

# GETTING BETTER: ALN AND STUDENT SUCCESS

*I used to get mad at my school, the teachers that taught me weren't cool, they are holding me down,  
turning me round, filling me up with your rules.*

The Beatles, *Getting Better*  
Sergeant Pepper's Lonely Hearts Club Band, 1967

*Janet C. Moore and John Sener*

The Sloan Consortium

*Marie Fetzner*

Montgomery College

## ABSTRACT

In the U.S., only 38 of every 100 ninth graders enroll in college; of these 38, only 18 complete bachelors' degrees within six years. Asynchronous learning networks (ALN)—asynchronous, highly interactive, instructor-led, resource-rich, cohort-based learning—can yield high success rates. Growing demand for online education and the expectation among higher education leaders that ALN learning outcomes will exceed face to face outcomes reflect belief in ALN's power to engage learners. Sloan-C's body of research confirms that ALN is especially suited for the anytime, anywhere, affordable access that is responsive to learners in a knowledge society. In fact, the original principles of ALN are the same principles that characterize ALN programs that have high student success rates. This paper includes vignettes from two- and four-year ALN programs that have used these principles to achieve high success rates.

## KEYWORDS

ALN, Interaction, Engagement, Student Success, Retention, Completion

## I. INTRODUCTION

Affordable access to quality learning with comprehensive breadth of choice is the goal of the Sloan Consortium. Within the next ten years, asynchronous learning networks (ALN) have the potential of increasing the accessibility and effectiveness of higher education so that it becomes “an ordinary part of everyday life” [1]. By improving access, affordability, and success, ALN can recreate higher education as a right, rather than the privilege it is today.

Higher education offers benefits to the national quality of life—“decreased reliance on public assistance, higher voting rates, and increased volunteering”—and to individual quality of life—“higher income, lower unemployment, and better health” [2]. According to the Community College Survey of Student Engagement:

For every year that you add to the average educational attainment level of the population, you add 5 to 15 percent in economic growth. So the connections between education and the economy are very, very clear. Educational attainment level is also powerfully and positively correlated with every single other thing we care about as a society [3].

Yet, with only 27% of the eligible population achieving bachelor or graduate degrees [4], the U.S. lags in making higher education accessible and affordable [5], ranking only fifth in the world in graduation rates [6]. According to the National Governor's Association (NGA), "if current economic and demographic trends continue, by 2020 the nation will need as many as 14 million more workers with some college education than its education systems will have produced" [7]. Unless education becomes more accessible and affordable, in key fields such as science and engineering, work that requires education will not necessarily be led by US citizens [8]. Global redistribution of market power means greater international competition and motivation for education and for jobs; thus Thomas Friedman asserts in *The World Is Flat: A Brief History of the Twenty-first Century* that the U.S. has all the resources, but if it is not attending to education, it is not attending to the secrets of its soul [9].

U.S. college tuition costs are estimated to be 26% of the average annual income [5]; and as tuition increases, "too many financially needy and minority students drop out" [10].

Twenty-one percent of people who attempt college abandon that dream [2]; and "60% of students at public institutions fail to complete degrees within five years, and half of these students leave during the freshman year" [11]. Students who drop out are "twice as likely to be unemployed as borrowers who graduated from college, and 10 times as likely to default on their loans" [12]. Thomas G. Mortenson of the Pell Institute for the Study of Opportunity in Higher Education observes that "those with the highest family incomes are '10 times more likely' to have a bachelor's degree by age 24 than those with the lowest. Twenty-nine percent of African-American students and 31% of Hispanic students who enroll in college leave before completing their first year. Our goals must now include improving completion rates for all students, especially those from disadvantaged backgrounds" [13]. In some states, an expected tidal wave of enrollments in the next decade threatens an infrastructure dependent on state budgets that are inadequate for shifting demographics, for under-prepared high school graduates and returning adults, and for workforce education [14]. For every 100 ninth graders, 67 graduate from high school four years later; of these 67 graduates, 38 enroll in college; of the 38 who enter college, 26 are still enrolled in the sophomore year; and of these 26, 18 graduate within six years [15]. Some estimate that the rate of high school dropout is even higher; a 30% high school dropout rate is a 'silent epidemic' [16]. The annual National Report Card on Higher Education's 2004 report card on the states concludes that despite gains in high school courses that prepare students for college, neither college participation nor completion rates have improved in the last decade: "the fundamental finding is that the nation has stalled in the development of human talent through college opportunity" [17].

Although the number of people attending postsecondary education has quadrupled since 1960, and any increased success rate is a net plus, developing human talent calls for new social ideals:

It used to be possible to educate an elite, a small number of people who would be the leaders, and essentially would tell the rest of us what to do. That is no longer the case. We need to educate all of our people to a higher level. And we simply cannot afford to waste any person...When in America did we come to the point of saying that the mark of a college's quality is the proportion of prospective students that it refuses to serve? [18]

To improve access and attainment for prospective students, the NGA recommends setting statewide benchmarks for postsecondary attainment, creating and supporting integrated K-16 data systems, better aligning K-12 and higher education expectations and incentives, promoting more learning options and focusing on low-performing schools [7]. While these strategies are promising, it is important to keep in mind that tracking individual performance is complicated by the fact that most students—59% in the 1999-2000 academic year—attend more than one college, or simultaneously enroll in two or more institutions [19]. Today's students are older, spend more time working and less time studying, and are

more likely to incur debt:

- Among the more than 14 million undergraduates enrolled in U.S. colleges and universities, about 47% are of “traditional” age (19–23 years old), but another 43% are 24 or older, and the average age is 26;
- 68% of undergraduates work 16 or more hours per week, 36% work 36 or more hours per week;
- About 35% of college students report they study less than 10 hours a week; nearly 60% report that they study less than 15 hours a week.
- About 65% of students graduate with student loan debt; the average debt has nearly doubled over the past eight years to \$16,928.
- 53% of first-year college students need remediation in writing or math [20].

Considering the changing characteristics of today’s students, the American Council on Education (ACE) recommends that “persistence measures should consider the full student experience across institutions” [21]. The Integrated Postsecondary Education Data System (IPEDS) hopes to redesign five current IPEDS surveys to design a record system that would track the progress of individual students across institutions [22]. The design will include guidelines so that the diversity of tracking techniques can use a common language and report meaningful data. Meanwhile, organizations such as the Lumina Foundation [23], the Gates Foundation [16], University of Oklahoma’s Consortium for the Student Retention Data Exchange (CSRDE) [24], the National Center for Higher Education Management Systems (NCHEMS) Information for State Higher Education Policymaking and Analysis [25] the National Center for Academic Transformation [26], the National Survey of Student Engagement [27] and the National Survey of Student Engagement in the Community College [28], and the Educational Policy Institute’s National Student Retention Clearinghouse (NSRC) [29] provide guidelines and exemplars for improving retention.

In terms of student success rates, it is clear that some institutions consistently outperform other similar institutions, according to College Results Online [30], which assesses graduation rates according to eleven factors including “student preparation, size, selectivity, percent low-income students, and institutional support” [31]. Schools that continuously improve retention, persistence and success, “make student success an unambiguous, institution-wide priority, driven from the top and pursued over the long term” [32].

The growth of enrollment in online education and the expectation among higher education senior administrators that outcomes from ALN will exceed face to face outcomes within the next three years [33] indicate growing belief in ALN’s power to engage learners and help them succeed. Sloan-C’s body of research confirms that ALN is especially suited for the anytime, anywhere, affordable access that is responsive to life in a knowledge society.

## **II. BARRIERS TO ONLINE SUCCESS**

The effectiveness of online learning environments varies. Learners can be demotivated by online courses that are impersonal, irrelevant, boring, one-size-fits-all page-turners. Just as learners in face to face courses can be, online earners can be under-prepared, under-motivated and discouraged by a lack of immediate payoff.

