In the last issue of CSU, I summarized the core concepts and organizational principles that form the infrastructure of successful strategic enrollment management (SEM) organizations. Core concepts identified included:

- Establishing clear goals for the number and types of students needed to fulfill the institutional mission
- Promoting academic success by improving student access, transition, persistence, and graduation
- Determining, achieving, and maintaining optimum enrollment
- Enabling the delivery of effective academic programs
- Generating added net revenue for the institution
- Enabling effective financial planning
- Increasing process and organizational efficiency
- Improving service levels to all stakeholders (e.g., prospective and current students, other institutional departments, other institutions, coordinating agencies)
- Creating a data-rich environment to inform decisions and evaluate strategies
- Creating and continuously strengthening linkages with functions and activities across the campus

Academic Success Strategies

In considering SEM strategies, there is a strong temptation to go directly to tactics. A more useful approach is to identify desired outcomes. Among the many enrollment outcomes that exist on every campus, the most prominent is student academic success. As Michael Dolenze (1993) states, "it is the curriculum, academic policy, and the corresponding choices students make to attend, persist, and drop out that drive the planning implementation, and evaluation of an institution's recruitment and retention programs" (p 9). The extent to which these issues are addressed will determine enrollment numbers and competitive positioning.

Thus, this focus on academic programs and student success offers a useful organizing principle for thinking about enrollment strategies. As institutions engage the daily complexities of institutional life and face the quantitative pressures of enrollment and budget, it is easy to lose sight of their primary reason for being: enabling students to meet their educational goals. Every campus department contributes to this endeavor in some way. Many of these functions fall outside the purview of formal enrollment management structures. However, enrollment managers have a unique role in coordinating functions and bringing them into alignment with the academic mission of the university.

Recruitment Initiating the Student/Institution Relationship

Promoting academic success begins during the recruitment process. The primary goal of student recruitment is to determine student-institution fit, that is, the degree to which a student's academic preparation, educational goals, career aspirations, and personal preferences are in line with what an institution has to offer. Effective enrollment programs view the recruitment process as the initial phase of building meaningful...
ful, lifelong relationships with students for whom the degree of student-institution fit is high. A student's decision to remain engaged with the institution will depend on the institution's ability to nurture and build upon its relationships with students, by providing meaningful communications and experiences throughout the student's educational career and beyond.

The process of recruiting and retaining students has traditionally been characterized as a funnel, with larger numbers of prospective students narrowing through successive stages to smaller numbers of enrolled, retained, and graduated students. While this makes quantitative sense, conceptually it creates the false impression that students flow automatically through the funnel as if drawn downward by gravity. In reality, recruiting and retaining students is more like climbing a mountain. It requires careful planning, effective execution, and technical skill. Thus, a pyramid may be the more useful graphic representation of the process (see below).

Oregon State University has sought to bring its recruitment and retention programs into greater alignment through a revamping of its admission policies and practices. This new approach is based on the research of William Sedlacek, professor of education at the University of Maryland. Dr. Sedlacek has identified seven "noncognitive variables" that, when measured and considered along with other admission criteria, can provide more accurate predictions of student success in college. These variables include positive self-concept, understanding and ability to deal with racism, realistic self-appraisal, ability to set and meet long-range goals, availability of a strong support person, successful leadership experience, and demonstrated community service.

Dr. Sedlacek's methodology has demonstrated that these variables can be effectively assessed through written responses of 100 words or less to a set of targeted prompts. When carefully trained in the Sedlacek methodology, reviewers can quickly assess students' noncognitive attributes. Oregon State's approach provides the type of information gathered by many institutions through interviews. However, it provides an alternative for those institutions whose size or funding precludes their ability to interview all applicants face to face. This approach also improves upon the traditional essay requirement by focusing on the experiences of individual students rather than their responses to hypothetical situations or theoretical concepts. As such, students are less able to plagiarize or receive inappropriate assistance in composing responses. Furthermore, any lack of truthfulness in their responses is often apparent as written responses are compared to other aspects of students' admissions information.

