This paper addresses issues related to the evaluation of campus environmental assessment interventions. It contains a brief historical review of the four-year environmental assessment project at Illinois State University and places the evaluation activity within that context. This evaluation was conducted to determine the effects of a mid-semester break (environmental assessment intervention) which was inserted into the academic calendar to prevent unnecessary stress, tension, sickness, and boredom. The majority of the paper describes the evaluation activity itself, including its goals, methodology, and results. A reflective analysis related to program evaluation in environmental assessment projects concludes this paper, with specific suggestions for future action. (Author)
Intervention and Evaluation in Campus Environmental Assessment: A Description of One Project

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Intervention and Evaluation in Campus Environmental Assessment: A Description of One Project

As Danish and Center (1976) have indicated, intervention and evaluation are "... two sides of the same community coin," and both need to be planned for from planning a change project, through implementation-evaluation, and dissemination of results. This general schema will provide the conceptual framework for examining the effects on students of an environmental change resulting from the campus environmental assessment project of the Illinois State University Student Counseling Center.

Brief Project Update

During the last two years of the campus environmental assessment project focus has been given to two issues which consistently emerged from the on-going assessment of campus environmental conditions on students: a) felt personal safety of students on and around campus, particularly for females in the evening; and b) perceived student stress at mid-semester.

Concerted work through campus change advocacy to improve the personal safety conundrum involved several meetings independently with various administrators, a large group meeting of all administrators who had responsibility for some aspect of personal safety, and several individual follow-up sessions. Little was accomplished, not because concern was absent, but because of the steep cost of implementing suggestions developed (e.g., increased lighting desired could not be handled by the capital improvement budget already approved for the next five years) and the fact that personal safety is a condition for which no single department, agency, or group on campus had sole or even primary jurisdiction. Thus, the very complex tasks of developing commitment to and mutual responsibility for change, even within existing budget restrictions, were largely unattained.
Efforts were more successful to improve the environmental contributions to stress experienced by students at mid-semester. Environmental assessment data had clearly and consistently shown from 1975 to 1977 that anxiety, pressure, sickness, and tension were elevated during the middle of each semester. Change recommendations provided by students in the environmental referent sections of the environmental assessment measure we use (the Environmental Assessment Inventory--EAI--Conyne, 1975) commonly called for insertion of a mid-semester break into the academic calendar to relieve its contribution to stress. The University two years before had altered its calendar such that Fall semester began in mid-August, a month earlier than before, with no scheduled break until the short day and one-half Thanksgiving vacation in late November, which was closely followed by final examinations just before Christmas vacation. Students seemed to link their experience of elevated stress with the new calendar, observing that one more month of school added an increased source for stress which was experienced most keenly at mid-semester when the onslaught of examinations, projects, and papers hit.

As with the personal safety issue, we regularly communicated these data to several administrators, attempting to focus their attention on alternative strategies which might be used to alleviate unnecessary environmental components of student stress which were experienced at mid-semester. A major difference, however, was that one University group was ultimately responsible for creation of a major environmental variable related to stress, the academic calendar. Therefore, we (and others who had access to the data) were able to bring the project's data before the Committee at a time when it was forming the next calendar, eventually resulting in the insertion of a mid-semester break meant to decrease stress.
Planning the Project

Fall semester of 1977 marked the first appearance of the break. The Counseling Center had decided to evaluate its effects on students, to determine if the break had in fact, reduced student stress. As well, the Committee responsible for devising the new calendar requested the Counseling Center to study the question followed by submission of a report, results of which would be used in future decision-making. This evaluative research function is frequently neglected in many counseling activities but is important to all of them; certainly it is crucial to environmental assessment projects, since results are needed to decide if an environmental change should be continued, modified, or discontinued in the future.

The "discrepancy evaluation model" (Provus, 1971) was used as a general model to assist in examining effects of the break on students. In this model, evaluation compares program performance with what was expected and, among other things, it compares client performance with expected client outcomes; the discrepancy evaluation model explores differences between what was intended and what was obtained in a program (Burck, 1978). In our case, intended outcomes of the break were reduced student anxiety, tension, sickness, and pressure at mid-semester (Conyne, 1978).

Implementation/Evaluation

The Environmental Assessment Team of the Illinois State University Student Counseling Center sought to investigate the effects of the Fall break on students by examination of non-confidential data currently collected by sources having frequent student contact (Conyne, Barrow, Baum & Rademacher, 1978). Especially of interest were data which related to:

1. student stress and
2. how students spent their discretionary days.
Should student stress indicators (e.g., Counseling Center intakes, damage indices) be lowered and the Break be implicated as a contributing agent, then this environmental change would be evaluated positively. Further, the Administrative Affairs Committee of the Academic Senate was interested in discovering how students spent their discretionary time, especially in relation to academic matters (e.g., did they study and write papers or did they relax?)

