

OUTCOMES AND THE FUTURE

As we achieve breakthroughs in developing trust and feelings of teamwork, we believe we are also observing an increase in professional confidence. Evidence for this includes: (a) more forthrightness in offering perspectives to other units of the University, (b) more presentations at professional conferences, and (c) an increase in numbers of articles submitted to professional journals.

We are also more confident with students. At least we are less advisory and more interactive. We have more and clearer hypotheses on how to make positive things happen and are joining with students in task forces and working groups to plan and carry out programs.

This report is an interim report. The journey is the reality. In spite of our many unreached goals, we feel that we have been more productive than if we were being driven by concrete deadlines that assume an arrival at some end point. For us it is better to travel as a group of friends who define the next portion of the journey together.

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Creating Conditions for Student Development In Campus Living Environments

Residential environments can be designed and managed to enhance and foster student development.

Architecturally hard and interpersonally dense and diverse residential environments present numerous challenges to students and staff alike. Lack of privacy, conflicts with roommates, inability to sleep and study, and the absence of opportunities to change the stark, institutional environment are but a few of the continuing concerns expressed by students. Staff, on the other hand, spend much time and energy reacting to problems, documenting damages, adjudicating discipline cases, and providing a variety of developmental programs, many of which are poorly attended by residents. It seems that staff are often trying to help students adjust to the prevailing environments in residence halls rather than giving students the opportunity to modify or create environments responsive to their own needs and preferences. Most of the difficulties experienced by both staff and students are related to the ecology of residence halls - the absence of a good match between students and the environmental conditions in their living units. Staff and students must wonder if there are not some new ways to address these long-standing problems. Could these problems be resolved by working smarter instead of simply working harder?

AN ECOLOGICAL PERSPECTIVE FOR RESIDENCE HALLS

With the emergence of the campus ecology perspective (Banning, 1978, 1980), residence educators have a powerful framework for helping students participate in structuring environments that meet their basic needs and promote the

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development of desired behaviors. In many ways, the campus ecology perspective is analogous to gardening. Knowledgeable gardeners know a great deal about seeds. Certain seeds need certain conditions at specific times in their development. Gardeners try to provide a *balance* between various conditions in order to promote optimal growth. This ecological perspective suggests a similar role for residence educators: they should try to prescribe the ecology most appropriate for specific types of students.

Unlike many traditional educational orientations that direct efforts primarily at students, the ecological perspective encompasses all dimensions of the residence-hall setting--student characteristics, architectural arrangements, administrative policies and procedures--and considers the relationship of each to the others and to the whole. This relationship is represented by Lewin's (1936) formula $B = f(P \times E)$, where behavior is a function of the interaction between a person (P) and an environment (E). To better illustrate the relationship between student development and campus ecology, we have modified Lewin's equation to read as follows:

$$SD = f(P \times E) \\ \text{c/s}$$

Student development is a function of the person/environment interaction mediated by the challenge/support ratio.

As the equation suggests, both the developmental and environmental literature emphasize that student development is facilitated by a dynamic balance between challenge and support. Challenge is often the product of stimulation and freedom in an environment, while support results from security and consistency in the setting. If an environment is too challenging, students may be so overwhelmed and overstimulated that they cannot develop. On the other hand, if an environment is too supportive, students may not be adequately challenged to grow (Sanford, 1966). Therefore, an appropriate balance of challenge and support for creating the *dynamic equilibrium* in the person-environment interaction is essential to foster satisfaction and development.

Although residence halls do provide both challenge and support, most halls are overly challenging environments. This imbalance can be attributed to such factors as population density on each floor; diversity of student characteristics; physical design of buildings--particularly small, cell-like rooms, built-in furniture, and institutional decor; and low student/staff ratios. Even though it may not be possible to construct new buildings or to reduce the population density in the residence halls by reducing occupancy, it is possible to implement strategies that will help overcome or reduce the negative impact of these factors (Kalsbeek, Rodgers, Marshall, Denny, & Nicholls, 1982).