Students' noncognitive attributes become part of a holistic admission review that provides more accurate predictions of student success in college. Though still in a testing phase, Oregon State intends to develop a new form of transcript based on noncognitive variables that will be provided to academic advisors and allow for enhanced student advising throughout their college careers.

**MARKETING AND COMMUNICATIONS**

Specific marketing and communication strategies are employed at each successive level of the enrollment pyramid. At the beginning stages of building awareness, recruitment and marketing efforts are built on three main components: image management, market segmentation, and relevant communications. Image management and market segmentation emanate directly from institutional mission. It is the mission that provides direction to the way the institution portrays itself in the higher education marketplace. Consistency of the content and visual representation of institutional image is critical in these times of intense competition and massive amounts of stimuli in the marketplace.
Institutional mission also provides guidance as to which segments of the prospective student market the institution should pursue. In some cases, appropriate target groups will be obvious, as in the case of a church-related college pursuing students affiliated with a particular faith tradition, or a land grant university placing a premium on reaching students who reside in the state it serves. However, given the diverse interests of an institution's many stakeholders, it is easy to be led astray into unproductive market niches.

Institutions can avoid the pursuit of dead-end markets through the use of two tools. Market research allows the institution to address the critical issue of student-institution fit by identifying those places where institution mission, institutional expertise, student interest, and societal needs converge. The most readily productive market will include those areas in which these variables converge naturally. Institutions certainly can make adjustments to bring themselves into alignment with new markets. However, the resource requirements for doing so are typically underestimated and results often fall short of expectations.

Pairing market research with predictive modeling can be especially effective. This tool uses the characteristics of students who have chosen an institution in the past to predict which prospective students will enroll in the future. One way of understanding predictive modeling is as a combination of prospect qualifying and market segmentation, two classic recruiting strategies. Prospects are qualified based on their likelihood of enrolling. Markets are segmented to allow for the tailoring of communications to specific groups of students. Ultimately, predictive modeling allows a recruiting operation to function more efficiently by targeting efforts to those students who are most likely to enroll and succeed academically.

Once appropriate target markets have been identified, communications must be provided to students that are relevant in terms of content and timeliness. These two variables operate differently at various stages of the enrollment process, as the institution seeks to establish stronger relationships with students as they move from prospect to enrolled student to graduate. During the prospect building phase, larger scale communications aimed at establishing institutional image are important. At this stage, many institutions rely on flashy graphics and glossy brochures to capture students' attention. While design issues are certainly important in conveying a school's message, it is most vital that the institution be clear about its unique mission and how it fills the higher education marketplace. No amount of clever design will overcome lack of clarity about what it is that differentiates your institution from the hundreds of others vying for students' attention.

Image-building communications must be based on careful market research regarding the effectiveness of various messages and the response to specific graphic presentations. Institutions waste countless dollars each year on communication strategies that are not tested with the target audience. Often these decisions are made by campus decisionmakers who mistake personal preferences for ineffective communications. Institutions typically feel they cannot afford to spend the funds required to conduct market research, only to waste money on promotional activities and materials that have limited effectiveness in achieving the desired outcome.

While broader communication strategies are important in generating initial interest, the relationship-building focus of enrollment management quickly turns toward personalized communications as students enroll, continue with the institution, graduate, and, hopefully, maintain an active relationship with the institution after graduation. With rapidly advancing technology, this increasingly means providing information tailored to the interests of individual stakeholders, available to them in a timely manner. At earlier stages of relationship building, technology is supplanting in-person contacts. This is not to say that personal interactions are no longer important. To the contrary, the high touch nature of personal contact is as important as ever as the level of relationship increases. One of the key advantages of technology is its ability to make earlier stages of the process more efficient, thereby allowing more engaging personalized contacts later in the process where they will have maximum benefit.

