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# A tale of three campuses: Unearthing theories of residential life that shape the student learning experience

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# Frank Shushok Jr., T. Laine Scales, Rishi Sriram, and Vera Kidd share some initial thoughts about responses to their Campus Residential Experience Survey.

Do you recognize your institution?

By Frank Shushok Jr., T. Laine Scales, Rishi Sriram, and Vera Kidd

# A Tale of Three Campuses

# Unearthing Theories of Residential Life That Shape the Student Learning Experience

HERE IS LIKELY NO CAMPUS FACILITY where students spend more time than a residence hall—not the student union, an academic building, or an athletic facility. Especially on a residential campus, where students may spend two, three, or more years living in residence, the potential impact of campus residential environments on student learning is enormous. As John Henry Newman observed in 1845 in *The Idea of a University*, when students gather together "keen, open-hearted, sympathetic, and observant . . . and freely mix with each other, they are sure to learn from one another, even if there be no one to teach them" (p. 9). In short, Newman suggests, simply placing students together in a residence hall on a college campus is sure to yield positive outcomes.

Although we agree with Newman's theory of generalized benefit, we also know that, as college and university leaders, we have the fundamental responsibility to design and deliver specific and intentional educational interventions to guide and optimize stu-

dent learning in the residential environment. After several decades of talking about residence halls as learning environments, how well are we doing on our campuses? How is what we *say we believe* different from how we *behave*? In short, do our actual investments of capital and human resources reflect our intentions to align philosophy with practice across every aspect of the university—including even our physical space?

John Tagg, in his important book *The Learning Paradigm College*, begins with a personal story about getting new eyeglasses. To his surprise, he had no idea just how bad his sight had gotten—slowly and surely eroding over the years. Upon exiting the optometrist's office, the whole world looked different—even though he was seeing the same things he had viewed just an hour earlier. How might Tagg's experience be a metaphor for our work with residence halls? As Edgar Schein argues in *Organizational Culture and Leadership*, much of our norms, values, and behaviors emerge from the underlying culture. It is in these basic underlying assumptions of organizational life that we are often unaware of how poor our eyesight has become. In his

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seminal work on college and university governance, *How Colleges Work*, Robert Birnbaum puts it this way: "The beliefs held by administrators and others who influence institutional life affect how they behave, how they interpret their experiences, and even what they see" (p. xiv). Perhaps if we put on new lenses through which to view the residential experience, we will find a whole new world of student learning.

Residence halls are powerful vehicles for facilitating student learning, but our theories about residential life—both personally and institutionally—have a dramatic influence on what facilities we build, who we assign to live there, and how we enact day-to-day operations. The assumptions upon which residential life is conceptualized on a campus, therefore, affect a variety of important student outcomes. However, often our underlying or subconscious "theories" or "philosophies" of residential life are different than the ones we speak out loud. What's more, these silent belief systems ultimately determine the student experience as delivered by colleges and universities.

#### RETHINKING FOR BETTER RETURNS

THREE DECADES OF RESEARCH on student outcomes provides compelling evidence that living in a campus residence, independent of any particular philosophy of residence halls, makes an important difference for students. Alexander Astin's What Matters in College? and Ernest Pascarella and Patrick Terenzini's How College Affects Students, both summarize much of the difference made by living on campus. Such differences include more participation in extracurricular activities, more frequent interactions with peers and faculty members, more positive perceptions of the campus climate, higher satisfaction with the college experience, greater personal growth and development, more effort and involvement in both the academic and social experiences of the college, and a higher rate of persistence and degree completion. These are student outcomes about which most educators care.

To use a financial metaphor, the way money is invested for retirement can produce significantly different outcomes. Almost anyone who contributes to a retirement portfolio will build wealth, and the compounding of gains expands that wealth exponentially over time. However, with more intentional investment, experts can demonstrate how the concept of compounding can create substantially more growth. Perhaps this line of thinking holds true for residence halls as well. While we know that placing students together on a college campus is sure to yield positive outcomes, when campus leaders understand the potential cumulative assets of residential communities investing carefully toward innovative initiatives that infuse faculty, facilities, and resources, a compounding effect takes place—one that, over time, transforms students, their education, and even their universities. In other words, Newman is right about learning occurring just by placing students together. But we have also seen how such learning can multiply with intentionality from campus leaders.