A few empirical studies have identified barriers to online success. The most frequent reasons for dropouts in corporate eLearning are, according to Berge [34] citing Frankola [35]: lack of time, lack of

management oversight, lack of student support; lack of or problem of motivation; individual learning preferences; poorly designed course; and substandard or inexperienced instructor. In a study of 400 corporate e-learners and academic online students, the e-Learning Consortium cited these factors influencing drop-out:

- Lack of motivation (36%);
- Instructional design-related factors and learning style mismatch (36%);
- Time conflicts with work and family commitment (33.1%);
- Learning what one needed to know...before the end of the course (25%);
- Lack of organizational support [36].

In an academic setting, Tello's study of persistence (defined as students who completed the course and/or planned to continue online in the subsequent semester) surveyed 714 online students and found reasons for non-persistence were primarily situational barriers: work, family and time commitments. Institutional barriers accounted for slightly more than one third of the reasons non-persisters said they withdrew from their online courses: the course was not offered the subsequent semester, the course content did not meet their expectations, or the instructor contact was not what the student expected [37].

At Monroe Community College, telephone surveys of 201 online non-retained students identified these top reasons for non-completion: lack of motivation; the course took too much time; instructor's teaching style; too many technical difficulties; fell behind and couldn't catch up; too much reading; signed up for too many courses; course too unstructured; not interested in subject; couldn't handle study plus other activities [38].

In an analysis of 47 barriers, Muilenburg and Berge collected 1067 survey responses from students, and found that the most important barrier for online students was a lack of social interaction. The next most severe barriers were administrative/instructor issues, time and support for studies, and learner motivation. Learners rated technical problems and cost/access to the Internet lower, and rated lack of technical and academic skills as the lowest obstacles to learning online [39].

By some early estimates, online course completion may have been consistently lower—from 10% to 50%—in comparison to course completion in face-to-face classes [40]. Ongoing studies at the University of Central Florida show that on average, “fully online courses have slightly lower success rates and higher withdrawal rates than either their face-to-face or Web-enhanced counterparts” [41]. For most schools, Ingle explains that specifically online retention data are difficult to disaggregate from overall retention data for a multitude of reasons, including the fluidity of enrollment in various delivery modes when sequential and full programs are not available or do not align with individual schedules; traditional definitions of retention do not account for “high achievers, intermittent students, or students who have no interest in moving toward a terminal degree, certificate, or license” [42].

Completion rates improve for students who gain experience in online education and pursue higher degree levels, so that online success rates are higher in advanced degrees than in beginning courses and programs. In her study of the issues surrounding online completion, Ingle found these course completion results for regionally and nationally accredited schools that offer fully online programs:

Categories	Number	Enrolled	Completed	Dropped	Rate
Number Programs in Sample	358				
Number Responding Programs	101				
Programs, Non-tracking*	24				
Programs, Tracking	76				
Undergraduate Institutions	69	192,896	116,096	76,800	60.19%
Two-year schools	58	169,794	96,566	73,228	56.87%
Four-year schools	5	14,616	12,322	2,294	84.31%
Upper division reported only	6	8,486	7,208	1,278	84.94%
Graduate schools	7	8,315	7,112	1,233	85.53%
Totals for Responding Programs		201,211	123,208	78,003	61.23%

\* Non-tracking programs: unable to track or separate online course completion statistics

**Table 1: Online Enrollment and Course Completion Rates for 2002–2003, Ingle [42]**

A caveat regarding these empirical studies is that “elements of self-deception and impression-management” may characterize students’ overt explanations for dropping out; socially acceptable reasons like lack of time may mask ‘unacceptable’ reasons such as:

Problems with a lack of prerequisite knowledge, with the course content itself in terms of both understanding and relevance, lack of support from peers and family, stress, poor marks, procrastination, a need for face-to-face interaction, adult pride, poor tutor feedback, weak goal commitment, a fear of failure, and other explanations for a dropout decision...[43].

Some institutions may settle for identifying the factors that are beyond their control and accept that they can’t do much about them. Others, however, treat such factors as starting points.

### III. FACTORS IN ONLINE SUCCESS

As demand for ALN grows [33], it is useful to understand the practices that improve online learning, cost effectiveness and institutional commitment, access, and student and faculty satisfaction. ALN offers new ways for encouraging and tracking the kind of connected participation that spells success for learners. Indeed, asynchronous learning networks—technological and people networks—have enabled organizations and institutions to share their knowledge internally and externally much more rapidly and accurately than ever before. Yet improving course completion, persistence, and success means attending to a multitude of variables. Berge and Yi-Huang illustrate some relationships in “A Model for Sustainable Student Retention: A Holistic Perspective on the Student Dropout Problem with Special Attention to e-Learning,” in Table 2 [34].

Demographic Variables	Bureaucratic Variables	Institutional Interactions
Age, Gender, Ethnicity, Residence Family Income/Socioeconomic Status, Parental Educational Level and Parental Expectation Individual Variables Academic Skills and Abilities Motivation, Goals & Commitment Prior Educational Experiences Record of Academic Achievements Prior Schooling Experiences	Mission & Policy Budgeting & Funding Institutional Awareness & Participation Academic Variables Structural System Normative System Social Variables Social System Mechanisms for Social Integration	Bureaucratic Interactions Academic Interactions Social Interactions Interactions External to Institution Life Circumstances Work Circumstances Family/Socio-Economic Circumstances
Academic Outcomes + Psychological Outcomes Voluntary/Involuntary Decision on Persistence/Drop-out		

**Table 2: Retention Variables, from Berge and Huang [34]**

At the institutional level, Schreck explains that “strengthening the relationship between variables...is more important than improving variables in isolation....online course retention is a direct reflection of how well an institution establishes an inquiry process (i.e., how well they research, build understanding, and implement that understanding) into four major areas: courses, teachers, students, and administrative” [44].

Schools “need to design more flexible schedules for working adult students, create a greater sense of community or engagement..., address the special needs of English-as-second-language students, and serve at-risk students more effectively” summarizes Twigg [11]. The National Center for Academic Transformation (NCAT) Program in Course Redesign has demonstrated that it is possible to increase student success while reducing instructional costs in first-year courses that including significant ratios of underserved students—adults, students of color, and low-income students. NCAT projects document strategies that improve quality and reduce costs in face to face, blended and ALN courses:

- Redesign the whole course;
- Encourage active learning;
- Provide students with individualized assistance;
- Build in ongoing assessment and prompt (automated) feedback;
- Ensure sufficient time on task and monitor student progress. [45]

Applying these strategies yields measurable improvements in learning outcomes, costs, and success rates [46].

#### IV. THIRTEEN WAYS OF LOOKING AT SUCCESS: TWO AND FOUR-YEAR PROGRAMS WITH HIGH COURSE COMPLETION RATES

It is not unusual for online completion rates at the graduate level to be 90% or higher, rates that are commensurate with face to face graduate programs. However, non-completions at the 2- and 4-year levels can be as low as 57–60% as Ingle shows in results from 76 schools [42].

To discover what schools are doing to achieve better course completions in the first two years, we sent an informal query to the directors of programs that are listed in the Sloan-C Catalog [47], asking them to summarize the factors that might account for their course completion rates of 80% or more in the first two years of their programs. Twelve schools and the University of Texas Telecampus (for 15 University of Texas campuses) responded to our query, and their responses are in Appendix A.