**STUDENT TRANSITION AND RETENTION**

When students have chosen to attend an institution, the enrollment management task becomes one of facilitating their transition to the campus and enhancing the student-institution relationship. Institutions commonly offer early registration and orientation programs, bringing new students to campus during the summer prior to entry into college. The primary purpose of these programs is twofold: to register students for first-term courses and to provide preliminary orientation to campus life. These programs may include small group experiences designed to create stronger early relationships among students, thereby strengthening affiliation with the institution and promoting persistence through the students' first few weeks on campus. Some institutions extend their pre-college programming to include bridge programs, which add academic preparation to the mix. Such programs typically include remedial study for students with academic deficiencies, an introduction to college-level coursework, and training in study skills. Such programs have a powerful effect in relieving pre-college anxieties for both students and parents, especially for families encountering the college-going process for the first time.

Orientation programs typically are offered just prior to the term in which the student enters college. Lasting from a few days to a few weeks, these programs offer a wide range of activities designed to acculturate students to the campus. Such efforts are critical to student retention during the first few weeks of the student's first term, when the highest rate of withdrawals occurs.

Many institutions extend new student orientation throughout the first year by means of orientation courses, cohort pro-
GRADUATION AND BEYOND

Graduation is generally thought of as an ending, when in reality an institution's potential relationship with its students extends far longer after they graduate. Attention to post-graduation aspirations of students is important to enrollment management in many respects. Career aspirations are an important aspect of determining student-institution fit in the recruiting process. Because many students are uncertain of their career goals, assisting in the career identification process is important to retention (Bean 1999). Returned students are more closely identified with the institution and are more likely to become active alumni and donors after graduation. The promotional and financial support of satisfied graduates re-uses institutional resources and helps to sustain the enrollment enterprise into the future.

Operational Strategies and Tools

Pricing Strategies

Pricing strategies in enrollment management revolve around three concepts that interact closely with one another: price elasticity, net revenue, and financial aid leveraging. Price elasticity refers to the notion of “what the market will bear.” That is, institutions can increase revenue by raising tuition. But at some point, the cost of tuition will become too high that fewer students will be willing to pay the higher price, thus resulting in lower enrollment and decreased revenue. Price elasticity refers to the interplay of the cost of tuition and willingness of students to pay.

At many private institutions, the notion of price elasticity is primarily a matter of historical precedent and comparison to a few local competitors. Institutions that operate on this basis run the risk of miscalculating their pricing options. Evaluation of elasticity should be part of a comprehensive market research effort. Public institutions often do not have latitude to set their tuition levels. Even then, pricing strategies can be implemented through net revenue and leveraging strategies.

The concept of net revenue recognizes that the process of attracting and retaining students requires significant investment in recruitment and retention efforts, including grants and scholarships that are funded from institutional resources. Net revenue is calculated simply as:

$$\text{Net Revenue} = \text{Total Tuition Revenue} - \text{Recruitment and Retention Costs}$$

As noted earlier, however, SEM offers the potential not only to increase revenue, but also to reduce costs. This makes for a far more powerful net revenue equation that produces significant positive results.

$$\text{SEM Net Revenue Goal} = \text{Stable or Increased Tuition Revenue} - \text{Reduced Recruitment and Retention Costs} = \text{Added Net Revenue}$$
The concept of net revenue is critical to making sound decisions regarding enrollment investments. Funding proposals should be based on a business plan that calculates realistic net revenue results over time, with subsequent accountability to those projected outcomes.

Financial aid leveraging is a strategy that combines the concepts of price elasticity and net revenue to determine the appropriate amount of institutionally funded financial aid needed to entice specific students to enroll. Often referred to as tuition discounting, financial aid leveraging serves two broad purposes: to provide an incentive to target groups of students (e.g., high ability students, students from a targeted geographic area) or to address price elasticity issues for individual students. The latter purpose requires copious amounts of data analysis, work that is outsourced by many institutions.