Data collection focused on four administrative offices of the University (Student Affairs, Secretary of the University, Provost, and Undergraduate Instruction), and selected off-campus areas (Normal police and two nearby campus liquor stores). In all, representatives of 15 sources were interviewed for purposes of data collection (see Figure 1 below).

<table>
<thead>
<tr>
<th>Student Affairs</th>
<th>Secretary</th>
<th>Provost</th>
<th>Undergrad. Inst.</th>
<th>Off Campus</th>
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<tbody>
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<td>Academic Advisement</td>
<td>Campus Rec.</td>
<td>Adm. &amp; Rec.</td>
<td>HPS</td>
<td>Two liquor stores</td>
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<td>Financial Aids</td>
<td>Env. Health</td>
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<td>Intl. House</td>
<td>Normal Police</td>
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<td>Health Service</td>
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<td>Student Csln. Cntr.</td>
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<td>Union</td>
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Fig. 1: Sources Contacted

Heads of these units or their designees were asked to provide whatever non-confidential data their unit had collected during 1975-'76, 1976-'77, and 1977-'78 which might have bearing on student stress levels. Note that we did not ask for collection of new data. Our intent in terms of data collection was to be as unobtrusive as possible and to discover the capacity of existing data pools to contribute to answering questions which are related to student
functioning. Whenever possible we were interested in making comparisons across
years and between "pre- and post-Bronk" time periods within years. Figure 2
depicts the general data matrix used to gather and interpret data from each source.

<table>
<thead>
<tr>
<th>Data Source</th>
<th>1975-76</th>
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<tr>
<td>Agency A</td>
<td>Pre</td>
<td>Post</td>
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Fig. 2: Data Matrix

Dissemination: Results and Conclusions

This report presents general summative results rather than to treat each
data source independently. (Individual reports, containing quantitative data,
impressions of contact, interpretation, and recommendations were available for
inspection, also). Summary statements below are based on information obtained
from 14 of the 15 data sources; data from the City of Normal Police Office are
still being compiled as this report is being written. Results of this evaluation
project were disseminated to participating agencies, the President's Office, the
Administrative Affairs Committee of the Academic Senate, the Academic College
Deans, and the Office of Student Affairs.
1. Generally, the evaluation approach used in this project has yielded inconclusive findings regarding the effects of the Fall mid-semester Break on students. For example, Public Safety records show a decrease in serious offenses reported for October 1977 compared with the same period for 1976 and 1975. However, a comparison of reported burglaries for these same time periods shows the reverse results.

2. Ambiguity results primarily from the kind of non-confidential data which are routinely collected by agencies. These data seem generally inappropriate for evaluating many student development questions. These data are frequently gross rather than specific, indirect rather than direct, and sometimes data retrieval is difficult and laborious.

3. In some instances, no quantitative data are routinely collected by an agency.

4. Subjective impressions gained from staff interviews were generally richer than objective data obtained through files. These collective staff impressions also demonstrated variance regarding the nature of the Break's effects on students.

5. Agency staff reported consistently that the Break affected them very positively, since it provided some "free work time," and served a rejuvenation function.

6. Agency staff were unanimous in their perceptions that this Fall semester has been uniquely calm as compared to the previous two or three Fall semesters. Examples are that the amount of facility damage in the Union was diminished in the Fall and the number of Counseling Center intakes were considerably decreased.

7. When attempting to isolate the effect of one environmental change on a population (such as that of the mid-semester Break on students) one encounters a systemic phenomenon of interdependence. For example, the consensus observations that Fall semester 1977 was unusually calm may or may not be related to the institution of the calendar change. The fact that the Break was but one large environmental change among many (e.g., new President, new Student Association officials, new Office of Residential Life Director) demands that caution be used in any attempt to draw cause and effect relationships between the Break and student behavior.

8. Another related systemic phenomenon which bears upon the interpretation of Fall being unusually calm is that of contextual background. For example, the decrease in Counseling Center intakes can be seen against a framework of a decreasing pattern of intake occurring over time, nonspecific to the Fall Break.

9. When compared with October 1976, the amount of revenue realized by the Union in October, 1977 was quite similar. Some loss was obtained for the Bowling and Billiard Center but gains were realized in Food Service, Lobby Shop, and Parking.

10. Academic Advisement and Financial Aids experienced sudden increases in student appointments following the Break, suggesting that students may have used this time at home with family to discuss academic and financial plans.
11. Program Accountability Data routinely obtained from responses to an open-ended questions format by 65 undergraduate paraprofessionals of the Student Counseling Center (Student Advisors) indicate that some (12 of 65) "looked forward to the Break," and some (10 of 65) reported the Break to have been enjoyable. Note that these responses to the Break itself were totally unsolicited. Some support exists in these data for the Break having been used for study, yet more comments supported the Break as supplying opportunities for enjoyment and tension reduction.