Schools that responded are regionally accredited not-for-profits; they represent an array of Carnegie classes:

<b>Name</b>	<b>Public/Private Carnegie class</b>	<b>Total enrollment</b>
AIB College of Business Des Moines, IA	Private NFP Associates Colleges	902
Dallas Baptist University Dallas TX	Private NFP Masters Colleges and Universities I	4714
Drexel University Philadelphia, PA	Private NFP Doctoral/Research Universities--Intensive	17656
Herkimer County Community College Herkimer, New York	Public Associates Colleges	3472
Marylhurst University Marylhurst, OR	Private NFP Masters Colleges and Universities I	1245
Pace University New York, NY	Private NFP Doctoral/Research Universities--Intensive	13670
Park University Parkville, MO	Private NFP Masters Colleges and Universities I	12548
Peirce College Philadelphia, PA	Private NFP Associates Colleges	1892
Rochester Institute of Technology Rochester, NY	Private NFP Masters Colleges and Universities I	14552
Seton Hall University's SetonWorldWide South Orange, NJ	Private NFP Doctoral/Research Universities--Intensive	9824
University of Illinois at Springfield Springfield, IL	Public Masters Colleges and Universities I	4396
University of Cincinnati Cincinnati, Ohio	Public Doctoral/Research Universities--Extensive	27718
University of Texas TeleCampus (15 campuses), TX	Public	

**Table 3: Schools with at Least 80% Online Course Completion Rates in the First Two Years**

## V. RECOMMENDATIONS FOR BETTER ALNS

The original principles of ALN—asynchronously interactive, instructor-led, resource-rich, cohort-based learning—hold true as practices that support learner success online. Many such practices, supported by data, are detailed in the Sloan-C effective practices collection at <http://www.sloan-c.org>. Below are some recommendations for better ALNs that are drawn from Sloan-C research and exemplified in the schools listed in Table 3 above.

### A. Cost Effectiveness and Institutional Commitment

Improving online course completions so that the quality of online education is at least equivalent to the institution's quality in traditional modes calls for the commitment of senior leadership and leadership throughout the institution.

Schools that are truly learner-centered [48] are more likely to thrive and to inspire lifelong loyalty and support. As ALN becomes part of the fabric of higher education, whether in fully online or blended courses, one of the best things institutions can do is to articulate their distinctive missions, supporting rhetoric with data, so that learners can find the best fit for their personal and professional goals. Recognizing that “retention initiatives...are estimated to be 3–5 times more cost-effective than recruitment efforts, i.e., the cost of recruiting one new student to college approximates the cost of retaining 3–5 already enrolled students” [49], institutions that focus on student success, seeking to involve all members of the community in cross-functional teams, benchmarking efforts internally and externally, and publishing success strategies are more likely to ensure ongoing commitment. Integrating administrative systems and support services for online, blended, and face to face populations benefits faculty, students, advisors and prospective constituencies so that people are able to track their own progress and institutional progress towards goals [50].

Many schools emphasize advising and proactive outreach to encourage student progress. For example, eArmyU does proactive counseling and intervention through its customer relationship management system, tracking students from admission through graduation, using email and phone reminders to keep in touch and make sure that students stay on pace towards their degrees. Especially for learners who incur financial aid debt and then drop out without degrees that would help them to repay loans, the consequences of non-completion are severe. Retention efforts pay off, helping make education more affordable for learners as well as for institutions.

Sharing resources with others to provide curricula specifically designed and continuously refined for community populations, such as Pace University's National Coalition for Telecommunications Education and Learning (NACTEL) programs for the telecommunications industry [51] and Bismarck State College's programs for the utilities industry [52] has produced high retention and completion rates. Moreover, freely shared courses such as Carnegie Mellon's Online Learning Initiative [53] and learning resources such as Merlot [54] and Connexions [55] can reduce development costs and improve quality.

As increased demand collides with diminishing resources and increased calls for accountability [56], ALNs offer cost effective [57], learning effective, scalable solutions.

### B. Learning Effectiveness

The characteristics of ALN programs—instructor-led, cohort based, less than 20% physical presence, resource rich, with emphasis on interaction—are the ingredients for engaged learning, a key to learning success. ALN has the capacity to draw on the diversity of learners' experience, abilities and aspirations to



make course content and activities personally relevant to learners' everyday lives. Interaction through reflection and with content, interface, teachers and with peers helps learners stay engaged [58]. Courses designed for active learning—using the principles of effective online learning [59, 60], challenge- and legacy-based learning that is learner-, knowledge-, and assessment-centered [60, 61], foregrounding teaching, cognitive and social presence [60, 62] to create learning environments that model “solidarity, congeniality, and affiliation”[63]—enable personalized assignments and scaffolding for metacognition. Cohorts are especially effective at engaging students:

Surveys of graduating students consistently point to the cohort-based design of the program as critical to their success. Students take each course with the same group of 30 students during the two-year program. They develop extremely close relationships, which they lean on for encouragement and support [64].

A comparison of reasons for drop-out among traditional and non-traditional students finds that strong social networks are critically important for students:

When you doubt yourself, your intelligence, everything ... you feel as though you can't make it, you're not going to make it, it's a horrible feeling. ... When you find a student who says, 'Yes, I know what you're talking about. Yes, I have that same problem'—even if she's never solved it and you're still experiencing it, you're not alone anymore [65].

Establishing a learner centered environment is a collective endeavor, as one faculty member noted: “We're not through here until everyone in this class has learned this material. Everybody's learning is everybody's responsibility” [48]. Interactive learning using the special affordances of ALN—reflection, collaboration, team teaching and teamwork, student-led groups and discussions, automations, simulations, reusable learning objects, shared course resources, games, blogs, wikis and participation tracking—give students options for control, choice and pace so that they can review content as needed, gain technological expertise, and negotiate multiple perspectives. Thus, NCAT and others recommend adapting whole course redesign [11], using design teams and peer review to create engaging courses that emphasize interaction rather than didacticism. To share knowledge about learning effectiveness, some institutions publish standards, guidelines and examples for developing and refining courses online [66, 67]. Going beyond attention to individual courses, some institutions have developed coherent pedagogical guidelines and outcomes for mastery learning across the entire curriculum so that learners understand the big picture and where they are in it. For example, Babson College's Model Driven Design (MDD) fosters knowledge building among the faculty and student community through interdisciplinary design and continuous refinement of entire programs [68]. National initiatives and other interest groups publish rubrics for excellence in teaching that are useful for building knowledge about how we learn. ALN enables providers to use resources like these to focus on learners' experiences, establish standards, and demonstrate and improve learning outcomes.

### C. Access

Sloan-C's vision for access through ALN is that all learners who are qualified and motivated will be enabled to succeed and complete courses, programs and degrees through online access to learning in any discipline, continually enlarging the pool of learners [69]. In some contexts, 100% retention is not the goal and some learners accomplish their goals without seeking degrees; for example, Middlesex Community College reports that “91 percent of the students who left ...in good academic standing prior to earning a degree or certificate reported they had completely or partially satisfied their primary educational goal” [70].

Nevertheless, “the most pressing problem facing us today isn’t making education more effective, it is making education more available” [71]. Innovative, comprehensive support services are a critically important measure of access, as WCET [72] and as Sloan-C effective practices [73] have demonstrated. As Scarafioti and Cleveland-Innes point out (*The Times They Are A-Changing*, in this volume), moving from access to choice calls for mobilizing communities to discover new ways to motivate and engage learners. For example, corporate/academic collaborations are huge, largely unexplored channels for on-the-job access to general education, to firm- and industry-specific education and to training programs, all of mutual benefit to learners, employers and institutions.

Accessibility includes individual role adjustment for learning online in a mode that demands considerably “greater individual responsibility” that is more internally than externally motivated [74]. Managing student expectations about learning online, orientations, proactive advising, and intervening with automated and human aid improve success rates. Especially notable are the positive effects of peer-to-peer support [75], which have reduced attrition by 50%.

ALN provides ample evidence of greater accessibility for a greater diversity of learners. With special attention to underserved populations at schools selected because of their high percentages of targeted groups—recent high school graduates in need of remediation, first generation college learners, returning or first time adult learners with competing priorities, low-income students, and African-American and Hispanic students—NCAT demonstrates improved learning outcomes, success rates, and costs through redesigned courses that take advantage of ALN technology. Providing on-demand tutorials, remediation, online resources and 24/7 support services; organizing large groups into smaller cohorts of peers whom course design motivates to help each other; increasing time on task with required (and monitored) participation; replacing duplicated instructional effort with self-directed, computer-assisted skills development, quizzing, testing and automated feedback—these good pedagogical practices improved success for “*very large numbers of students—a task that would have been impossible without technology*” [46].