While financial aid leveraging can be extremely effective, it must be used with caution. Studies have shown that after initial encouraging results, institutions are prone to applying the strategy too broadly, with negative net revenue results over time (Fissler and Hooze 2003). Like all other strategies, financial aid leveraging must be subject to regular evaluation and adjusted in response to ever-changing market forces.

INFORMATION MANAGEMENT
Whether the issue is market research, customizing student communications, understanding student attrition, or calculating net revenue, enrollment managers must have ready access to huge amounts of data. Even more important is that they must have the ability—whether themselves or their staff—to analyze and interpret information in meaningful ways for campus decisionmakers. Thus, enrollment management is highly dependent on institutional research and information technology.

This fact has significant implications for SEM organizational structures. Among the many collaborative enrollment managers are required to maintain with other campus units and resources, they must have direct access to information. The importance of data to the enrollment enterprise presents a strong argument for making the institutional research function part of a campus SEM organizational structure. Indeed, a number of enrollment managers have institutional research as part of their portfolio. An alternative is to create strong links between SEM and institutional research, usually by assigning one or more members of the IR staff to work exclusively on enrollment data. A third option is to hire information specialists as members of the enrollment management staff. Many institutions have redefined roles to fill this need, for example replacing an admission counselor with an information specialist, reflecting the importance of the data gathering and analysis role. Finally, some enrollment managers opt in the short term to outsource their need for information services to one of the growing number of firms offering such assistance.

BUSINESS PRACTICES AND CUSTOMER SERVICE
Enrollment managers care deeply about students and their educational needs, and recognize the importance of building personal relationships with many stakeholders. However, to maintain those relationships requires steely-eyed attention to core business practices. No matter how well mentioned the effort, stakeholders will not feel well served if their needs are not met satisfactorily in terms of content and timeliness.

Successful SEM operations place a high premium on the analysis and continuous improvement of business practices, seeking to provide the highest level of service in the shortest time possible. This issue is less a management issue than a cultural one. Management prodding alone will not produce the desired results. Rather, staff at all levels must be carefully developed and trained to understand their role in delivering quality, timely service and be rewarded for doing so. A commitment to continuous improvement and quality service has two primary qualities.

First, the commitment must be systematic: Many quality initiatives fail to take hold because they are treated as just that—short-term initiatives. While such efforts can be useful in initiating a cultural, long-term commitment to quality service, in themselves they are unlikely to change foundational institutional behaviors. A true commitment to providing top-quality service is nurtured among staff members by:

- Establishing expectations and rewards: Position descriptions and performance evaluations for all staff should clearly address the expectation of providing top-level quality service. Staff should be evaluated for service provision during their annual performance review and be recognized and rewarded frequently for providing outstanding service through an "Employee of the Month" program or other similar program.

- Communicating with staff: Staff at all levels must be aware of the institution’s enrollment goals and understand their role in achieving those goals. In many cases, the most important contributor to employee satisfaction is not salary and benefits, but “knowing what’s going on.”

- Providing staff development opportunities: Staff at all levels must receive regular training on customer service. Such training should occur as new staff are hired and at least once a year for all staff. Continuing staff will benefit from regular refresher courses and can assist in training newcomers.

Second, the service commitment must extend to all stakeholders. Efforts to improve services typically focus on students. The reality is that successful enrollment management operations seek to provide quality services to all stakeholders, including other campus departments, individual faculty and administrators, high schools, other colleges and universities, coordinating agencies, and many others. In each case, timely response provided in a professional manner is important to the enrollment enterprise.

TECHNOLOGY
From facilitating business practices to managing data to providing on-demand communications, enrollment managers are increasingly required to be technology experts. The ability
to evaluate, conceptualize, purchase, implement, and continually maintain information technology is a required set of skills in the SEM organization.

