ABSTRACT
        This paper includes four components: (1) short
theoretical presentation of campus environmental assessment/design;
(2) presentation of two large mapping procedures and their
implications for campus community consultation; (3) integration of
assessment data with consultation for environmental design purposes;
and (4) discussion of paraprofessional involvement in
assessment/design. Following the theoretical presentation, the
authors discuss two mapping procedures implemented by the Illinois
State University Student Counseling Center. The first is a randomized
telephone survey of environmental impacts on students, and the second
is an on-going monitoring of campus environmental impacts using the
Environmental Assessment Inventory (EAI, Conyne and Harding, 1975)
and Environmental Assessment Inventory-Group (EAI-G, Conyne and
Harding, 1975). Results of these approaches, each conducted by
Counseling Center paraprofessionals, are presented and their
significant implications for consultation are discussed. The paper
focuses on the integration of environmental assessment with
consultation activities which result in environmental design.
Essentially, we address the relevant question, "How are data
translated to action?" Specific environmental design procedures are
described with concrete examples drawn from our experience.
(Author)

Campus Environmental Assessment/Design:

Two Mapping Approaches for Campus Change

Advocacy and Consultation

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Campus Environmental Assessment/Design:

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Introduction

In this paper, we will provide the following: a) rationale for campus

environmental assessment/design; b) description of paraprofessional involvement

as campus environmental assessors; c) description of two campus environmental

assessment (mapping) approaches, a structured telephone survey and the Environ-

mental Assesament Inventory (EAI, Conyer & Harding, 1975); d) discussion of the

process of translating environmental impact data to action, including campus

change advocacy and consultation interventions; and e) presentation of some

implications of campus environmental assesament/design for counseling centers.

Rationale

The notion that counselors help people only by working with them directly,

face-to-face, is being questioned and gradually modified. In fact, an emerging

position would suggest that counselors can help most by working to improve the

noxious conditions which affect people. Directions for this shift in emphasis

come from several relatively diverse quarters, some of which are mentioned below.

Caplan's work in community mental health (e.g., 1964) ushered in a pre-

ventive focus to mental health, a direct alternative to the predominant remedial,

"band-aid" approach so historically characteristic of mental health services.

Oetting, Ivey, and Weigel (1970), reviewing results of their national survey

of counseling centers, stressed that future service directions for counseling

centers included acceptance of a community, rather than an individually-based

model, preference for a developmental-preventive orientation to counseling, and

the use of consultation as a major counseling intervention. Morrill, Oetting,

and Hurst's (1974) counselor functioning cube enumerate 36 varieties of

counseling, all placed in a conceptual schema giving form to the directions

mentioned above as desirable. Conyne and Clack's (1975) consultation intervention

model, based on the cube, further specifics 18 kinds of consultation.

Directly related to this "alternative stream" in counseling intervention is

the attention being given to the environment as client. Community psychology

(e.g., Murrell, 1973), social ecology (e.g., Insel & Moos, 1974), environmental

psychology (e.g., Ittelson, Proshansky, Rivlin, & Winkel, 1974), and ecological

psychology (e.g., Barker, 1968) all emphasize the significant influence of environ-

ment on behavior. Concomitant counseling interventions which emerge from this

orientation involve system change. The ecosystem model for campus design (e.g.,

Banning & Kaiser, 1974) contains a useful action methodology for system change

which has drawn from several disciplines. The ecosystem model has contributed

strongly to the procedures used in the campus environmental assessment/design

project of the Illinois State University Student Counseling Center.

Briefly stated, the ecosystem model targets the transactions of students

with their campus environment for assessment and design. It is based on the

assumptions that people and environments mutually impact each other, that campus

environments can be modified to create more optimal student-environmental fits,

and that the intentional design of campus environments involves the planned,

interdependent involvement of appropriate people and groups.

The ecosystem model's Level I (macro, total campus environment assessment/

design) and Level II (micro, partial and selected campus environment assessment/

design) provide action directions for our own environmental assessment/design

project at Illinois State University (Conyne, 1975). In this project, we attempt

to map impacts of certain total campus conditions (Level I) and of particular

university administrative units (Level II) on students, using resulting impact data for environmental design purposes through campus change advocacy (Level I) and consultation (Level II). Two of these mapping approaches are outlined below, following a discussion of paraprofessional involvement in the project.

Paraprofessionals as Environmental Assessors

The Student Counseling Center employs 75 undergraduate students as paraprofessionals (paras). The role of these paras is diverse, including provision of individual and group counseling with fellow students, dissemination of campus and community information, referral of students needing assistance to appropriate persons or agencies, and assessment of campus environmental impacts on students.

The environmental assessment function of the paras is a key element in our environmental assessment/design project, because all of the impact data used result from the paras' observations and assessments. Since they live, work and play in the same campus environment which they assess, paras have by virtue of their experience a continual wealth of environmental impact data available to them. In this sense, the paras are really "experts" on campus life. All they needed to translate their experience to useful information was training in systematic approaches for reporting their observations of campus environmental impacts on students.

Two approaches, the Telephone Survey and the Environmental Assessment Inventory (EAI), were created to provide the systematic environmental mapping approaches required. We describe each mapping approach in this paper, emphasizing the EAI, because it is an on-going procedure which we are currently using.

Two Mapping Approaches: Environmental Telephone Survey
and Environmental Assessment Inventory

A. Phone Survey

Items

The structured phone survey, principally a Level I mapping approach, was conducted in the Spring of 1975 to assess campus environmental impacts on students. The survey (Conyne & Hoffman, 1975) contained 17 items derived from two sources: a) five items from an internal survey which had been conducted the previous year by Institutional Research; and b) 12 items resulting from a brainstorm session in which the 75 paras were asked to list campus environmental factors which they felt had current impact on students. The 17 items are included in Figure 1 below.

ITEM

1. Quality of interpersonal contacts

2. Physical safety at ISU

3. Physical layout of campus

4. Physical attractiveness of campus

5. Availability of informal meeting places

6. Union as a facility for students

7. Effectiveness of Student Association

8. Worth of Educational Experience at ISU

9. Responsiveness of institution to your needs and interests

10. Own ability to influence policy-making

11. General cultural atmosphere

12. General psychological atmosphere

13. Effectiveness of student service units

14. Location in Normal-Bloomington community

15. Faculty contacts outside the classroom

16. Residence Hall life

17. Class discussions

Figure 1. Telephone Survey items.

General Procedure. University permission was obtained to randomly sample 2% of the ISU student population (359 students), with every para assigned about four students from the sample to interview. The actual interviews were highly structured, following a specific format including: a) introduction to survey; b) survey question, part I (valence segment); c) survey question, part II (intensity segment); and d) survey question, part III (probe for specific information). Responses were coded during the interview. Figure 2 below provides an example of the format through using survey question one, "Quality of interpersonal contacts."

Code
11
1. (   ) | Do you feel positive or negative about the quality of your contacts with people at ISU?

Positive (1)   Negative (2)   Neutral (3)

| If positive or negative, ask |

12
(   ) | How strongly (positive) (negative) do you feel?

Slightly (1)   Moderately (2)   Extremely (3)

| If slightly or extremely, ask |

13   14
(   ) (   ) | What specifically about the quality of your contacts with people at ISU leads you to feel this way?

_____

_____

_____

Figure 2. Telephone Survey format example.

Environmental impact data resulting from this process were reported in
two forms: a) percentage answering positively, negatively, and neutral; and
b) general response categories containing specific environmental data.

B. Environmental Assessment Inventory (EAI)

Development of this mapping approach progressed through two distinct phases,
involving brainstorming, instrument development, and a pilot study (Phase One)
and several instrument revisions (Phase Two).

Phase One. Using brainstorming as a technique the paras identified
variables within the Illinois State University campus environment which had
positive and negative impacts on students. Data generated from this session
were consolidated into 160 items arranged into four categories adapted from
Moos (1973): (1) Personal characteristics and behavior of ISU inhabitants;
(2) Ecological dimensions; (3) Programs, policies, and procedures; and (4) Psy-
chosocial and campus climate characteristics. The EAI was designed so that the
paras could rate each item on a seven point impact scale, indicating if an item
impacted students negatively, positively, or neutrally. Assessors could also
indicate that they had insufficient information to rate a particular item,
(Don't know column), and that a specific environmental condition had or had not
occurred (Yes-No column). Descriptive statistics of mean scores, standard devia-
tions, and frequency counts were obtained for each item.

A pilot study was conducted during spring semester, 1975 in which the EAI
was completed by the paras six times. The study yielded valuable information
about the campus environment and it showed clearly that EAI data could be
extremely useful in discovering the nature and extent of selected campus environ-
mental impacts on students.

Phase Two. Several revisions of the EAI were made consistent with pilot
study findings and in anticipation of our intentions to use the data for environ-
mental improvement. As we struggled with these revisions, it became apparent
that the EAI included two distinct foci which paralleled ecosystem levels:
a) Level I, a macro-perspective, directed at mapping the total campus climate;
and b) Level II, a micro-perspective, directed at mapping specific campus units.
To capture this orientation, the four categories were collapsed into two· Campus
Climate, and Administrative Units. The Campus Climate category was further
sub-divided into sub-categories of academic climate, academic formats, social
climate, and physical climate. Below is an illustration of the Campus Climate
category.

Physical Climate

Buildings	( )	1	2	3	4	5	6	7
Classrooms	( )	1	2	3	4	5	6	7
Landscaping	( )	1	2	3	4	5	6	7
Parks and Fields	( )	1	2	3	4	5	6	7
Quad	( )	1	2	3	4	5	6	7

Figure 3. Category I example: Physical Climate sub-category.

The Administrative Units category, which corresponds to Level II, was de-
signed to include administrative units requesting to obtain EAI data and consul-
tation. Each participating unit is assessed for staff availability, staff
helpfulness, unit's procedures, and unit's physical properties. An illustration
of this category follows:

	Don't Know	Yes No (circle one)	Impact (circle one)
Unit "X"			1 2 3 4 5 6 7
Staff availability to students	( )	Yes No	1 2 3 4 5 6 7
Staff helpfulness to students	( )	Yes No	1 2 3 4 5 6 7
Procedures	( )		1 2 3 4 5 6 7
Physical properties	( )		1 2 3 4 5 6 7

Figure 4. Category II example: Administrative Unit "X".

Since the EAI data yielded in the pilot study were quantitative in nature,
they indicated which environmental variables were having positive and negative
impact on students, but did not give specific information as to why these
variables were having certain impacts. The revised EAI included a process which
systematically supplied this specific information, called "environmental referents,"
and its inclusion made it possible to understand the quantitative data more fully.
This step was essential in order to provide data suitable for action. An illus-
tration of how these qualitative data are obtained follows:

Item #	Y-N + Rating	Data Source	Specifics

Figure 5. Qualitative data format.

From Data to Action

As stated earlier, this project addresses macro and micro levels for campus
environment assessment/design. In turn, these levels have associated with them
two different but overlapping interventions, campus change advocacy (macro,

Level I) and consultation (micro, Level II). While campus change advocacy was
used with the phone survey data, both of these interventions are applied to the
on-going EAI data.

Campus Change Advocacy

Completion of the phone survey yielded a volume of environmental impact
data which we wished to use not only for Counseling Center program development
but also for environmental design. Since this was our initial mapping activity,
however, we had no existing channels for communicating these data to others on
campus. Therefore, we chose to initiate whatever channels we could, hoping to
create opportunities in the system through which we could communicate the data
and advocate environmental design possibilities.

The first channel opened was the College Deans' Council, an opportunity
which the University President arranged in response to a letter describing the
phone survey data. We met with this group and presented a report of the study
and its findings; as well, we took this time to describe the EAI and present our
plans for its future use as an indicator of on-going campus environmental impacts
on students. Several additional channels have been created subsequently through
which EAI campus data are communicated, including the spheres of student affairs,
academia, student association, and central administration.

In each case, the general model for campus change advocacy is an active,
initiating one which may be represented by Figure 6 below (Harding & Conyne, 1976):
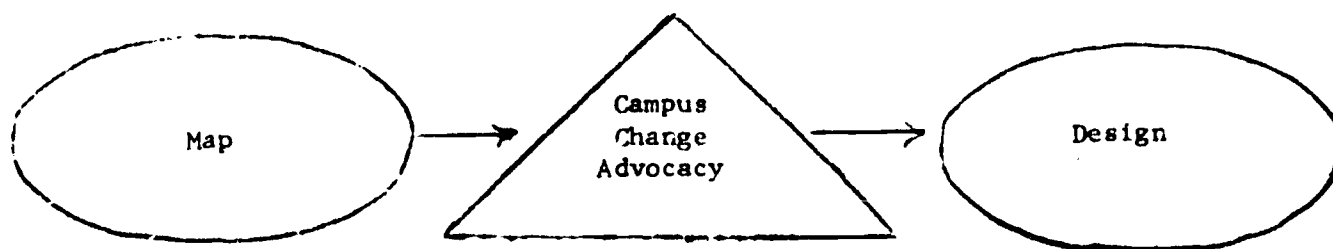

Figure 6.   Campus Change Advocacy.

The monthly EAI mapping related to academic climate, academic formats, social climate, and physical climate provides a con........ous monitoring of the impact of these dimensions on students, with emergi... data being rich in design possibilities.

Consultation

Interest shown in the phone survey results suggested that several university administrative units might desire on-going mapping of their unit's impact on students. Also, we thought they might want to participate in consultation about design considerations which would naturally emerge. Therefore, in our EAI revisions, we adapted the instrument to allow for environmental assessment/consultation to occur. Letters were sent to 17 administrative and student affairs units describing this project and inviting up to ten units to participate. Ten units became involved in the Fall of 1975 and their involvement continues.

The consultation process involves an individual consultant being assigned to a requesting unit following negotiation of a mutually acceptable contract for mapping and consultation. Each unit consultation is confidential. Category II of the EAI provides a participating unit with monthly data regarding its impact on students (see Figure 4 for Category II items). Consultation involves communication of these data and consideration of emerging design issues, a process occurring within the context of desired organizational improvement. The environmental assessment/design consulting approach can be represented as follows:
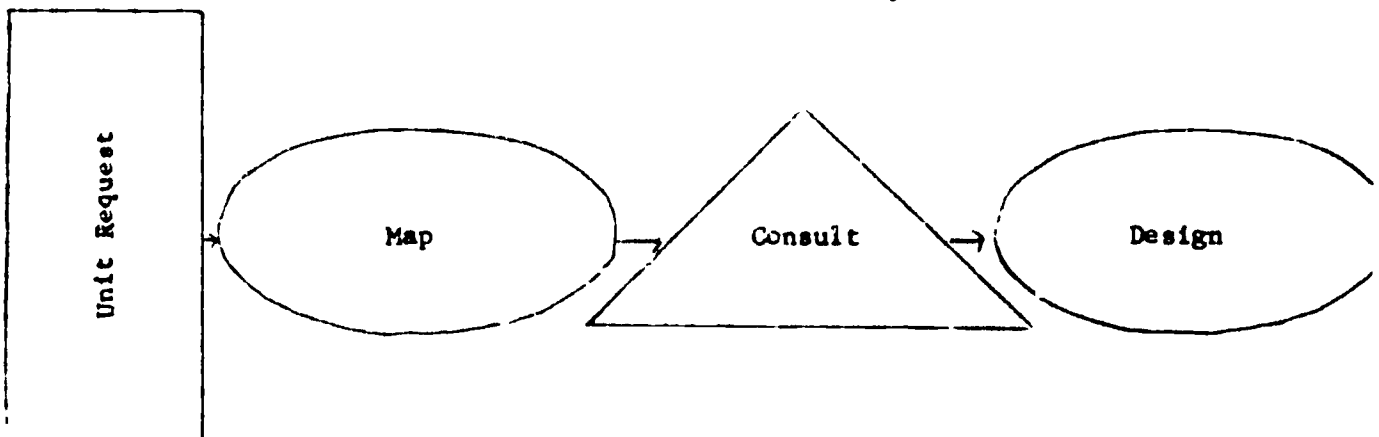

Figure 7. Consultation.

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Implications

The environmental assessment/design project described in this paper attempts

system change rather than person change, an emerging trend for university

counseling centers. In many ways, unfamiliar ground is being traversed and we

are learning as we walk the project along. The implications for our project are

many, a few of which we examine below.

A. Paraprofessionals as Assessors

Assessment of the campus environment by the Counseling Center paras provides

us with security since we can train and supervise them in their efforts quite

closely; thus, this approach is "cleaner" than one which would involve a random

sample. Our close contact with the assessors is even more important because the

EAI is rather complex and on-going training is made absolutely necessary due to

frequent addition and deletion of items used in gathering specific new data.

Also, by using our paras, we can more assuredly protect the confidentiality so

necessary for the Category II data used in agency consultations.

A drawback to using our own paras is that they would seem not to be repre-

sentative nor to have contact with all student sub-groups. This condition, in

combination with the paras' task of assessing environmental impacts on students,

raises questions about data validity and the credibility of using the paras in

this way. For example, an administrative unit being assessed in Category II

might choose to refute the data if unit personnel did not consider the infor-

mation supplied by the paras as representative of the student body at large.

B. Instrument Development

The items included in the EAI were supplied by information gained from the

paras through brainstorming. Seeking and using their input had the additional

benefit of the paras developing a strong investment in the project, since they

were involved from the beginning and continue to perform an essential, on-going

function. On the other hand, those receiving the data do not neccasarily have this type of investment. In these cases, the consultants have to work hard to develop relationships in which consultees develop a sense of sharing and owner-ship of the data.

Although the items which constitute the EAI relate to our own campus en-vironment it was helpful to organize them using already established environmental classification categories (Moos, 1973). Doing this helped simplify the instrument and define broad areas of the environment for mapping purposes. However, the instrument is still more complex than we prefer and we are considering simplifying it.

C. Campus Change Advocacy

The role of a campus change advocate is a difficult one, perhaps especially for counselors. In most instances, training programs have not prepared counselors to take active initiating roles in system change. In our project, this role is being attempted in the very system in which the advocate is a part, thereby adding increased complexity to the task. Just as the paras in their role as assessors need to have credibility with the campus community, professional staff must establish trustful relationships with decision-makers who can make change happen. One method for doing this is to become an advocate for specific univer-sity goals that are articulated in the university "mission" statement; an educational curriculum which individualizes education is a common example of one such goal.

The role of the campus change advocate is a high-risk-high-gain endeavor. It is not one that should be undertaken without a clear understanding of the implications. Establishing key relationships and gaining respectability for counselors as campus change advocates takes time, patience, and commitment.

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D. <u>Consultation</u>

Organizations usually hire consultants who are external to the system. However, in our situation we have attempted to offer consultative services to units within the same system of which we are a part. Some unique problems have developed. Since the mapping approaches demonstrate how an administrative unit impacts students, the crucial question arises of "Who is our client, the students or the unit receiving the data?" This project is further complicated by the fact that the EAI was developed independent of the people with whom we are consulting, making mutual participation and shared ownership in the entire process more difficult to attain.

In addition, this project was described to participants as an environmental assessment/consultation project. Many participants do not seem yet to understand the concept or purpose of consultation. On some occasions we have felt that we were viewed simply as "data carriers". Consultants have spent a great deal of time and effort to rectify this predicament, including the emphasis that consultation need not be tied solely to the mapping data.

E. <u>Change Advocates and Consultants</u>

This project is an ambitious one, oriented to difficult, complex issues which are relatively new for us as they are for the profession. This situation leads to uncertainty, anxiety, and excitement among staff. While system changes do occur, they come gradually since a University structure is extremely resistant to change. All of these comments argue for the importance of maintaining a staff maintenance group, where feelings and situations alike can be openly discussed throughout the project's life.

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