## D. Faculty Satisfaction

Faculty want to improve teaching, learning and student success. Ironically, in too many environments, institutions do not recognize or reward excellence in teaching, let alone reward excellence in completion results. Thus, the State Higher Education Executive Officers (SHEEO) 2005 report, *Accountability for Better Results: A National Imperative for Higher Education*, recommends that:

Faculty members must lead the way in devising more coherent programs of general education, more effective and efficient teaching techniques, and useful, authentic assessments of student learning. And institutional reward systems must provide more incentives and recognition for faculty contributions that increase student learning, retention, and success [76].

Without reward and support systems, faculty, like students, may withdraw from engagement:

Instructor burn-out and alienation leads to a... form of desensitization. As instructors begin to take necessary shortcuts they find themselves efficiently performing routine operations upon students whose learning styles and needs are actually quite heterogeneous. These students, in turn, become desensitized as their instructors begin to appear almost robotic in their provocations and responses (or even to disappear altogether, becoming, as a matter of fact and not just as a figure of speech, ghosts in the machine) [77].

Material incentives for faculty include additional funding and/or release time for developing, teaching, researching and publishing research about online courses [78]. ALN also offers the incentives of more effective teaching for faculty who use strategies that are not available face to face [79], who reduce cost

and save time [80], who help achieve institutional and program missions, and who build new communities for sharing, organizing and teaching [81]. Faculty who participate in development programs for online teaching enjoy renewed interest sparked by rethinking their teaching, including “responding more to student needs, changing their course development and delivery, incorporating technology into teaching, modifying their time management, and [using more] resources in their courses” [41]. Faculty also enjoy collegial processes of innovating and renovating and appreciate students’ perceptions of higher learning and satisfaction [60]. Many more examples of faculty satisfaction related to student success are detailed in Sloan-C’s effective practices [82].

## E. Student Satisfaction

Back in 1967, when The Beatles’ working class heroes found school inhospitable, less attention was paid to student satisfaction. Today we are realizing that satisfaction with all aspects of the learning experience—academic challenge, fairness, and relevance; substantive, constructive interaction; support services and resources—motivates people to continue studies. Improving success rates in the still young field of ALN depends on understanding and rewarding learners’ perspectives.

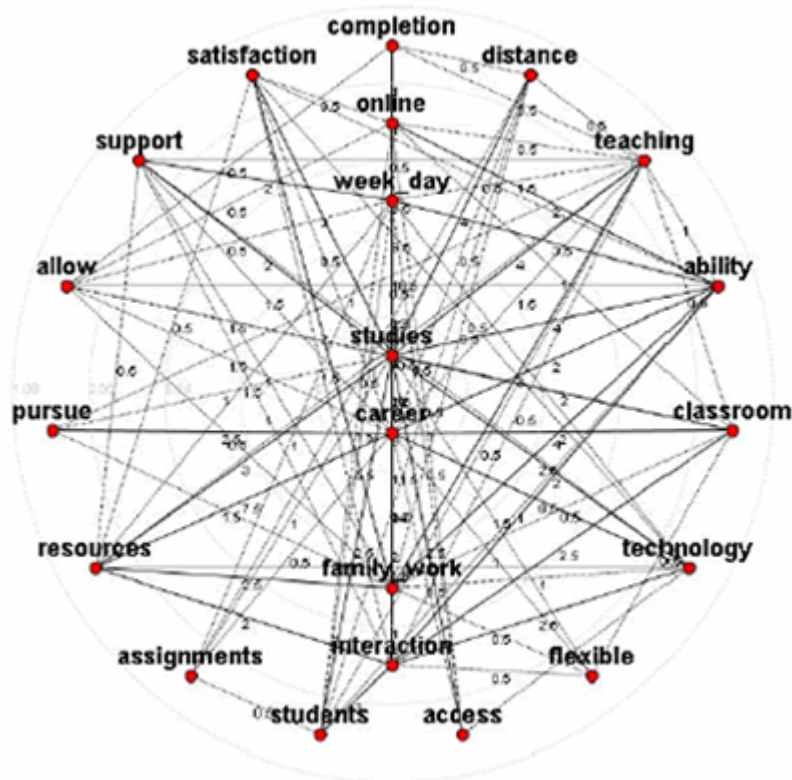


Figure 1: Students’ Views on ALN [83]

An analysis of thousands of student testimonials about the value of ALN, figure 2 shows that learners choose ALN for many reasons; the most frequently cited themes cluster towards the center of the figure. Growing understanding and continuous assessment of ALN enables more and more providers to take these themes into account, developing the still young field of ALN to make higher education better through learning environments more and more responsive to the dimensions of everyday life.

## VI. CONCLUSION

“Rigor, relevance, and relationships” [16] are critical for student success online and face to face. Despite the barriers we face as technology makes a culture of learning possible, ALNs offer affordable and increasingly effective alternatives access for students to engage with one another, with content, and teachers. As unprecedented innovation widens connectivity, educators who are shaping the environments of the future are re-examining tradition to discover how ALNs can transform learning. The vignettes below from schools that focus on student success demonstrate that “it’s getting better, a little better all the time” [84].

## VII. APPENDIX A

Here are vignettes from twelve two- and four-year colleges and a state university system that have achieved high online course completion rates. Responses to our request for the reasons students complete online courses at rates of 80% or more are the perceptions of administrators. Although we did not seek to establish common metrics and terminology, and did not ask for comparison with face to face course completion rates, a more scientific study would be beneficial. Nevertheless, it is significant that the schools all emphasize strategic planning for growth, continuous assessment, training and support for faculty and students, and instructional design that promotes interaction.

### 1. AIB College of Business, Des Moines, IA

AIB College of Business is an independent, nonprofit, coeducational two-year business college founded in 1921. AIB College of Business states its mission as being “dedicated to providing quality educational opportunities that prepare students to pursue careers in business.” To fulfill this mission, AIB offers associate degree and diploma courses of study, and the College administration directs its efforts toward “creating an educational environment by providing a variety of learning experiences, quality educational programs, and business and social activities.”

After an evaluation review, AIB has obtained blanket approval from its regional accrediting agency (Higher Learning Commission of the North Central Association of Colleges and Universities) to offer all of its associates degrees online. The evaluation team cited AIB’s online programs as exemplary and stated that other institutions could learn from AIB’s standards of excellence in online delivery.

Growing college-wide enrollment is one of AIB’s 12 principal strategic goals over the next five years. AIB plans to increase its total enrollment to 1,000 students and sees continued expansion of the online degree program as “paramount,” particularly for growing the population of adult learners served.

Over the last academic year, AIB reports achieving a course completion rate of at least 80% each term. Below are some of the practices that AIB believes contribute to its high retention rates:

- *Training for students*—students taking online courses have the option of attending an in-person orientation session where they training on how to use Blackboard and how to be successful in online courses. Students enrolled in online majors take a “College Foundations” course during their first term where they receive detailed training on the necessary technical skills, as well as study skills and time management. Documentation is also available to students online, such as a Blackboard manual and troubleshooting guide.
- *Training for instructors*—all new online instructors go through an extensive 20-hour training covering technical and pedagogical issues related to teaching in the online environment.

- *Personal contact with faculty and staff members*—AIB keeps class sizes small (15 students or less) so that each student has personal contact with the instructor. AIB also encourages instructors to develop highly interactive courses to facilitate getting to know students on an individual basis. The relatively small size of the online program (less than 300 students taking online courses) facilitates personal contact between students and staff members.
- *Technical support*—AIB provides free 24/7 technical support to students.