APPLYING THE PERSPECTIVE

Since resident students spend approximately 70% of their college experience in residence-hall rooms, this primary space is critical to their quality of life. Yet these settings can be quite challenging. Imagine, for example, the experience of a freshman assigned to a 10' by 12' room with a stranger who has different needs and interpersonal style. In fact, most roommate conflicts are not the result of roommates being purposefully irritating; rather, they result from the roommates' feelings that their freedom of action is restricted because they do not know how to allow for each other's differences in a tight space. However, it is possible to assign roommates and design students' rooms so the tension and conflict caused by natural differences in living styles is reduced.

Understanding Roommates' Basic Living Style Preferences. Differences in three basic living-style preferences are repeatedly the source of annoyance to roommates. These dimensions are preferred sleeping and study conditions, bedtimes, and neatness (Jackson, 1985). Different preferences for sleeping and study habits can be readily explained by roommates' abilities to concentrate or relax with different amounts of background noise--music, talking, TV, etc. Some students (screeners) are able to tune out distractions even in a highly-loaded setting like a residence hall. Other students (non-screeners) are not able to be selective in what they focus their attention on and are naturally attuned to minor, subtle changes in their immediate environment (Mehrabian, 1976). These students have difficulty in achieving and maintaining necessary levels of privacy. Since non-screeners have a larger personal-space boundary, intrusion beyond which creates discomfort, these students may seem overly controlling and unfriendly as they try to establish desired privacy levels. They often pay a high cost for achieving privacy. I

Differences in the times roommates go to bed and get up are also potential sources of conflict. Night owls are naturally more alert and exuberant at night, while early birds think and work best in the mornings. Similarly, different preferences for neatness between roommates are quite apparent in the confined spaces of a residence-hall room. Without a doubt, neat roommates prefer neat roommates, while clutterers prefer clutterers.

Confronted with these differences, roommates can try to accommodate each other through the development of a behavioral contract. The ecological perspective, however, implores residence educators to adopt proactive strategies for creating, or fitting students into, harmonious living situations.

Creating Supportive Roommate Relationships Through Room Assignments. The roommate-assignment process can be a proactive strategy for reducing potential conflicts. While several methods may be used to match roommates, many practitioners have found the Myers-Briggs Type Indicator (MBTI) (Myers, 1963, 1976) to be a very useful tool in matching and assigning students on the basis of similar personality characteristics. A variety of studies note that assigning roommates or suitemates according to similar MBTI profiles increases the likelihood that students will be compatible and satisfied (Eigenbrod, 1969; Kalsbeek et al., 1982; Schroeder, 1981). For example, at Auburn University, roommates in men's housing were matched according to commonality of dominant mental functions on the MBTI (Schroeder, 1976). This matching strategy, called *complementary*, pairs students who share the same dominant process, yet exhibit different auxiliary processes. (Table I on p. 48 provides a listing of MBTI matching strategies.) An example of a complementary match would be to pair an ENFP with an ENTP. Intuition (N), the dominant process for both students, provides a degree of similarity and commonality for the relationship. However, the auxiliary functions of Feeling (F) and Thinking (T) are different. Although both students use the intuitive process for perceiving, they make judgments by means of different processes. This matching strategy provides enough dissonance in the relationship to create a delicate balance of challenge and support.

The first year this strategy was implemented at Auburn, requests for roommate changes declined by over 65%. In addition, 21 of 24 roommate pairs who had self-selected their roommates had the same dominant function in common. Although these results indicate that matching roommates with similar MBTI functions results in compatibility and satisfaction, research has only recently demonstrated the impact of the roommate relationship on development.

In a campus-wide study conducted at Auburn in 1985, researchers examined the interrelationship of variables in the roommate situation that might affect not only satisfaction, but also academic and personality development (Jackson, 1985). While roommate satisfaction was found to lead to personality development, roommate similarity in MBTI profiles was significantly related to academic performance, as defined by grade point average. Furthermore, even though roommates with identical MBTI profiles achieved grade point averages higher than roommates whose profiles were opposite or intermediary in similarity, the highest grades were achieved by roommates whose profiles were complementary. Since complementary roommates are very similar yet not identical in personality, it appears that complementary pairings created a dynamic equilibrium in the roommate relationship—one that provided a common basis for understanding and interpreting actions, yet was sufficiently challenging to stimulate academic development.