E. Gordon Gee, a university president across 30 years and five universities, offered the challenging foreword to Daniel Kenney, Ricardo Dumont, and Ginger Kenney's *Mission and Place: Strengthening Learning and Community Through Campus Design*. Not surprisingly,

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he admonished colleges and universities to consider carefully how campus facilities, including residence halls, are crafted to nurture an institution's mission. If this is neglected, he warns, campus environments become victims to the "siren call" of contrasting agendas. Gee writes, "Only a few shortsighted decisions need be made before the physical quality of a campus soon reflects the scattered and distracted spirit—and administration—of the institution" (p. viii).

#### BELIEF AND BEHAVIOR

T IS NOT DIFFICULT TO CONVINCE COLLEAGUES that campus spaces can have a substantial impact on human emotions, student behavior and engagement, the development of friendships, and, ultimately, the facilitation of learning among students and faculty. However, even after decades of most higher education and student affairs graduate programs teaching courses about person-environment theory, not to mention research confirming these theoretical assumptions, many campuses continue to construct environments that inhibit student learning, fail to foster relationships that enhance learning, and increase the distance between the articulated missions of colleges and universities and their desired student outcomes.

Why might this happen? Cultural theories of organization suggest that colleges and universities be viewed as systems of belief that invent reality rather than discover it. Peter Senge, in The Fifth Discipline, argues that managing mental models is a critical maneuver for changing organizational practices or assumptions. He writes that "new insights fail to get put into practice because they conflict with deeply held internal images of how the world works, images that limit us to familiar ways of thinking and acting" (p. 174). For Senge, obvious strategies for improving results often go unimplemented, not because of weak intentions or wavering will, but instead from poor, unsurfaced, and untested mental models. Mental models that exist below the level of awareness remain unexamined and, therefore, unchanged. In this scenario, Karl Weick's apt observation in his classic The Social Psychology of Organizing is also alarming: "How can I know what I think until I see what I say?" When utilizing residence halls for

student learning, campus leaders must assist others to unearth buried assumptions and their resulting behaviors, not first to implement change but to stop the perpetuation of flawed belief.

## BELIEF SYSTEMS, BEHAVIOR PATTERNS, AND BUILDING MODELS

To MAKE OUR POINT, we explore three campuses that exemplify how narratives influence the culture of learning in residence halls. There are no doubt many other examples we could provide, and there are more than three prevalent belief systems that undergird residential life programs. The point here is to encourage campus educators to unearth narratives that are at times tantamount to an old pair of glasses desperately in need of fresh lenses. *Alpha*, *Beta*, and *Gamma Colleges* illustrate three belief systems we uncovered from studying actual campuses and represent institutional types comprised from multiple examples discovered through our research. The names of presidents are pseudonyms.

### Alpha College (The Sleep and Eat Model)

Alpha College has followed the historical pattern of many colleges and universities. In 1970, enrollment approached 7,000 students, and more than half of the undergraduate students lived on campus. Some students chose to stay on campus for three or four consecutive years. Between 1970 and 1980, however, Alpha experienced a decade of dramatic growth, and the housing inventory of 3,500 spaces became woefully inadequate for the 10,000 students enrolled by 1980. By 2000, campus enrollment surpassed 14,000 students, but the institution had not added a single bed to residence halls since 1967. During a 30-year period, a residential campus became a first-year-only housing program, creating a commuter campus culture.

Alpha's president, Roger Anderson, had taken office in 1982, and served through much of this 25-year period as the residential campus slipped away. Anderson's perspective was similar to that of most university presidents of his time; that is, he was greatly influenced by German traditions shaping American

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higher education of the twentieth century. From his perspective, residence halls were not seen as educational tools where faculty, staff, and students congregated to live out the "collegiate way"; instead, "dorms"—derived from the Latin root word *dormire*, meaning "to sleep"—were facilities that gave students a place to rest a tired body after a day of rigorous classroom learning.