*Stacy Crawford*

*Online Education Coordinator*

*AIB College of Business*

## **2. Dallas Baptist University, Dallas, TX**

The purpose of the Online Education Department at Dallas Baptist University is to provide Christ-centered, quality higher education to traditional age and adult students at both the undergraduate and graduate levels in the United States and abroad using Internet-based instructional techniques and methods of communication in order to integrate faith and learning in meeting the educational needs of the expanding global virtual community.

Since 1998, Dallas Baptist University has offered fully accredited degree programs via the Internet, creating a rich online environment where students and faculty members can collaborate and interact. DBU's online campus features a dynamic combination of the newest Internet technologies from streaming media to threaded discussions.

The online completion rate at DBU has remained constant between 92% and 93% each semester. Several factors account for this high rate. First and foremost, all faculty members are required to attend training, both those developing online courses and those taking over courses that have already been developed. Faculty are trained in online pedagogy, course facilitation and building online learning community.

Class sizes are kept to 22 students so that faculty can do what they do best, interact with the students. Upon admission to the University, approval from the Online Student Coordinator and the student's advisor must be obtained before a student may enroll in an online course.

Secondly, DBU has excellent online course content. Each master course is designed by a qualified instructor in that discipline, and the content is approved in that college and in the provost office. DBU has a team of instructional course developers who apply graphics, add learning objects, load quizzes and exams and custom create the content in Blackboard.

DBU won Blackboard's Bbionic Course of the Year, one of only five courses chosen. Because of strong faculty support, instructors can be the content experts and do not have to become technology experts. DBU uses a consistent navigation path for all courses so that students know where to go and how to interact with whatever course they take. Each course is required to have student-student and student-instructor activity.

Third, DBU screens students with a skills inventory. Students must know how to send an email attachment and notify DBU with the name of their Internet provider before they can take an online course at DBU. For computer users, DBU recommends that students take a basic computer class before taking online courses. Finally, all DBU support services are online: library, bookstore, writing center,

registration, and a 24x7 technical help desk that supports DBU online students anytime, anywhere.

*Kaye Shelton*

*Director, Online Education*

*Assistant Professor of Adult Education*

*Dallas Baptist University*

### **3. Drexel University (Drexel eLearning), Philadelphia, PA**

At Drexel University, course completion rates in distance learning courses are between 85% and 95%, depending on the academic program. Undergraduate degrees are available in both business and nursing.

Drexel eLearning, a wholly owned subsidiary of Drexel University, works with the faculty and administrators within each college offering an online undergraduate degree to plan and implement an online program resulting in high retention rates. Specific activities within our undergraduate asynchronous online degree program include:

- The use of three full-time instructional designers, each with terminal degrees in their field, to design online courses which meet the highest pedagogical standards.
- The annual administration of a New Online Student Survey to acquire up-to-date information on how online students perceive their online program.
- The employment of full-time academic advisors for online students.
- The establishment of a Wednesday to Tuesday (midnight) course schedule to afford online students the convenience of the weekend to complete assignments (Goodwin College, only).
- The active use of online discussion boards to give online students the feeling of connectedness with other students.
- The use of 24/7 technical support service to assist students from all over the world with technical issues.
- The utilization of state-of-the-art systems, such as Blackboard, to enhance student's ability to coalesce through our Orientation to Online Learning Session, our Online Student Community Center, and our Peer Mentoring Program
- The use of online Podcast, called the *Drexel eLearning Minute*, to provide expert advice on succeeding in an online course.

*Dr. Kenneth E. Hartman*

*Director of Academic Affairs*

*Drexel eLearning, Inc.*

*Drexel University*

### **4. Herkimer County Community College, Herkimer NY**

The College is officially designated by the State University of New York as a "Full Opportunity College," and operates with a policy of open admissions, but some programs are competitive and enrollment may be limited.

The mission of Herkimer County Community College is to:

- Provide a wide range of students with access to quality, affordable lifelong learning opportunities;
- Foster diversity by attracting students from other countries, states, and counties as well as from the local area;
- Offer quality associate degree and certificate programs in response to local and regional needs;

- Facilitate student achievement by offering arts and science degree transfer programs that provide a strong liberal arts and science foundation and applied science degree and certificate programs that focus on specific career interests;
- Offer a variety of innovative and technical programs and services to students and the community; and
- Provide business and industry training thereby strengthening the economic development of the region and enhancing its position in the global marketplace.

The College operates under the authority of the State University of New York and the College Board of Trustees and is sponsored by Herkimer County.

#### HCCC Vision Statement

Herkimer County Community College will become an institution of national, and in some areas, international reputation, recognized for its quality academic and athletic programs and services; a supportive environment that fosters diversity; and successful performance of its graduates. Recognition of this quality will extend to the expertise and performance of its teaching faculty; the personal service provided by its staff; the support offered by its administration and board of trustees; and the excellence of its campus life. In Herkimer County, HCCC will become the college of choice for the majority of college-bound residents and the trainer of choice for businesses and non-profit organizations. This challenge will be considered successful when the College is ranked in the top quartile among its peer institutions in each of the areas defined in its Performance Indicators.

#### Quality Policy Statement

It is the policy of Herkimer County Community College to achieve total performance in satisfying the requirements of our students and customers (both internal and external to the College). Quality performance means understanding who those students and customers are; understanding what requirements they have of us; and meeting each requirement without error, on time, every time. Teamwork and continuous process improvement are inherent in achieving these goals.

Retention initiatives for a coordinated first year include: block scheduling, probation program for first-year students, peer mentoring program, early warning system, website for first-year success, newsletter for faculty of first-year students, marketing of first-year program, and measurement and prediction regarding the online cohort. HCCC strives for online students to have equivalent services to those offered to campus students.

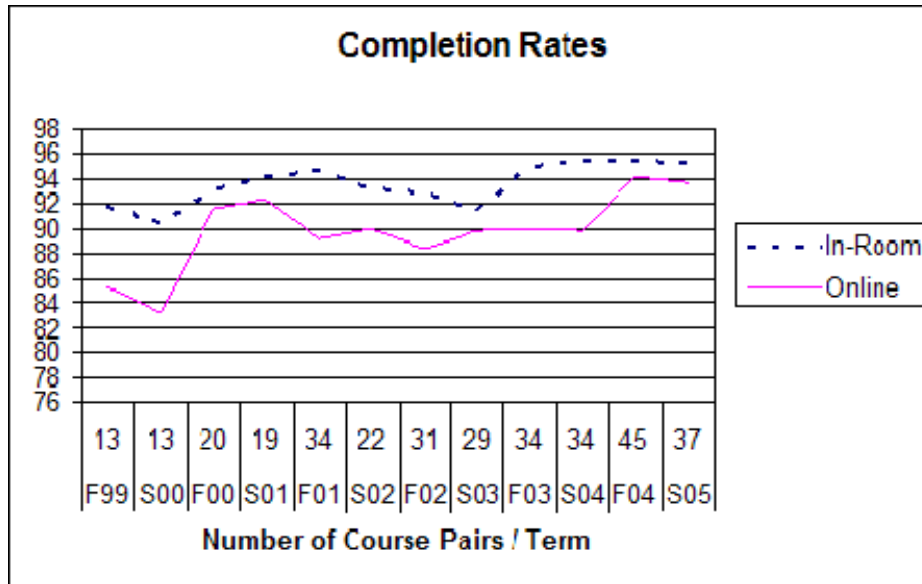


Figure 2: HCCC Online and In-Room Student Completion/Retention Rates, Fall 1999 to Spring 2005

William Pelz

Herkimer County Community College

<http://www.suny.edu/SUNYNews/txt/2004-01-27BestPractices.txt>

## 5. Marylhurst University, Marylhurst, OR

Marylhurst University is a private institution of higher learning open to men and women of any race or religion. It is dedicated to making innovative post-secondary education accessible to self-directed students of any age. Marylhurst offers coursework leading to bachelor's and master's degrees, and to other goals such as career transition, professional development, and personal enrichment.