While using the MBTI in roommate matching has proved to be quite promising for the housing practitioner, the ecological perspective dictates an assessment of each setting and its inhabitants before attempts at intervention strategy. Table I illustrates four roommate-matching strategies, three of which use the Myers-Briggs Type Indicator.

Table I
Roommate Matching Strategies

	<u>Name of Strategy</u>	<u>Description</u>	<u>Example</u>
Highest Degree of Support Lowest Degree of Challenge	Pure (Compatible)	All Factors Identical	ENFP ENFP
	Dominant (Complementary)	Same Dominant Function	ENFP ENTP
Highest Degree of Challenge Lowest Degree of Support	Auxiliary	Same Auxiliary Function	ENFP ESFP
	Random	Few Functions in Common	ESTJ ENFP

To determine which of the strategies to use, residence educators should first assess the relative degrees of challenge and support within the area of assignment and the students to be assigned. When students are in developmental transitions or not yet integrated into social groups, the residence-hall environment is extremely challenging and students should be assigned as similarly as possible, using the *pure or compatible* strategy in which all functions and attitudes are identical. When students are not in developmental transitions or have support groups to help mediate their college challenges, or when the residence hall environment allows for a high degree of predictability, students should be paired less similarly—perhaps using the *dominant/complementary or auxiliary* strategy. Schroeder and Jackson (in press) provide additional information on using the MBTI to match roommates and suitemates, particularly as it relates to practical administrative issues, ethical considerations, and personality correlates of roommates' living habits.

A student's roommate can be either a source of challenge or a source of support. When roommates differ radically in their perceptual and response patterns, they may threaten each other, clash frequently, and, in general, waste energy that could be better spent on valuable activities. The behaviors and attitudes of roommates with similar personality styles, however, can provide them with evidence that they are functioning in a consistent and meaningful manner; the interpersonal environment is perceived as predictable and understandable. In the hands of a skilled practitioner, the roommate-assignment process can be used to balance the ratio of challenge and support in the roommate relationship and thereby create conditions that encourage compatibility, predictability, and even academic and personal development.

Making the Physical Environment Responsive to Basic Needs. Just as the interpersonal environment of roommates can be intentionally structured for positive outcomes, so too can the physical environment be modified to allow residents to meet their needs and express their preferences. Grant (1974) suggests that territoriality is a primary device, universal to all cultures, which permits individuals to structure their environment so that they maintain the proper levels of stimulation, security (privacy), freedom, and order. Applied to the residence halls, territoriality simply means allowing individual students or groups of students to personalize and exert maximum control over their physical environment. Unlike houses and apartments that provide definite spaces or entire rooms for specific functions, small residence-hall rooms must accommodate such opposite, and occasionally antagonistic, functions as sleeping, studying, socializing and relaxing. Given the limited amount of space in a residence-hall room for two people to work with, it is imperative that students be encouraged to restructure their space to make it more responsive to their needs.

Since a primary component of territoriality is the personalization and marking of spatial areas, residence educators should actively encourage residents to change institutional room atmospheres by painting or wall papering; adding plants, posters, and drapes; constructing lofts, bookcases, and furniture; refinishing doors, replacing fixtures, and plastering ceilings. Painting might include covering walls with graphics, murals, caricatures, and slogans. Such strategies as building partitions and lofts are helpful to roommates who wish to eliminate undesirable visual stimuli that can interfere with their studying or sleeping. These measures seem to be particularly important for students who are *nonscreeners* or whose bedtimes are incompatible with those of their roommates. Thus, even in double rooms, students can better regulate stimulation loads, and hence privacy levels, if they are encouraged to restructure their rooms.

Many of these room-personalization strategies have already been implemented in some colleges and universities, with dramatic results. For example, both the overall amount and variety of personalization in students' rooms has been related to students staying in school (Vinsel, Brown, Altman, & Foss, 1980); in addition, damages and maintenance costs declined significantly following program implementation. One institution reported a 300% reduction in damages in the first year (Schroeder, 1980). Since territorial mechanisms are so vital to the daily functioning of human beings, many typical problems in residence hall—damage, inappropriate behavior, excessive noise, disruptive group activities, and low retention rate—are reflections of students' inability to manipulate their physical environment in order to make it more responsive to their needs.