The president's perspective permeated the campus. After moving first-year students into the residence halls at Alpha, parents and faculty gathered at the quad to receive a presidential welcome. Anderson joked that all parents and faculty "should visit the dorms *once*." His emphasis was on the word *once* as he provided an entertaining description of student housing facilities as mysterious and rather uninviting quarters, suitable only for the brave students who resided there. President Anderson never provided a serious response to the residence hall director's invitation to visit the halls. "I visited [the dorms] once and that was enough for me," he quipped.

For Alpha's president, the most financially prudent and culturally relevant approach was to house students on campus for the first year. In fact, he often echoed the words of the director of residence life when he described the residence halls as cultivating a "sense of identity and community where a freshman can feel connection." Although President Anderson publicly acknowledged the value of residence halls in creating a cohesive student culture, his private comments to the director of residence life emphasized the *expense* of constructing and maintaining these facilities: "With so many cheap apartments surrounding us, we don't need to be in the business of building expensive new dorms; let the community compete for the students' rent dollars!"

We can view the Alpha Campus as having an institutional attitude that separates academics and student affairs, isolating the residential experience and minimizing opportunities for student learning or faculty interactions within the halls.

For the purposes of this discussion, we can now pause to consider the following questions:

Who are the "players" at Alpha College?
What do these players believe?
How do their beliefs affect their behavior?

#### Beta College (The Market Model)

Beta College had been in a steady growth pattern for two decades. For this urban campus, surrounding apartments were expensive, and campus administrators realized that having safe and affordable housing was essential to student recruitment. In 2004, a higher-than-anticipated first-year class forced Beta to limit the number of juniors and seniors allowed to return to campus housing. In response, students wrote letters to the campus newspaper, the student government association passed resolutions demanding more housing, and parents provided a stream of pressure, phoning top-level administrators and urging them to increase on-campus housing.

In spring 2005, after a lively discussion in the Executive Council, President Felipe Paredes finally conceded with a big sigh: "We're going to have to bite the bullet and build new housing. It's just too important for recruiting good students, and it's becoming a public relations problem, too." The vice president for finance and administration, who had been poised to make a proposal in response to the pressures, immediately presented his plan for "public-private partnerships." In this model, the university provided land to a private developer to build and operate housing for university students. The Executive Council was easily sold on this model because building "dorms" did not count against the university's bond rating. And, as President Paredes was fond of saying, "these private firms build the kind of housing students want these days."

Over the next four years, Beta added 1,200 beds through public-private partnerships. All the new housing was apartment-style with amenities most important

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to students—plenty of parking, single rooms, kitchens, and trendy recreational facilities, and in one case, a tanning facility and swimming pool. "The housing program at Beta seems to be paying off," Paredes proudly reported in the spring 2009 trustee meeting. "Students and parents are happy—and enrollments are up this year." With the support of its board of trustees, Beta planned to add another 1,200 beds over the next three years under the same plan.

Beta College can thus be summarized as an institution that made a market decision to outsource its residential program (and the associated student learning opportunities). For economic or political reasons, it chose to neither construct new university-owned facilities nor intervene in the residential lives of its students.

Who are the "players" at Beta College?
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#### Gamma College (The Learning Model)

Gamma College followed a similar growth trajectory as Alpha College, with the student population doubling in size between 1970 and 2005. In fact, the two institutions shared a similar history and served a nearly identical demographic of traditional-age college students. In contrast to Alpha, however, administrative leaders at Gamma were always talking about the importance of a "truly residential" campus. Gamma's president, Eva Lane, like her predecessor, made sure that campus housing expanded as the college grew to its present size of 11,000 students. Simply adding beds, though, was not enough. She insisted that residential environments were carefully crafted to help deliver Gamma's educational aspirations for students. She relied on the associate dean of residence life to partner with her in shaping the vision. Whatever Gamma built, however, had to subscribe to President Lane's basic assumptions about residential communities. For instance, these communities must be multidisciplinary. This academic diversity, according to Lane, is an important aspect of the residential learning environment. Moreover, these communities needed to be multigenerational, consisting of students from all classifications. Being mentored by sophomores, juniors, and seniors was important for first-year students, Lane asserted, and becoming a mentor to first-year students is important to the continued growth of students beyond the first year. Finally, each of these communities needed to be led by a live-in tenured faculty member working and living side-by-side with a student affairs educator. This holistic approach to residential life was fundamental to Lane.

At summer orientation, one parent raised his hand in the question-and-answer period to challenge Gamma's two-year residency requirement. "Why should I pay all this money in rent for the dormitory when I could invest in a rental property near campus for my son and his roommates?" he asked. The vice president for student affairs emphasized the importance of the residential experience as part of a Gamma education. The president quickly followed by saying, "Living on campus provides for multiple and repeated encounters with other students and faculty members. Bringing together learners across the generations, the residential campus is a uniquely powerful environment for both structured and serendipitous educational moments." While the entrepreneurial parent remained skeptical, many parents nodded as President Lane reiterated the university's commitment to meaningful residential experiences for students.

In contrast to Alpha College, where faculty members rarely darkened the doorstep of a residence hall, faculty at Gamma College frequently participated in community life of the residence halls. In fact, several faculty members lived "in-residence," and a host of others taught classes, worked in their offices, or participated in activities in Gamma's residence halls, which were designed to accommodate academic endeavors. President Lane argued that residence halls are also a good financial investment. They generally pay for themselves through rent revenues, but even if they require some expenditure, she argued, "A university is meant to facilitate conversation across the generations, among teachers and

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students, and about important educational topics. Investing in our residence halls is investing in these outcomes."

Gamma College defines itself first and foremost as a residential campus with a holistic educational philosophy that pervades the institution at all levels of administration. On-campus living, during and even beyond the first year, is seen as a vital part of students' education. There is an expectation that a coalition of academic faculty and student affairs professionals provide intentional opportunities for rich learning experiences for students in residence. Students reside in facilities that have been remodeled or constructed to support well-published learning objectives, and they move easily between the academic and residential environments on campus. Students request on-campus housing beyond their first year, and upper-class students play a role in the positive assimilation of new students into the halls.

Who are the "players" at Gamma College?

What do these players believe?

How do their beliefs affect their behavior?

These vignettes all demonstrate philosophies from actual higher education institutions. The leaders of Alpha, Beta, and Gamma Colleges are working from very different assumptions about residential living. Do you see your institution fitting within one of these broad categories? While the vignettes focus on the president's mental models, the assumptions of other campus constituents—faculty, campus leaders, and student affairs staff-influence a university's vision for residential learning. When analyzing beliefs and values, Edgar Schein advises that "one must discriminate carefully between those that are congruent with underlying assumptions and those that are, in effect, either rationalizations or only aspirations for the future" (p. 30). In short, the residential life program currently in place at a particular institution emerged as a result of known or unknown philosophies, and unearthing these will shape what exists in the future.

#### **OBSERVATIONS FROM THE FIELD**

Jr., Rishi Sriram, and T. Laine Scales created *The Campus Residential Experiences Survey (CRES)* to begin unearthing mental models of residence halls. The plural form "models" indicates our observation that there are typically several models operating on a single campus, although one model may prevail. The process of discovering assumptions, reflecting on practices, and visioning the future is the first step toward establishing an intentional philosophy of residential education.

In the fall of 2009, we surveyed the membership of the Association of College and University Housing Officers—International to better understand mental models operating at colleges and universities. We received over 1,200 responses, including over 1,000 narrative accounts. While we will publish the comprehensive findings in a forthcoming journal article, there are interesting themes we would like to share with you.

Our survey has as its theoretical underpinning an "ecological perspective." As described by C. Carney Strange and Jim Banning in *Educating by Design*, these ideas coalesce around "four dimensions of campus environments: (1) the design and quality of physical features; (2) the collective characteristics of human aggregates, or groups of people; (3) the dynamics of campus organizational structures and designs; and (4) the collective meanings members construct around these dimensions and attribute to them" (p. 298).

While our survey is based on a transactional view of campus leaders, faculty, and staff and their environment, it is also designed as a tool for unearthing assumptions about residential life that exist within and among campus stakeholders. Respondents are asked to review a number of statements about the specific aspects of residential communities at their particular institution, and then rate "how it is" at their institution and "how it should be." Thus, the variance, or gap, between the respondents' perceived situation and

their desired aspirations for student learning in their campus residential environment is revealed. In the process, assumptions or philosophies about residential life that exist among campus stakeholders emerge. In addition, many respondents took the opportunity to describe in writing about the residential life initiatives occurring at their institution, and what changes they believe could improve those situations. Some individual insights, along with certain groups of similarly stated feedback, add depth and texture to the statistical survey responses.

One would expect the typical areas of concern around residential learning programs to include "hard" elements such as inadequate operating budgets, lack of well-designed learning-centered residence hall facilities, and shortages in professional positions. These elements were acknowledged as problems by respondents but were not the issues creating the greatest gaps between current and desired environments. The issues that emerged as most problematic for respondents were organizational and cultural phenomena.

The picture that emerges from these responses is largely one of varying degrees of disillusionment—in most cases, residential campuses were described with "Alpha" (Sleep and Eat Model) or "Beta" (Market Model) rather than "Gamma" (Learning Model) characteristics. The culture of separation between academic and student affairs, or in-classroom and out-of-classroom experiences, is prevalent. Residential learning, if emphasized at all on campuses, is squarely in the realm of student affairs and housing professionals. Yet there is recognition that the situation needs to be changed, and an expressed desire to integrate the learning experience for students. While the narratives often placed responsibility on other campus groups (administrators, faculty, students), one might also ask, if the vision and desire are clear in our minds, and we as residential life professionals are willing to do the work to bring about positive change, what exactly is holding us back? Have we accepted the existing narrative or prevalent model

at our campuses as not just our *reality*, but our *destiny* as well?

#### That's Just the Way It Is

One dominant theme among respondents is acquiescence—"that's just the way it is (or has always been) at our campus." Unearthing this type of benign resistance is the first step in challenging the status quo. Have we mentally thrown up our hands at the general hopelessness of it all? At this point, individuals and organizations face a "gut check"—how deeply do we believe that student learning is central to our mission as residential managers? Is our passive mental approach to the situation merely reflecting the tone on our campus, or are we setting the tone? If we can't rouse ourselves to move forward, how do we expect to inspire others to move in spite of us?

#### We Are Waiting It Out

One aspect of acquiescence reflected in the survey is the idea that "we are waiting it out." This approach is based on more external, largely economic, concerns such as budget reductions or lack of capital to address facilities, which (understandably) can threaten to take the wind out of the sails of individuals and organizations. While the national economic situation has provided moderate to extreme challenges for most institutions, should we wait for the situation to improve before we restart forward motion? Are we convinced that all the human and financial resources in our organizations are aligned for continuous improvement of our services to students? Is there anything we can do to better reallocate what we have?

#### And It Will Never Change

For some respondents, a feeling of helplessness has degraded to cynicism. Not only is the status quo on campus as it has always been, the phrase "and it will never change" is added to the narrative. Whether we believe that administrators are simply not interested

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in residential learning, or that faculty are adamantly opposed to setting foot in our halls, is our skepticism providing outward reinforcement for the divisions about which we complain? Could this somehow be a self-fulfilling prophecy in which colleagues are responding according to our expectations? Have we, as standard-bearers for residential learning, become cynics?

#### Been There, Done That

Another mental model, which reflects the sting (disappointment, heartbreak, embarrassment) of some degree of prior failure, a "been there, done that" theme, is evident among some schools. Several comments indicated that campuses have made forays into residential learning, but—based on various challenges—are not able to maintain the momentum. While there is mention of budgets, there are also indications that these prior attempts did not have the broad or deep support needed to survive. For example, the faculty involved in the residential learning program lost interest, or the administration did not maintain its support of the program. At this point, we must ask perhaps the hardest question of all what happened? And we must engage this question apart from the "story" of what happened, which we often write to cover over our failures and mistakes. The question is, "What really happened?" Were the learning outcomes clearly defined? Was a strong and mutual collaboration established with academic faculty, with clearly defined roles and responsibilities? Did we communicate the intent and benefits of the program to the resident students? Did we provide adequate support and partnership? If the prevailing wind at our campus is "been there, done that," what mental model must we adopt and promote in order to make it successful the second time around?

#### We Have a Dream

Finally, a positive theme of hope also emerges among a number of respondents, whether that hope is conditional (believing we can accomplish this if we can get the support of the administration) or optimistic (knowing there are faculty out there who are interested in working with us—all we need to do is find them). We then can ask ourselves and others: What level of positivity and hope is reflected in my thinking? What about in my interactions with my staff, with administrators, with faculty? Have I bolstered my hope with good research, clear intentions, and focused plans? Have I involved others in my dream to the extent they now have a dream of their own?

## IMPLICATIONS FOR ON-CAMPUS LIVING AND LEARNING ENVIRONMENTS

S RESIDENCE EDUCATION, student affairs, and housing Aprofessionals, our message that "residential" and "learning" are a single idea—residential learning—is paramount. In order to override weaker ideologies, former rhetoric, and tired constituents, our walk and our talk must be strong, repetitive, and hopeful. We must identify and partner with dedicated colleagues within the academic environs who can begin to influence the system from within. It is critical that we research and prepare relevant and academically sound proposals and operating plans, including assessment of current and planned impacts on students, and write clear and compelling learning outcomes that dovetail with the university's priorities for education. We must understand and be able to justify the financial impact of these changes and be willing to compromise with other departments to share the cost.

We must rise above discouragement and cynicism about our perceived cocurricular isolation and initiate a collaborative environment where we do the most with the financial and human resources we have available. If we can only implement a collaborative academic-student affairs program in one hall, then we work with faculty to guide and assess a stellar project to further sell our concept in the coming years, involving more faculty and buildings in the process. Successful students and enthusiastic parents can help carry the message, if we plan to sustain the momentum of implementation with unwavering forward motion. In due time, as the tides of our culture begin to change, Karl Weick's earlier statement will

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turn upside down from a perspective of doldrums to a point of promise: "We now know what we think because we see what we've been saying."

#### Notes

- Astin, A. W. (1993). What matters in college? Four critical years revisited. San Francisco, CA: Jossey-Bass.
- Birnbaum, R. (1988). How colleges work: The cybernetics of academic organization and leadership. San Francisco, CA: Jossey-Bass.
- Kenney, D. R., Dumont, R., & Kenney, G. (2005). Mission and place: Strengthening learning and community through campus design. Westport, CT: American Council on Education and Praeger Publishers.

- Newman, J. H. (1873). The idea of a university defined and illustrated. London: Basil Montgu Pickering.
- Pascarella, E. T., & Terenzini, P. T. (2005). How college affects students: A third decade of research. San Francisco, CA: Jossey-Bass.
- Schein, E. H. (2004). Organizational culture and leadership. San Francisco, CA: Jossey-Bass.
- Senge, P. M. (1990). The fifth discipline: The art & practice of the learning organization. New York: Currency Doubleday.
- Strange, C. C., & Banning, J. H. (2001). Educating by design: Creating campus learning environments that work. San Francisco, CA: Jossey-Bass.
- Tagg, J. (2003). The learning paradigm college. Bolton, MA: Anker.
- Weick, K. E. (1979). The social psychology of organizing. New York: McGraw-Hill.