Animated by its Catholic and liberal arts heritage, Marylhurst emphasizes the uniqueness and dignity of each person, and is committed to the examination of values, as well as to quality academic and professional training. Marylhurst University seeks to aid students in advancing their goals for responsible participation in a rapidly changing world by pursuing, and encouraging its students to pursue, the ideals of competence, leadership, and service.

The 91% online course retention at Marylhurst University is a result of the interplay of 4 major areas or themes: 1) Course; 2) Teacher; 3) Student; 4) Administrative.



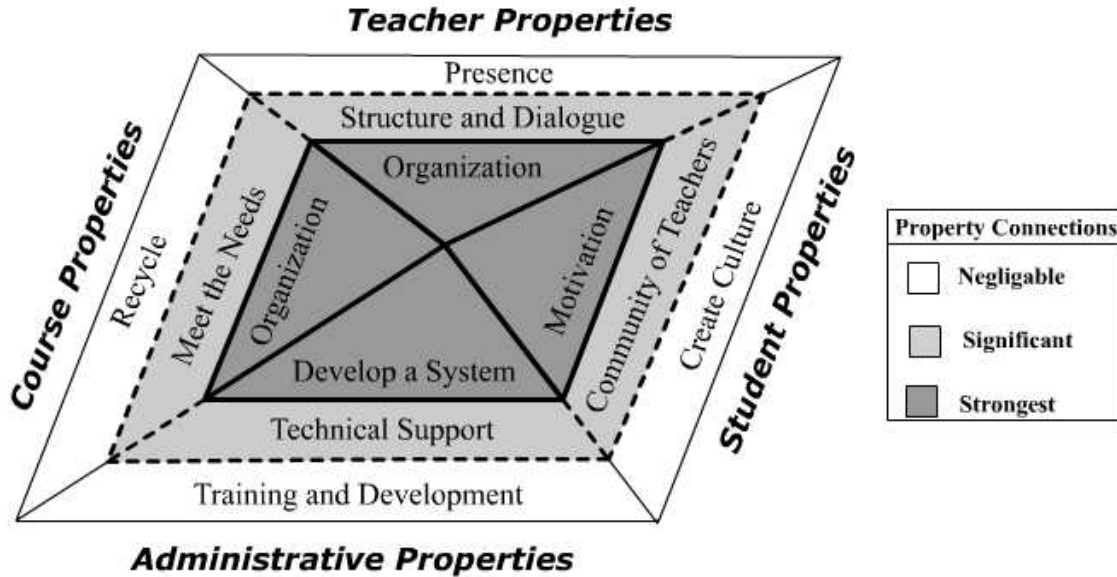


Figure 3: Analysis of Factors in Course Retention at Marylhurst [44]

The interplay of themes is within their respective properties with the “1’s” having the weakest connections, the “2’s” having stronger connections, and the “3’s” having the strongest connections.

**Course Properties:**

- Recycling Courses (less important)
- Course that “Meet the Needs” (more important)
- Organized Courses (most important)

**Teacher Properties:**

- Presence (less important)
- Structure and Dialogue (more important)
- Organized Teachers (most important)

**Student Properties:**

- Creating Culture (less important)
- Community of Teachers (more important)
- Motivation (most important)

**Administrative Properties:**

- Training and Development (less important)
- Technical Support (more important)
- Developing a Systematic Approach

**Propositions**

Online course retention is a direct reflection of how well an institution establishes an inquiry process (i.e., how well they research, build understanding, and implement that understanding) into four major areas:

courses, teachers, students, and administrative.

If one of the four major areas (courses, teachers, students, and administrative) is missing, the strength of the model diminishes. Therefore, all four areas should be considered when trying to improve online course retention.

Strengthening the relationship between variables in the model is more important than improving variables in isolation.

Highly organized courses and teachers (defined in the following propositions), and knowledge of what motivates online students improve the administrative system for delivery.

Highly organized courses feature routines, clear writing, and a templated, weekly layout for discussions.

Highly organized teachers focus on establishing a pattern of expectations, offer clear and frequent communication, and engage the students in the learning process.

Meeting the needs of students requires strong technical support and training faculty to create a balance between structure and dialogue. This will lead to a community of teachers—students helping students [44].

*Vincent Schreck*

*Senior Instructional Designer*

*Portland State University*

*(formerly of Marylhurst University)*

## **6. Pace University, New York, NY**

Pace University's School of Computer Science and Information Systems has been providing an AS in Telecommunications in an ALN format since 1999. More recently, the University has offered an AS in Networking Technologies and an accelerated BS in Telecommunications completion degree. (See <http://csis.pace.edu/nactel> for additional information). Students in the NACTEL program regularly complete their courses with a 95% success rate with completion being defined as attaining a grade of C or better. There are five factors that have contributed to this success:

1. Pace University faculty members
2. Online advisors
3. Course development
4. NACTEL staff
5. Constant communication

### Faculty

Pace University faculty members who teach in the NACTEL program regularly receive commendations from our students for their supportive, caring and effective teaching. Faculty members respond quickly to the needs of their students, and work hard to reply clearly and caringly to their requests. Faculty members strive to provide helpful and instructive responses to student questions, and work hard to continuously improve the courses that they are teaching.

### Online Advisors

The NACTEL program has a number of individuals who serve as online advisors to our students. These individuals are available by phone or by email to help students with their course selections. Students often comment on the importance of these advisors who will help them to carefully select the right course or courses for each semester. Students have worksheets that provide them with a road map of which courses to take, but the advisors are able to work with them to help them to select the right courses at the right times to ensure their success.

### Course Development

All courses within the NACTEL program are developed carefully, with much attention being paid to instructional design factors that contribute to students' success. Students have access to a wide array of ways to learn a given set of concepts (textbooks, voice over PowerPoint lectures, practice quizzes, "real" quizzes, Web links, discussion forums, interactive exercises, simulation software, etc.). Built into all of these is a steady stream of feedback so that students know that they are learning what they are supposed to learn, in a timely fashion. Early and often feedback to students is built into each course, so that students know where they stand, and what else they need to learn. Courses are continually under review, and improvements are made on an ongoing basis.

### NACTEL Staff

NACTEL staff members meet regularly and communicate frequently about students in the program. NACTEL staff members swing quickly into effect to provide students with extra help and support when necessary. Adult students who are working full-time and who are frequently raising families and who are actively involved in a wide array of other activities, sometimes need extra time or support in order to succeed in their classes. Occasionally our students need to "step out" of a given class for a period of time, due to some sort of emergency event in their lives (either personal or professional). Should that happen, NACTEL staff members work closely with the students to set up a "roll over" agreement which enables the student to complete the current course as soon as things calm down in their lives. These requests do not happen often, but NACTEL staff members are empowered to respond to them quickly and effectively when they do.

### Constant Communication

The NACTEL program provides many ways for students to communicate with each other and with NACTEL staff and faculty members and administrators on a regular, frequent and easy basis. All students know how to reach all NACTEL staff members by email or by phone. All students know how to reach NACTEL faculty members by email and by phone when necessary. All students know how to reach NACTEL administrators by email and by phone when necessary. The flow of communication is intended to be two-way. Students receive frequent communications from NACTEL administrators. In addition, students are surveyed three times each semester about their courses, and are strongly encouraged to respond to these anonymous surveys. Faculty members solicit feedback about their courses, and the NACTEL administrators regularly review all course feedback. When students encounter problems, the goal is to fix them in a timely and caring fashion.

The NACTEL program regularly has a completion rate for its courses that is quite high. All five of the above mentioned factors play a key role in this. Students frequently comment on the help and support that they are able to receive while attending to their studies. We are convinced that all five of these factors contribute highly to the success of NACTEL students.

*Dr. David Sachs*

*Associate Dean and NACTEL Co-Director*

*Pace University*

*School of Computer Science & Information Systems*

## **7. Park University, Parkville, MO**

The mission of Park University, an entrepreneurial institution of learning, is to provide access to academic excellence which will prepare learners to think critically, communicate effectively and engage in lifelong learning while serving a global community.