Creating Supportive Living Groups Through the Assignment Process. Ecological interventions similar to those described above can also be applied successfully to structuring the interpersonal and physical environments of hallways and living

units. When students are assigned together in living units (floors or sections) according to similarity in characteristics (academic major, personality, common interests), friendships and a sense of community are likely to emerge naturally. For example, Kalsbeek et al. (1982) found that the more similar roommates were in personality, the more supportive the students perceived the social climate of their suites to be. Furthermore, Gerst and Sweetwood (1973) found that students who described their living environments as being highly supportive and involving felt more satisfied, less anxious, less depressed and hostile; had a more extended and intimate network of peer friendships; and perceived their residence halls as being more attractive and interesting than did students who did not see their environment as involving and supportive. Moreover, a study conducted by Schroeder and Belmonte (1979) illustrated the importance of structuring the social environment of residence halls to maximize students' satisfaction and development. Freshman pre-pharmacy students were assigned to living units composed entirely of pre-pharmacy students or to living units composed of a mixture of academic majors. When compared to the students assigned to heterogeneous groups, the pre-pharmacy students assigned to homogeneous groups exhibited more supportive interactions; described themselves as more intellectual, content, and exuberant; experienced less negative affect; had a higher persistence rate in both the residence halls and their curriculum; achieved higher grades; and reported more friendships in their living unit. Residence-hall research consistently shows that students assigned to living units according to similarity in characteristics tend to be happier, have more friends in their living units, and perform better academically.

As in the roommate situation, students find more support in living groups with whom they share the dominant group interests or personality. Living with others who are similar helps students derive an accurate and consistent interpretation of their surroundings, and provides stable social contacts. Homogeneous groupings, in particular, not only offer students a mental anchor or source of support, but also mediate between the individual and the complexity of college life. Thus, residence educators can structure the social environment for positive outcomes through the assignment process.

Perpetuating Supportive Living Groups Through Self-Selection. Administrators can also encourage supportive living groups to form by allowing students to self-select into living units. When given the opportunity, students migrate toward living units with which they share interests or personalities and create interpersonal environments with unique characteristics. During the spring semester of each academic year, students in the Saint Louis University residence halls describe the social climates of their floors. These descriptions are compiled for a publication, Choices, which is distributed to prospective residents as an aid in specifying their preference for floors. Residents are also given the opportunity to assign new students to their floor for the following fall term as a first priority in the assignment process. The description composed by the residents of 9G was as follows:

Most of us returned to the floor this year and the new girls fit in perfectly. We all contributed to painting our floor in a twilight design with silhouette and setting sun design (which placed second in the Room Personalization contest). We are mostly Physical Therapy majors and put a big emphasis on our classwork. We often study together as our schedules are similar. We are also athletic as a group, and many of us work out together and several of us work at the Rec Center. We are well on our way to winning the overall women's Dorm League Championship - a hot contest between us and 4 Walsh. We do a lot together and really pride ourselves on our involvement and support.

The social climate of this floor, as described by the residents, attracts and retains women with similar academic interests and personalities. One year 67% of the women living in 9G were physical therapy or nursing majors, and the next year 84% were majoring in these same fields. A review of the women's MBTI profiles revealed a high degree of similarity: Extraverts (80%) vs. Introverts (20%); Sensors (80%) vs. Intuitives (20%); Feelers (90%) vs. Thinkers (10%); Perceivers (50%) vs. Judgers (50%). With this homogeneity of students with similar academic majors and psychological types, one would expect certain behaviors to be valued and perpetuated in their living group from year to year. Indeed, this is the case. The women of 9G have won the All Sports Dorm League Championship two years in a row and are on their way to a third championship; they have won at least one blood-drive competition in each of the last three years; and they have repainted their hallway each year. Even though the interactions and activities described by 9G suggest a supportive environment, the physical therapy curriculum is a highly competitive one. New students who decided to live on the floor were assigned as similarly as possible in MBTI profiles in order to enhance the degree of support exhibited by returning residents. In contrast, new students to floors that have overly supportive environments are assigned according to complementary or auxiliary MBTI strategies to introduce an element of challenge into the social environment. Thus, the balance of challenge and support in living groups created through self-selection can be moderated through the assignment process.