12. Comparison of quantitative data from the Student Counseling Center's Environmental Assessment Inventory (EAI) findings for October, 1976 and October, 1977 provides no clear resolution to the question of the effect of Mid-Semester Break on students. This is not surprising since the EAI does not directly assess this dimension and any conclusions regarding it need to be drawn by inference. However, qualitative EAI data gathered show quite clearly that: a) more academic work was generally required in 1977 than in 1976; b) the Mid-Semester Break was seen by students as easing tension, providing catch-up work time, and allowing a cooling-off period for interpersonal conflicts exacerbated by academic pressure; and that c) faculty were perceived to have used the Break as an occasion to assign more tests and projects just prior to and immediately following the Break. It is interesting to note that reactions to the examination item on the EAI (X = 3.0 on a 7-point scale) were considerably more negative in October, 1977 than they were in October, 1976 (X = 3.6).

13. Impressionistic data gathered from staff in the Office of Residential Life differ from those gained from staff in International House (Fell Hall). The general consensus of staff in the former agency is that students remaining in the residence halls over Break used the time to party while staff from International House indicated that students remaining there used the Break for studying. Proportionately more students stayed in International House during the Break than in other Halls.

14. The number of referrals to SCERB during Fall, 1977 increased 51% over last year with the increase in referrals from residence hall sources alone up 43% from last year. These increased referrals from residence halls were primarily in the area of alcohol offenses. It might be a mistake, however, to infer that these findings were due to the mid-semester Break. A more plausible explanation may reside with different enforcement policies for alcohol abuse which have been implemented by the new Office of Residential Life's administration. This finding, and its related interpretation, again reinforce statements about systemic interdependence which were offered in number seven above.

Project Conclusions

1. Evidence from this study of the nature of the mid-semester Break on students was generally inconclusive.

2. The kind of nonconfidential data gathered routinely by the campus agencies participating in this study contributed little to answering questions related to how students respond to environmental conditions.
3. While the quantitative data collected from agencies could not clearly and consistently demonstrate a positive effect on students, they also did not show a negative effect. The impressionistic staff data collected were generally strongly supportive of the Break.

4. Students are but one campus population to consider when making environmental changes, such as a calendar change, and when evaluating the effects of any changes. Consideration needs to be given to all major campus groups, such as faculty, staff, and civil service, when changes are contemplated.

5. Qualitative data from the Environmental Assessment Inventory generally support the Break as serving a necessary "tension-reduction" function, but a perception of faculty assigning tests and project due-dates immediately adjacent to the Break would, if accurate, serve to mitigate this positive effect. It would be interesting to discover if academic work loads were indeed greater for students around the time of the Break.

6. The Break might be continued in the future with provision made for more comprehensive and appropriate evaluation data planned for and collected. The consistent recording of specific behavioral data which are thought to be directly related to stress (e.g., frequency of interpersonal conflicts, the amount and type of vandalism) would be helpful.

Personal Reflections and Learnings (Stream of Consciousness)

1. Environmental assessment, design, and evaluation are complex interventions requiring unique: a) perspective (ecological-systemic), b) training (consultation, planned change), and c) role (system intervenor). See Conyne, Banning, Clack, Corazzini, Huebner, Keating & Wrenn, 1977).

2. A lot of time and effort went into the project described in this paper. I seriously wonder if it was all worth it, given the outcomes.

3. Am I, and are we ready to effectively carry out such projects?

4. Are such projects simply too immense and difficult to conduct?

5. Can systemically-oriented projects be reasonably undertaken in milieus where independence rather than interdependence seem to be predominant?

6. Fostering planned environmental change with environmental members and then evaluating the effects of such change seem important to do theoretically. Practically, however, the state of the art is in early infancy. Ideas, models, research, and mutual support are all needed.

7. I am aware of feeling a bit (or a lot) on a fringe of counseling psychology by advocating the area of environmental assessment. Sometimes this is a very lonely, unrewarding place to be.

8. All isn't gloomy, however. Closer specification of change targets and strategies, and attempting to involve others with us in change projects should serve to enhance our efforts. Establishing linkages among interested professionals could help. Building into graduate and postgraduate training programs emphases in needed skills is mandatory. Continuing to interpret environmental assessment theory and practice to the profession at large is needed. Symposia like this one (and other scholarly products) need to be offered.
9. Learnings must be applied, tested, recycled, and reported.

10. Do we have sufficient energy for all this?
References