Park defines a student as having been retained if he/she is in the course at the end of the traditional add/drop-enrollment adjustment period (after 6 academic days in an 8-week term) and receives a grade (passing or failing) at the end of the term. Over the period of more than five years the retention rates ran from 93% to 97% each year. While the numbers are “hard,” the reasons suggested for this success are anecdotal and are not the result of scientific research. As a best practice, Park has focused on quality of instruction by requiring faculty teaching online to go through a 6–8 week training program in which they are the student in the course they will be teaching, thus understanding the student perspective. This is a rigorous process in which the attrition rate is purposefully high. In most cases, faculty are also required to have taught the course in a face-to-face format before teaching it online. The net result has been an achievement of 94–96% retention of students, despite the obvious uncertainties associated with military life.

Park online instruction is web based, asynchronous, instructor led, and generally in eight-week terms. Qualified, experienced, trained faculty are sensitive to student needs and are assisted by trained course developers. Students are non-traditional, mature, and highly motivated. Services are online, including the Catalog, application forms, advising, registration and registration confirmation, book purchasing, assessment, library services, tutoring. Courses are convenient, flexible, asynchronous, interactive, and encourage peer support with high levels of interaction with instructors and among students. The platform is easily accessible with a consistent look and feel to all courses; it permits various activities and reporting and tracking. Policies are friendly to non-traditional students, including small classes and course loads in eight-week terms. Park students want academic excellence, support services, interaction, flexibility and convenience, attention and fair pricing. Student feedback based on 79,000 responses from 120,000 students over five years is positive:

- 90% indicated their online course required as much or more time than traditional face-to-face classes;
- 90% indicated they learned as much or more in their online course when compared to face-to-face courses;
- 90% indicated that their online course prepared them for future courses or to apply their learning.

*Thomas W. Peterman, PhD. Vice President for Distance Learning*

*Park University*

## **8. Peirce College, Philadelphia, PA**

Peirce College is a four-year specialized institution offering accredited business administration, information technology and paralegal studies degree programs to address economic and workforce

development needs. Founded as Union Business College in 1865 to provide educational opportunities to Civil War veterans transitioning to the civilian workforce, Peirce College was at the forefront in providing career-oriented education for women in the 19th century and remains the leading provider of part-time business education for women in the Commonwealth of Pennsylvania. Peirce College created Peirce Online in 2000 as part of its mission to offer practical, leading edge education primarily to working adult learners and in keeping with its legacy of utilizing innovative instructional technology in support of its mission. With its online business and information technology management degrees, Peirce is one of the oldest accredited colleges offering a complete online degree program in the United States and is one of the fastest growing online Bachelor's degree programs according to eCollege.com.

One of the college's most notable strategic accomplishments with respect to e-Learning has been its expansion from a strong regional brand to a national scope and international reach, serving degree seeking students from 43 of the 50 states and seven foreign countries. Fifty percent of Peirce's tuition revenue is derived from its online program. Face-to-face instruction and online delivery utilize the same curricula, course description, and professors and achieve the same learning outcomes. These interchangeable formats are included under institutional accreditation through the Middle States Association (MSA) as well as program specific endorsements by the American Bar Association (ABA) and the Association of Collegiate Business Schools and Programs (ACBSP).

Peirce has recently incorporated streaming audio into its online course delivery; administratively, Peirce recently upgraded to Voice-Over-IP telephony that enhances communication among students, faculty and advisors. A new Customer Relationship Management (CRM) system has been installed which can focus communication between the College and targeted audiences of prospects and students.

Currently, Peirce has an 84% retention rate in the online experience. The College defines students as retained if they took classes in the fall and then again in the following spring or summer sessions. Peirce attributes retention success to the College's responsiveness to student needs. Accelerated classes and asynchronous delivery allow adult students to complete courses quickly and conveniently with no residency requirement. Peirce provides outstanding service with an institutional culture of being student-centered. To this end, the College has established a program advisor model that essentially is higher education's version of a relationship manager, making sure students have a "single touch point" for all their needs. Support services, available online or in person, include tutoring, workshops, career advising, student organizations, an extensive virtual library, and a 24x7x365 help desk.

*Jon Lenrow*

*Assistant Dean, Online Programs*

*Peirce College*

## **9. Rochester Institute of Technology, Rochester, NY**

At RIT, course completion rates in distance learning courses average 94.5%, for the past nine years. It is clear that online learning students are driven to complete their degrees, according to marketing and student satisfaction surveys. When asked why they are attending RIT Online, students respond overwhelmingly that they are here to complete a degree. The rates of completion seem to be staying constant, for many reasons. Student satisfaction with distance learning at RIT has remained constant and high. Academic programs in which most online students are enrolled are ones in which students see a financial reward that is compelling enough to make them stay with the program. In addition, tuition investment costs to attend RIT are high. Between 60 and 80% of non-traditional students receive employer support, but even those who don't receive employer reimbursement simply recognize the value of getting a degree.

From a list of ten exclusive options, the consistent reason (70%) students enroll in online courses is for convenience and flexibility. The second most frequently chosen reason is because the course was not offered any other way. To help ensure success, RIT's Online Learning has a policy of simply asking students if they believe they have the time-management skills for the asynchronous online classroom. RIT recognizes that different students prefer different learning styles, but that older students are often encumbered by more responsibilities—professional and personal obligations which make them choose online classes more than do the traditional aged students who have more choices because their outside obligations are often less.

Courses taught at RIT use asynchronous learning environments. For RIT this is an acknowledgement that faculty do listen and understand that using flexible online learning technologies will add to student satisfaction and lead to student success. Faculty typically follow the seven principles of good practice when setting up their online courses. The faculty have also adopted standard practices to assure students get the highest quality educational experience.

New students are overwhelmingly satisfied and comfortable with the online process. RIT runs first time student surveys every quarter. These surveys indicate that first time students are indeed comfortable and satisfied with initial experiences. The review of their course completion rates complements this data. These students are given access to both customized online pages that prepare them for the online classroom experience, a CD-ROM to orient them to the online learning, and toll-free access to customer and technical support. In addition, these surveys indicate that physical contact with RIT is not a barrier. Students in the survey report they know whom to contact and using either the phone or email for customer service with a no difficulties. As a result the RIT Online Learning Department, feels that new and non-matriculated students at RIT are comfortable.

*Karen Vignare (formerly of RIT)*

*Director*

*MSU Global Ventures*

*Michigan State University*

## **10. Seton Hall University's SetonWorldWide, South Orange NJ**

Seton Hall University, *Where Leaders Learn*, is a major Catholic university. In a diverse and a collaborative environment it focuses on academic excellence and ethical development. Seton Hall students are prepared to be leaders in their professional and community lives in a global society and are challenged by outstanding faculty, an evolving technologically advanced setting and values-centered curricula.

The completion rates for all seven of Seton Hall online degree programs are on average 85–89% among approximately 400 students (exceeding the f2f rate of 75%). The primary reasons are: (1) a relevant, hands-on curriculum; (2) a learning team cohort program design with its inherent tendency to create an intimate learning community in which students enroll together in a pre-defined sequence of courses; (3) residency weekends where students bond with their colleagues, the faculty, the staff, and often, other learning team members from other cohorts; (4) faculty (most are full-time Seton Hall faculty) who understand the importance of interaction, rapid response time and constant feedback in cohorts in which two faculty interact with 15 students; (5) one-on-one student advisement; (6) full-time program administrators for each online degree program who provide continuous personalized non-academic student support; students are also provided with online mentoring, career counseling and open forum chat rooms to discuss academic issues; (7) every course is designed with interaction as the focus; using

combinations of asynchronous and synchronous learning tools, students are immediately engaged and are kept engaged throughout the course; and (8) the flexibility for students to move between learning teams if for any reason they are unable to continue with the original team; thus many students who drop from one term, return and continue in the next.

