an effort to relate pre-assessment and post-assessment, only 6 clearly described in their comments an effort to compare pre-test with post-test.

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Your name _____

Are you a (circle): freshman   or a   sophomore

Intended major, if known: _____

We are interested in your initial reactions to three curricular and calendar proposals which are being considered by Waldorf College. These proposals are in the preliminary discussion stage and may never be implemented; however, before the discussion proceeds we seek student input regarding these ideas. Please take a few moments to answer the following questions by circling the appropriate response or checking the appropriate box and adding any comments as you wish.

1. Are your initial reactions to the 2-2-2-1-2 calendar proposal:

very favorable	favorable	neutral	somewhat unfavorable	very unfavorable	undecided

2. What do you like or don't like about the 2-2-2-1-2 calendar?

Taking fewer courses at one time	like	dislike	undecided
The longer time spent in class for the course each day/week but only for eight weeks:	like	dislike	undecided
Having more time for concentration on fewer courses	like	dislike	undecided
Completing the course in eight weeks rather than 15 weeks	like	dislike	undecided
Flexibility in scheduling classes and in arranging field experiences	like	dislike	undecided
The plan is somewhat different from most other colleges	like	dislike	undecided
Other_____	like	dislike	undecided
Other_____	like	dislike	undecided
Other_____	like	dislike	undecided

3. While this calendar (the 2-2-2-1-2) is still in the proposal stage, and if adopted would not be implemented during your time of enrollment, HAD IT BEEN IN PLACE AT THE TIME OF YOUR FIRST ENROLLMENT AT WALDORF, would you have been:

    ___ even more likely to have enrolled at Waldorf

    ___ it would have made no difference

    ___ less likely to have enrolled

    ___ undecided

4. What is your initial reaction to the international/multi-cultural experience as a part of Waldorf's academic program?

    ___ At least initially, I'm enthusiastic about the idea.

    ___ I'm interested in the concept, but I don't know how I feel about it at this point.

    ___ I don't like the idea. (If so, why not? Write response below.)

16

5. If the international/multi-cultural experience proposal was in place during your time as a student at Waldorf, would you be most likely to:

___ Take advantage of the opportunity to go abroad, even though it is a bit more expensive. (realizing the College would pay transportation costs)

___ I would probably decide on a lesser expensive program or something which would not cost me any additional dollars, like a program in New York City.

___ I really wouldn't want to do this; so I probably would not have enrolled at Waldorf. (GO TO QUESTION 7)

6. If you answered positively in the previous question, would you (CHECK ALL THAT APPLY):

___ I would value the opportunity, and the low cost, and find a way to afford the opportunity which at the time seemed the most exciting to me.

___ I would be willing to take out a student loan to undertake the additional costs of going, for example, to Europe.

___ I would need to do something which entailed little or no additional cost.

7. If the international/multi-cultural experience had been in place at the time you decided to enroll at Waldorf, would this program have made you:

___ even more likely to have selected Waldorf

___ less likely to have selected Waldorf

___ I would not have enrolled at Waldorf

___ undecided

8. We have also discussed the possibility of offering a few, select, four-year bachelor degree programs at Waldorf. This is NOT LIKELY TO HAPPEN--at least any time soon, but we want to be open to new possibilities and seek your advice and counsel. If a bachelor's degree program were offered at Waldorf, do you think you would:

___ definitely be interested if there was a program in my field

___ might be interested if there was a program in my field

___ definitely still want to transfer following my first two years

___ undecided

Why do you feel the way you do?

9. In the space below, please make any additional comments you would like to make regarding any of the proposals: