

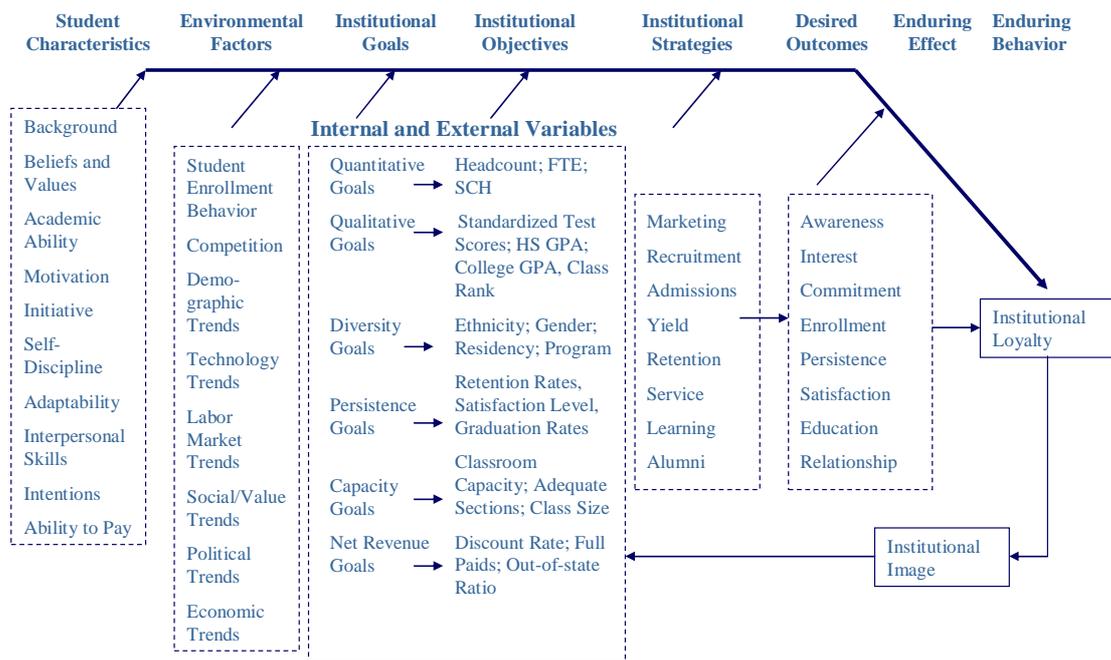
Enrollment Management: A Systems Approach

No organization or enterprise exists as an island. Understanding the interrelation of elements of a complex business such as enrollment management is essential to achieving desired organizational outcomes. The evolution of enrollment management as a widely practiced profession suggests that college and university leaders, at least intuitively, have recognized that simply expanding to new markets, pressuring admissions and enrollment professionals for improved results, or throwing marketing dollars at an enrollment problem are not viable solutions. Successful enrollment enterprises look holistically and strategically at enrollment dynamics as well as the interplay between those dynamics.

“Systems thinking,” a term coined by Peter Senge (1990) in his book, *The Fifth Discipline*, is applicable to the field of enrollment management, and more importantly, to how institutions develop and sustain a viable approach to influencing enrollment outcomes. The following model is a systems thinking archetype that incorporates system dynamics to analyze and impact institutional enrollments. Through this conceptual framework colleges and universities can view interrelationships rather than cause and effect chains and consider processes of systemic change instead of engaging in panic-driven reactions to snapshots of enrollment shifts. By analyzing enrollment patterns through a

systems thinking framework, enrollment managers and institutional leaders can more accurately identify the precise points of leverage necessary to successfully impact outcomes.

Graph 1: Enrollment Management Systems Archetype



Organizational systems, like the one illustrated above, are composed of individual components and imply a relationship between the components (Nicholson, 1995). How the components of an enrollment management system are managed—as independent variables or as parts of a cohesive whole—makes all the difference.

Hossler and Hozzee (2001) first wrote about the application of systems theory to the discipline of enrollment management. The authors emphasized the value of viewing enrollment management through *open systems* (systems that focus on the external environment, including the interchange between multiple organizations) versus *closed systems* (systems that are focused inward on what happens within an organizational unit). In an *open system*, communication and coordination between organizations is essential. This premise applied to enrollment management simply means that optimal enrollment outcomes are more likely when enrollment management organizations serve as a **conduit for information** to and from other administrative and academic units. Moreover, enrollment management divisions must **orchestrate institutional enrollment activities** but do so in collaboration with other campus stakeholders who are content or process owners.

As an **information conduit**, enrollment management organizations must provide actionable intelligence regarding the factors that influence student decisions to enroll initially or persist once enrolled. The *Enrollment Management Systems Archetype* (Graph 1) reveals two areas that directly impact enrollment outcomes: (1) **student characteristics** and (2) **environmental factors**. To a large extent, **student characteristics** determine the influence an institution can potentially have on the college decision-making process, the capacity to predict student success in the admissions process, and the ability to ensure the student's success once enrolled (Astin, 1993). **Environmental factors** at the global,

national, regional, state, and local levels can have a positive or negative impact on enrollment outcomes. There is a small subset of environmental factors for which colleges and universities can directly control, a moderate number of environmental factors that can be influenced, and a relatively high number that cannot be controlled or influenced.

In an *open system*, enrollment managers have a unique opportunity to engage the campus in setting **enrollment goals** and **related objectives** as well as in the development of **strategies** designed to achieve identified goals and objectives. Such engagement increases awareness of enrollment dynamics while fostering the mantra of interdependency, which is necessary to accomplish institution-wide buy-in and involvement in enrollment activities. Too often, **enrollment goals** are nonexistent; broad, undefined targets; or aspirational without consideration of relevant data. The inclusive process of goal-setting inherent in an *open system* virtually guarantees that many voices are heard, and if orchestrated properly, those voices are informed by data. With this foundation in place, the “**right strategies**” can be developed. By focusing on the “right strategies” rather than strategy du jour, a college or university can marshal available resources to effectively implement a narrow set of strategies designed to move important “institutional needles.”

As the primary **orchestrator of enrollment strategies**, enrollment organizations should proactively engage other stakeholders in strategy development and

implementation. Institutions with centralized and decentralized student recruitment or retention efforts that exist without coordination miss two important points. First, prospective students view communications from and interactions with a college or university as one experience. That is to say, they do not know or care how an institution is organized. To them you are all one school. Inconsistent messages, poorly timed and overlapping communications, inaccurate information, varying quality of communications and interactions, and a lack of interinstitutional communication sharing all reflect badly on any school a student may be considering. For this reason, it is critical that all formal communications and interactions be centrally coordinated. However, managing communications flow and ensuring quality control do not prohibit the engagement of content and process experts across the campus being actively involved in developing and staging communications or planning interactions. Second, retention efforts implemented in isolation limit an institution's ability to leverage multiple success interventions to assist a student that is at risk. Rarely will a single intervention be sufficient to overcome a student's obstacles to continued enrollment and his or her development of success-oriented behaviors.

The *Enrollment Management Systems Archetype* also alludes to institutional outputs: (1) **desired outcomes**, (2) **enduring affect**, and (3) **enduring behavior**. **Desired outcomes** in this system mostly reference psychology stages future, present, and past students experience as they migrate into and through an institution. While some students will experience these stages as a natural

consequence of their interactions with a college or university, the *Enrollment Management Systems Archetype* suggests that a higher proportion of students will experience a positive psychological journey through an institution if intentional strategies are in place to influence the outcome. Regarding the **enduring affect** (institutional image), many enrollment organizations are pressured to focus on short-term results (e.g., enrollment for the upcoming term, the quality or diversity of the incoming class, annual retention and graduation rates) rather than a protracted campaign to improve institutional image. Enrollment trends rise and fall over time, and only a solid institutional image can sustain a school through an enrollment draught. Assuming an institution's leadership perceives institutional image as a valuable asset to be protected and nurtured (Seiver, 1998), then the **enduring behavior** sought by enrollment organizations is loyalty. Student and alumni loyalty yields positive "word-of-mouth" (the most powerful recruitment factor for any institution) and enhanced commitment to the college or university (a proven factor in reducing student attrition).

Student Characteristics

"From the 1970s through today, colleges have developed two basic market-oriented desires. They want to plan and forecast their enrollment more effectively, and they want to influence the college-going decision-making process of desired students" (Paulsen, 1990). To accomplish these practical objectives, enrollment managers must first understand the factors that influence college

choice—student characteristics, environmental factors, and institutional attributes. Similarly, enrollment managers must understand the effects of an academic environment and student background characteristics on satisfaction and performance (Karemera, Rueben, & Sillah, 2003). Without in-depth insights as to causation for related enrollment behaviors, only by chance will enrollment organizations engage in the recruitment and retention strategies that are most likely to produce optimal results.

As noted, student characteristics represent a vital component to understanding initial and continued enrollment choices. The student characteristics depicted in the *Enrollment Management Systems Archetype* are not intended to be an exhaustive listing, yet identified characteristics represent many of the attributes that influence enrollment behavior and student success.

For example, a student's **background** can be correlated to enrollment decisions such as whether or not to attend college, which type of institution provides the best fit, where does one's educational pursuit fall among other life priorities, or how much is a college education worth. Faced with such questions, individuals naturally rely on their personal experiences and backgrounds as a guidepost. Characteristics like age, race, gender, socioeconomic status, parental educational attainment, and even residency (rural, suburban, or urban) influence enrollment decisions. The type of high school attended (e.g., public, private, boarding school, home school) as well as the level and nature of course work

completed also influence decisions. Increasingly, a person's background related to work experience, community service, social networks, leisure interests, and other lifestyle factors enter into the college selection process.

Social **values** and religious **beliefs** guide the enrollment decisions of some students, particularly as they relate to the selection of private colleges and universities. Community norms and values also may affect postsecondary educational aspirations (Hossler, Schmidt & Vesper, 1998). In communities that value higher education, often those values are conveyed through formal and informal channels to their residents. Likewise, the norms and values within high schools frequently influence the college destination of their graduates (McDonough, 1997). To a degree, the beliefs and values of high school teachers, counselors, and peers influence the types of institutions students include in their choice set. But of all the potential influencers of college choice, parents exert the most influence on which school to attend.

Academic ability often dictates the array of institutional choices available to students. The admissions selectivity of each institution determines the academic profile of students who enroll. Perhaps most importantly, however, is the relationship between academic ability and academic success once enrolled. Admittedly, there are many factors correlated with academic success, but none is more predictive of future performance than is past performance.

Less quantifiable characteristics such as **motivation, initiative, self-discipline, adaptability, and interpersonal skills** have been shown to affect student success. Because it is difficult to assess these characteristics, few institutions consider them in the admissions process. For those that do, insights into these characteristics are typically gleaned through qualitative measures such as essays, interviews, and recommendations. A relatively small number of institutions have attempted to adopt quantitative instruments such as Emotional Intelligence tests, the Keirsey Temperament, and the LASSI to inform admissions decisions or more often, to identify early interventions designed to foster student success.

Intentions provide useful insights to enrollment behavior in two areas: (1) college choice options and (2) educational objectives. Although most students enroll at their first choice institution, many attend their second or third choice school. Students who attend institutions that were not their first choice are predisposed to leave those schools prematurely. Enrollment strategies related to this phenomenon include increasing the percentage of first choice students enrolling and converting second and third choice students to become first choice students. A conversion strategy can occur during the recruitment cycle or once the student enrolls. Either way, strategies must be proactive to be effective. Regarding educational objectives, a study conducted by the Community College Research Center at Columbia University revealed that of first-time community college students seeking a degree or certificate 48% achieved their stated

objective or were still enrolled within six years of initial enrollment. In the same study, 42% of students seeking job skills did so within six years, as did 60% of individuals pursuing personal enrichment and 55% of those who enrolled planning to transfer (Bailey, Leinbach, & Jenkins, 2006). Even though the achievement of educational objectives by students attending four-year institutions is presumed to be higher, one could infer that there are a significant percentage of students at all institutions who change educational objectives throughout their college career or simply fail to meet their objectives. The latter population should be of most concern for enrollment managers.

A student's **ability to pay** for college often influences their enrollment behavior. Based on a study conducted by The College Board (2004), students from low income families, first-generation college students, African-Americans, and Hispanics were disproportionately less likely to attend college due to perceived or real financial barriers. When students from these populations did enroll in postsecondary education, they were concentrated at lower-priced institutions (Baum & Payea, 2004; National Center for Educational Statistics, 2003, 2004; Thomas & Perna, 2004). Institutions engaging in withdrawal surveys consistently identify ability to pay as a major factor in student decisions to discontinue enrollment as well. Strategies to address ability to pay issues usually consist of increasing awareness of available financial aid, promoting the benefits of applying early for available aid, and adjusting financial aid packaging to ensure access and affordability.

The characteristics that students bring with them to a higher education environment must be identified and analyzed to determine the most effective recruitment and intervention strategies. By developing a profile of successful students, institutions can search for potential students who possess similar characteristics—thus, enhancing recruitment and retention outcomes. However, such an approach may yield a fairly homogeneous student body. The balance between achieving enrollment and retention goals and promoting diversity should be weighed carefully.

Environmental Factors

Tactical enrollment planning models focus inwardly, often using historical data and anecdotal experiences to guide the development of tactics. To be strategic, enrollment managers must anticipate environmental shifts and assess the impact of such changes on enrollment objectives at their respective institutions (Cope, 1981). A common method of anticipating and assessing environmental changes is referred to as *environmental scanning*. Aguilar (1967) described *environmental scanning* as the systematic collection and analysis of external information to (1) reduce the randomness of information flowing into an organization, and (2) provide decision-makers with early warnings of changing conditions that may impact the organization.

Unfortunately, many college and university leaders are not in touch with external conditions, particularly those that involve slow, incremental changes. Institutional paralysis, as evident in a lack of awareness of changing conditions or failure to adapt to recognized shifts, frequently leads to enrollment woes. Such enrollment problems may come in the form of an unexpected enrollment and financial bombshell even though the signs were clear and easily accessible. The response to unanticipated enrollment problems is typically, *panic*.

By reacting to enrollment quandaries after they create institutional pain, two organizational consequences emerge. First, a *sense of urgency* infects the institution. This consequence can have a positive or negative impact on the institution's ability to respond to enrollment challenges. If the organization uses the newfound *sense of urgency* to compel individuals to engage in fundamental, systemic change, the enrollment challenge is likely to result in an improved enrollment management effort. However, if the *sense of urgency* leads to blame, the enrollment crisis will worsen unless the environmental conditions become more favorable. Second, the institution engages in *intense internal scrutiny* with the objective of "fixing the problem." In addition to finding blame, such *internal scrutiny* often yields short-term, panic-driven solutions that may temporarily mask the problem but rarely ever addresses the root cause of the problem. Consequently, the enrollment crisis continues to plague the institution.

The *Enrollment Management Systems Archetype* promotes a much more strategic, prevention-oriented approach—routine environmental scanning. Elements of an environmental scan can vary but the purpose is to generate actionable intelligence used to determine the “right” enrollment strategies (Morrison, 1992). Recommended environmental scanning elements include:

- **Student Enrollment Behavior**—This portion of the scan focuses on (1) enrollment patterns (full-time versus part-time) and (2) enrollment preferences (time of day, day of week, frequency of class meetings, term length, instructional delivery method), (3) enrollment goals (degree, certificate, professional development, personal enrichment), and (4) enrollment choices (institutional type, size, location, programs, admissions selectivity, etc.). Assuming an institution is nimble and market-responsive, student enrollment behavior information can be used to adjust curricular offerings; course scheduling; the ratio of courses and programs taught in the classroom and labs, online, and through hybrid courses that blend face-to-face instruction with online content delivery; as well as marketing and enrollment strategies.
- **Competition**—A competitor analysis should consist of comparisons of program curricula, program requirements, apprenticeships/internships/co-ops, faculty expertise, class size, available learning options, job placement rates, university transfer rates, and other program or institutional attributes. From an enrollment strategy perspective, a competitor analysis also should assess institutional image, cost, perceived value, marketing

message, marketing and enrollment resources, inquiry response time, the quality and relevance of inquiry fulfillment and ongoing cultivation, the frequency of prospective student contacts, and tactics deployed to convert inquiries to applicants and admits to enrolled students. Armed with competitor comparisons an institution can identify and secure a desired market position, especially as it relates to unclaimed market niches and underserved markets, as well as refine marketing and enrollment strategies.

- **Demographic Trends**—All institutions should possess a diversified enrollment portfolio (e.g., concurrently enrolled high school students, first-time freshmen, transfers, stop-outs, continuing students, undergraduates, graduate students, credit and noncredit students, online learners, traditional-aged students, and adult learners). Rarely will all student population segments served by an institution be growing simultaneously. More often, one segment will be shrinking while another is increasing. By anticipating demographic shifts, institutions can plan for demographic changes that may impact the enrollment mix. Important demographic variables to consider are the projection of high school graduates along with local and regional population projections. In both projections significant shifts in demographic factors such as gender, race/ethnicity, and age are noteworthy. College participation rates and success rates as well as educational attainment levels of each segment provide valuable insights.

- **Technology Trends**—Because of the rate of change in technology, it is imperative to anticipate how students will use technology to select a college or university; interact with faculty, peers, and the institution they attend; enable learning; utilize student services; and engage in career pursuits. Failing to connect with students through technology and develop their technological competencies regardless of age, computer literacy, academic program, or career interests is fraught with peril. An analysis of technology trends should include emerging or anticipated technology uses in business and industry, human interactions and communication, navigating and processing information, and everyday life.
- **Labor Market Trends**—In this trend analysis, the focus is on the two sides of the program demand question. First, what are the emerging trends in the job market? By shedding light on careers that are on the horizon, growing, or have unmet employee needs, an institution can align program offerings to respond to these forecast labor market conditions. Second, what are the emerging areas of student career demand? While responding to student demand can certainly produce enrollments, it may lead to graduates who are not gainfully employed in their area of study. Ideally, institutions should respond to labor market conditions only where there is unmet demand by both industry and students, and the corresponding solution is consistent with the institution's mission and academic strengths.

- **Social/Values Trends**—Such an analysis typically looks at societal norms and pressures, lifestyle characteristics, and changing societal values. Though this analysis may appear superficial as it relates to the offerings of a college or university, it exposes the essential needs and behaviors of people. In many ways, this analysis is akin to Maslow’s hierarchy of basic needs. Trends revealed through this analysis tap into many of the motivators and barriers of pursuing postsecondary education—providing powerful insights into messaging, recruitment strategy, and attrition causation.
- **Political Trends**—The shifting political winds often offer intelligence related to support for higher education, enrollment funding, financial assistance for students, and much more. Potential changes on the political front may indicate whether or not it is prudent to grow or shrink enrollments; increase or decrease educational costs or institutional financial aid; as well as the degrees of freedom an institution may have in new program development, building new facilities or renovating existing structures, or investing in innovation.
- **Economic Trends**—Projections of economic trends provide critical information for institutional decision-making in areas such as price elasticity; the expected college participation rate of various population segments; the impact on college affordability given transportation costs, living expenses, and the like. An economic trend analysis should consist of metrics such as unemployment rates, employment patterns, the socio-

economic status of the population in the service region, available discretionary funds for expenditures such as a college education, and the general economic welfare of the local area and region.

In combination, data collected through an environmental scan can deliver a view of the external higher education landscape that yields strategic direction related to opportunities and threats an institution will be facing. Enrollment strategies created in the absence of such data are always inward focused and tactical. “What is needed is a method that enables decision-makers both to understand the external environment and the interconnections of its various sectors and to translate this understanding into the institution’s planning and decision-making process” (Morrison, 1992).

Institutional Goals

At a minimum, enrollment goals should address the four dimensions of institutional enrollment: student quantity, student quality, student diversity, and capacity management. Depending on the institution, other goal categories may include student persistence and net revenue. Regardless of the goal categories selected by an institution, the goals should be data-driven and not purely aspirational, be specific with clearly defined benchmarks and timeframes for achievement, and involve those responsible for the achievement of goals in setting the targets.

Institutional Objectives

Institutional objectives must flow from the established goals—providing a granular perspective of how goals will be achieved. The detailed objectives limit the possibility of focusing solely on bottom line results while fostering an institutional awareness of the dynamics related to achieving goals. The goals and more importantly, the objectives provide the foundation for strategy development. Strategies that are not linked to one or more objectives should be carefully scrutinized to determine their value to the institution. Without clearly defined goals and objectives, enrollment areas are prone to engage in a flurry of activity that has little importance to the institution. Strategies for strategy's sake are almost always counterproductive. They dilute the focus on and resources applied to the strategies that matter most.

Institutional Strategies and Desired Outcomes

Enrollment strategies are not limited to student recruitment. They must permeate the enrollment continuum from the first point of interest a student expressed in an institution on to enrollment and beyond (Black, 2001). Therefore, no single strategy type is sufficient to manage a relationship with future, current, and former students.

Each strategy type has a specific desired outcome. For example, the purpose of student **marketing strategies** is primarily to raise awareness and convey a compelling institutional image. Student **recruitment strategies** are designed to

create and cultivate interest in the institution and its academic programs. Once interest is sufficient that students apply for admission, then **admissions strategies** cement the commitment students have to complete the application and related enrollment processes. **Yield strategies** focus on converting admitted students to become enrolled students. When students enroll, if not before, **retention strategies** are targeted at high risk students and high risk institutional experiences to increase the probability of student success and persistence. Also while the student is enrolled, **service strategies** are deployed to influence student satisfaction, and **learning strategies** are implemented to enhance the educational experience. Following enrollment, **alumni strategies** continue to cultivate a relationship with graduates with a goal of ongoing support of the institution and potentially, future enrollment.

These strategies should be designed to leverage the four stages in the life of a student with an institution—life as a prospective student, as a current student, as a graduating student, and as an alumnus. Of these stages, the period as an alumnus is protracted requiring a sustained cultivation effort. On the opposite end of the time continuum is the graduation stage. Though brief, this stage is symbolic in terms of a student's desire to maintain a relationship with an institution. By far, the most institutional effort and resources are exerted during the prospective student stage. While this may be strategically prudent, this investment should not occur at the cost of cultivating a relationship with current students. No successful business ignores its existing customers. Higher

education institutions can ill-afford to cease romancing students once they enroll. The degree to which they feel connected to and cared for by their school largely determines their willingness to continue a relationship post graduation and promote the institution with positive “word-of-mouth” with others they encounter throughout their lives. Colleges and universities should be intentional about communications and interactions with current students with a plan and related resources.

Enduring Effect and Behavior

The end game of any enrollment effort should not be enrollment in the upcoming term. Instead, the focus of enrollment management should primarily be to enhance institutional image and engender institutional loyalty. If you meet enrollment targets without accomplishing the aforementioned, the institution is vulnerable to the ebb and flow of enrollment trends. There is nothing enduring in meeting enrollment goals.

With a strong image, an institution can weather any enrollment crisis. And, institutional loyalty produces lasting benefits such as competitive advantage, positive “word-of-mouth,” enhanced student retention, improved fund-raising capacity, and institutional vitality. These by-products of loyalty are sustainable over time.

Conclusion

The holistic approach to enrollment management represented in the *Enrollment Management Systems Archetype* offers a construct through which enrollment managers and institutional leaders can strategically focus on enrollment dynamics. However, it is simply a tool for gaining the proper perspectives on internal strengths and weaknesses as well as external opportunities and threats that determine enrollment outcomes. Frankly, this systems methodology is useless without the institutional will to act and the discipline to stay the course. You are encouraged to identify the antecedents for a successful application of this construct and ensure said antecedents are in place before proceeding.

References

- Aguilar, F. (1967). *Scanning the business environment*. New York: Macmillan.
- Astin, A. W. (1993). *What matters most in college? Four critical years revisited*. San Francisco, CA: Jossey-Bass.
- Bailey, T. R., Leinbach, D. T. & Jenkins, D. (2006). *Is student success labeled institutional failure?* New York: Community College Research Center at the Teachers College, Columbia University.
- Baum, S. & Payea, K. (2004). *Education pays 2004: The benefits of higher education for individuals and society*. Washington, DC: The College Board.
- Black, J. (2001). *The strategic enrollment management revolution*. Washington, DC: American Association of Collegiate Registrars and Admissions Officers.
- Cope, R. G. (1981). Environmental assessments for strategic planning. In N. L. Poulton (Ed.), *Evaluation of management and planning systems*. New Directions for Institutional Research, 31, 5–15. San Francisco, CA: Jossey-Bass.

- Hossler, D., Schmidt, J. & Vesper, N. (1998). *Going to college: How social, economic, and educational factors influence the decisions students make*. Baltimore, MD: Johns Hopkins University Press.
- Hossler, D. & Hoeezee, L. (2001). Conceptual and theoretical thinking about enrollment management. In J. Black (Ed.), *The strategic enrollment management revolution*. Washington, DC: American Association of Collegiate Registrars and Admissions Officers.
- Karemera, D., Rueben, L. J. & Sillah, M. R. (2003). The effects of academic background characteristics on student satisfaction and performance: The case of South Carolina State University's school of business. *College Student Journal*, Vol. 37. AL: Project Innovation of Mobile.
- Morrison, J. L. (1992). Environmental scanning. In M. A. Whitely, J. D. Porter, and R. H. Fenske (Eds.), *A primer for new institutional researchers*. Tallahassee, FL: The Association of Institutional Research.
- McDonough, P. M. (1997). *Choosing colleges: How social class and schools structure opportunity*. Albany, NY: State University of New York Press.
- National Center for Educational Statistics (2003). *Enrollment in postsecondary institutions, fall 2001 and financial statistics, fiscal year 2001*. Washington, DC: Author.
- National Center for Educational Statistics (2004). *Digest of education statistics 2003*. Washington, DC: Author.
- Nicholson, N. (1995). *The Blackwell encyclopedia of management: Vol. VI. Organizational behavior*. Cambridge, MA: Blackwell Publishers.
- Paulsen, M. B. (1990). *College choice: Understanding student enrollment behavior*. Washington, DC: ERIC Clearinghouse on Higher Education and George Washington University.
- Senge, P. (1990). *The fifth discipline: The art and practice of the learning organization*. New York: Doubleday.
- Sevier, R. A. (1998). *Integrated marketing for colleges, universities, and schools*. Washington, DC: Council for Advancement and Support of Education.
- The College Board (2004). *Trends in student aid 2004*. New York: Author.
- Thomas, S. L. & Perna, L. W. (2004). The opportunity agenda: A reexamination of postsecondary reward and opportunity. In J. C. Smart (Ed.), *Higher*

education: Handbook of theory and research, Vol. 19. Dordrecht, The Netherlands: Kluwer Academic Publishers.