Integrated database systems that support many enrollment and institutional functions continue to be important. However, these systems are increasingly evaluated on their ability to deliver services via the World Wide Web. Customer relationship management (CRM) on the Web is quickly becoming a required component of the enrollment management toolbox. CRM consists of a suite of software and services that allows stakeholders to establish portals into institutional Web sites, enabling them to customize the information they receive. Institutions can make information available to the student on an on-demand basis, replacing what had been done previously via postal mail, telephone calls, and in-person contacts. Advanced systems allow for automatic e-mail communications at specified times, automated management of incoming e-mail, event management, and chat rooms for prospective students. Continuing students can access personal records and conduct institutional transactions at their convenience. Such systems require substantial up-front investments and usually require a shift of staff resources to technical support and content management. However, when managed well, the efficiencies to be gained by using such systems can far outweigh the costs.

Technology solutions for document management also are gaining in functionality and usage. While prior document imaging solutions often were more labor intensive and less cost-effective than desired, newer document management systems are proving to be of great benefit in revising business practices and improving service delivery. This is especially true for larger institutions. Like other technologies, document management systems are increasingly Web-based.

Whatever the potential benefits, technology is not a panacea. Like any enrollment management strategy, specific technology solutions should be evaluated carefully not only for their "wow factor," but more importantly for their ability to deliver cost-effective improvements to enrollment operations. Thus, virtually all effective technology implementations involve review and revision of core business practices.

Few institutions utilize technology as effectively or strategically as California Polytechnic State University-San Luis Obispo (Maraviglia 2001). Cal Poly has taken an innovative approach that uses technology to drive everything from prospect communications to admissions processing to building campus relationships. Prospective students receive a series of carefully designed flash e-mail messages that are both eye-catching and timely in meeting students' needs. Web portals have been created which allow for students to customize the information they receive, as well as self-service registration for campus events and services. Admission processing has been rendered virtually paperless, with admissions decisions automated in customized fashion for each academic program. Cal Poly's system also includes content and communications for high school counselors and parents. The high quality, seamless nature of the system has allowed Cal Poly to achieve unprecedented increases in its enrollment numbers and student profile over the past ten years.

Implementing SEM

Implementing SEM involves addressing the issues described in this article and summarized below. These are not discrete tasks to be engaged, accomplished in chronological order, and forgotten about. Rather, each issue represents a planning phase that flows among and informs the others. Ultimately, what appears to be a checklist becomes an implementation cycle, a continuous feedback loop in which goals, structures, and strategies are constantly reviewed and adjusted based on outcomes measured by clearly defined metrics.

Phases of the SEM implementation cycle are as follows:

**CLARIFY GOALS**
- Link to institutional mission
- Number of students
- Types of students
- Net tuition revenue

**CONDUCT RESEARCH**
- Performance indicators
- Student outcomes assessment
- Market research

**CREATE A SEM ORGANIZATION**
- Structure
- Composition
- Philosophical alignment
- Direct/dotted-line relationships

**ASSESS STAFF RESOURCES**
- Staff alignment
- Staff development
- Reward systems

**REVIEW, RENEW, AND INITIATE CAMPUS COLLABORATIONS**
- Coordinate student success strategies
- Link to academic policy and program
- Link to institutional finances
- Link to strategic planning

**ASSESS STRATEGIES**
- Outcomes assessment
- New, replacement strategies

**EVALUATE AND ADJUST**
- Feedback loop
- Continuous evaluation and change
Finally, it is important to reiterate that SEM is not a quick fix approach. To the contrary, SEM involves a series of carefully-deployed strategies and processes that are implemented, evaluated, and readjusted over time. One of the most important SEM disciplines is patience in allowing the implementation cycle not only to play out once, but multiple times. This allows hunch-driven, "silver bullet" strategies to give way to the sound planning and careful evaluation required of effective enrollment management. Only then will an institution realize the power of SEM and the potential for charting a stronger future.

References and Resources


Green, T. 2002. Integrating Academic and Student Affairs Initiatives to Increase Admissions. Presentation at the American Association of Collegiate Registrars and Admissions Officers Strategic Enrollment Management Conference, Boston, MA.


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