Encouraging Interaction and Group Identity with Shared Territories. Administrative practices concerning the personalization of shared spaces can also enhance the group living environment. Modern high- and low-rise residence halls with long and narrow corridors and cell-like student rooms tend to isolate individuals. Large lounges, designed as socializing areas, are often geographically isolated from living areas and seldom used except for studying, an individual activity. In addition, the common administrative practice has been to paint all hallways and lounges a uniform color and provide rather bland institutional furnishings. When damages occur in these areas, students rarely show concern, mainly because they perceive these public territories as being owned and controlled by the institution and not by the house or student group. Yet for a group to function effectively, it must have a territory perceived as being owned by and under the control of group members. To accomplish this, residence educators should encourage residents to visibly mark their hallways and lounges by painting and decorating them. Such territorial markers serve a common purpose "to inform that one is passing from a space which is public, where one's presence is not questioned, through a barrier to a space where one's presence requires justification" (Newman, 1972, p. 63). This function of territorial symbolism applies to group as well as to primary territories. When hallways and lounges are adequately marked and become the common property of a group, it leads to a change in attitude of the members. Residents begin to care for the space, and concern for maintaining and protecting the area is shared. Further, the way in which floor members personalize their hallways often reflects, symbolically, the identity of the group. Without a doubt, the personalization of group space changes the qualitative nature of students' interactions with their physical environment and each other by providing a more predictable, interesting, and secure living space.

Zoning Spaces for Behavioral Enactments. In addition to being personalized, public areas in the residence halls can be restructured and zoned to encourage student participation in a variety of activities. Various territories within residence halls often must accommodate many conflicting demands. The overload in

primary and group territories created by such opposite and antagonistic needs as stimulation-privacy and order-freedom can produce feelings of crowding, heightened arousal, and decrease cooperation and supportive interaction among students (Violins & Baum, 1973). Converting public territories such as large, unused, and remote lounges into behavioral zones can reduce environmental load in primary and group areas. The following example illustrates the validity of this approach. After students have been studying (an activity that requires order and privacy), they often take a break to listen to records, talk with neighbors, or play a game of hall hockey (activities that are stimulating). Sometimes these activities disrupt other students' sleeping or studying, resulting in conflict and damages. One way to reduce the probability of this situation is to create stimulation zones where exciting activities are expected and encouraged. Converting a large public lounge into a recreation area with pinball machines, table games, loud music, and exciting colors provides students with easy access to a variety of novel, intense, and complex stimuli. Similar conversions can result in the creation of zones that emphasize freedom (painting, sculpting, craft centers), order (libraries, mechanical-drawing rooms), and privacy (study carrels, chapels). Designing various behavioral zones within a residential complex enhances social interactions, provides for privacy and security, and reduces conflicts in primary and group territories (Jackson & Schroeder, 1977).

CONCLUSION

This article has described some very practical strategies for overcoming or reducing environmental conditions that interfere with student satisfaction and development. In some institutions, these approaches may necessitate a reconceptualization of the student-institution relationship. Although students have made substantial gains with regard to personal and social privileges, they are often constrained by rules and regulations that prohibit them from controlling their personal living space and changing the institutional climates of their residence halls. Students should be viewed as *constructivists* - persons capable of influencing, planning, and constructing their own environments (Banning, 1986).

The ecological perspective encourages housing staff to become managers of the ecology. To be good "gardeners," residence educators not only need a thorough knowledge about the characteristics of students, they also must design conditions to help students grow and develop. Instead of anticipating inability in students, staff must affirm students as partners in the ecological design process. As staff become aware of repressive conditions that residence hall environments can sometimes create for students, they must help students participate in restructuring the environment. Staff cannot remain uninvolved. Ecology teaches us that we all make an ecological impact - whether we try or not. The question, then, is not *whether* to manage the ecology of residence halls, but how to manage it.

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