Finally, the most important reason for student success is the corporate culture of the SetonWorldWide and Seton Hall that support the values of commitment and student service.

*Philip DiSalvio, Ed.D., Director, SetonWorldWide*

<http://www.setonworldwide.net>

*Assistant Provost*

## **11. University of Illinois at Springfield, Springfield, IL**

The University of Illinois' mission statement articulates the campus' various educational activities and emphasizes its commitment to students. The current mission statement was developed during UIS' strategic planning in 1991–92 and appears in *Toward 2000: A Strategic Plan for Sangamon State University, Phase One*.

The University of Illinois at Springfield has as its primary mission providing excellence in teaching. UIS strives to produce an educational environment where students can acquire:

1. a solid foundation for lifelong learning,
2. a keen appreciation of intellectual and aesthetic achievements,
3. an enhanced capacity for critical thinking and oral as well as written communication,
4. a practical preparation for pursuing fulfilling careers,
5. a sound basis for informed and concerned citizenship, and
6. a productive commitment to improving their world.

UIS emphasizes public affairs instruction, research, and service carried out through community partnerships that contribute to social progress, governmental effectiveness, educational excellence, and economic development. UIS is committed to addressing the needs of both traditional and nontraditional learners and reflecting cultural diversity in both the curriculum and the university community. UIS encourages innovative approaches appropriate to fulfilling these institutional aims.

Course completion rates in online classes at the University of Illinois at Springfield rates hover in the 90% range, within one or two percent of the on campus rates. The percentages are those who are enrolled in the class on “census” date—day ten of the semester—and are still there when grades are submitted. Undergrads need a D to pass; Grads need a C to pass; they can withdraw until the final couple of weeks of class. UIS charges “e-tuition” so out of state students enrolled in wholly online degree programs pay in-state tuition. Finally, UIS does not admit students with fewer than 30 credit hours (except in a very small honors program).

A number of factors contribute to consistently maintaining this high rate including faculty responsiveness, student support and technical stability/support. Each of these three aspects is critical in assuring that students thrive in an online program.

At UIS, online classes are offered through the mainstream academic structure with, for the most part, the

very same faculty members teaching the classes both on campus and online. They are experienced at teaching our non-traditional commuting-to-campus students—many of whom are full time professionals in administrative, legislative and executive offices of Illinois state government. Our faculty members participate in pedagogical workshops and one-on-one training from the Office of Technology-Enhanced Learning (OTEL) that stress a constructivist, engaged approach to teaching online. Student-centered learning is the norm. Faculty members, for the most part, respond to all email and online postings from students within 24 hours. OTEL supports the hiring and training of online peer tutors who serve as an additional supportive resource for students in many of our online classes.

Each online degree program at UIS has a program coordinator who provides on-going support to distant students from their first inquiry through to the completion of their degree program. One cannot underestimate the value of having a single contact person who is consistently supportive and responsive, semester-by-semester, throughout the degree program. Students come to rely upon, and deeply appreciate, their program coordinator.

Providing stable web-based platforms for delivery of the curriculum is also important. The Educational Technology unit supports Blackboard at UIS, providing better than 99.9% “up” time. The Campus Technology Services unit assures that online learning applications get the highest priority for bandwidth to and from campus. A technology support desk is accessible six days a week during the semester (seven days a week during the first weeks of the term) via phone or email.

*Ray Schroeder*

<http://people.uis.edu/rschr1/onlinelearning/blogger.html>

*Professor Emeritus/Director OTEL* <http://otel.uis.edu>

*Faculty Associate, U of I Online* <http://www.online.uillinois.edu>

## **12. University of Cincinnati, Cincinnati, OH**

The University of Cincinnati is a public comprehensive learning and research university. UC currently offers two associate, five bachelor, four master, and one doctoral degree programs available largely (or wholly) through distance learning classes in a variety of areas.

UC cites several factors driving its development of online programs, including a desire to increase access, a strong market need for certain offerings such as their highly-ranked criminal justice program, institution-wide deployment of a course management system, and a new initiative for “revenue-based” programs. In the few years that UC has offered online programs, enrollments have now reached 1,200 students. The University sees its ability to enable students to take a top-ranked program online which is equal in quality to the traditional program as its most significant accomplishment in this area. The University of Cincinnati defines students as having been retained if after entry and completion of a given quarter, they return to the program (enrolled in courses) the next quarter.

Online courses typically maintain a faculty-student ratio of 15–25 students, and a tenure track faculty member leads most courses. Student feedback from annual and course surveys indicate at least equal, if not higher, satisfaction levels in the online programs relative to campus-based programs. One possible contributing factor is UC’s strong focus on pedagogical approaches which meet the needs of working adults. For instance, some UC programs are delivered via single intensive, shorter-length courses which enable students to take two, separately scheduled, courses within a 10-week quarter to help working adults balance educational and other life demands. Faculty-student ratio and student support are also factors cited as contributing to UC’s ability to attain high retention rates in its programs. UC also uses other quality indicators besides student retention, including also student learning, student satisfaction, and



appropriate time to degree.

Retention in online programs is as high as 100% in the education administration program. The BS in Clinical Laboratory Science program began in Summer 2004) and reports a 95% (and above) retention rate. The Health Information Management program in its early stages and completions are also expected to be high. In the AAS in Early Childhood Education, course completion rates range from 85% to 93%.

*Melody Clark, Ed.D.*

*Academic Director, Distance Learning*

*University of Cincinnati*

*Provost Office*

### **13. University of Texas TeleCampus**

The UT TeleCampus is a support center for distance education and online degrees from the University of Texas System and its fifteen member institutions. The mission of the University of Texas TeleCampus is “to extend the reach of the UT System through the application of high-quality, student-centered Internet delivery to degree programs, academic courses, training, professional development, and college preparation.” The UT TeleCampus also assists UT System institutions in capacity building, faculty professional development, and dissemination of “innovative and solution-based models and best practices for effective distance teaching and learning.” The UT TeleCampus aims to “be the recognized leader and model for innovative multi-campus online learning in the nation.” For academic courses, the amount of tuition and fees charged by each UT System campus varies and is based on residency status. As a result, the cost of taking a course will vary depending on which campus offers that course.

In Fall 2004, UTTC offered approximately 120 courses (138 course sections) and has consistently reported high course completion rates since 2002 (85% undergraduate; 97% graduate). UTTC attributes this level of success to three factors:

- UTTC and the UT universities produce quality courses that utilize best practices in course design and follow the Principles of Good Practice. Providing in-depth training for faculty and production staff enables them to produce interesting, highly interactive courses.
- UTTC and the UT universities have made a number of improvements to the “participation process” for students in the areas of registration, fee bill payment, initial course login, and technical problem resolution. Campus student business offices have designated contacts who are specifically trained to help distance education students. To reduce student confusion and frustration, UTTC provides students with course login information, technical requirements and skills training, and course management system navigation prior to the start of the semester.
- UTTC provides quality academic student services to aid successful course completion such as free online tutoring in many subject areas provided through Smarthinking, and a Digital Library which provides and coordinates a variety of library resources and services, including remote access to electronic resources, borrowing privileges at numerous academic and public libraries, reference and technical assistance.

*Rob Robinson*

*Associate Director for the UT TeleCampus*

## VIII. ABOUT THE AUTHORS

**Janet C. Moore** is the Chief Learning Officer for Sloan-C. Dr. Moore edits and writes Sloan-C's newsletter, the *Sloan-C View*; edits the annual volumes in the Sloan-C quality and wisdom series; and is associate editor for the *Journal of Asynchronous Learning Networks*. She is the Sloan project manager for the Council of Academic Management for eArmyU. She wrote *Elements of Quality: The Sloan-C Quality Framework* and assists in the framework's development. She has reviewed more than 700 online programs for the Sloan-C Catalog. She participates in Sloan-C online workshops and special interest groups, and responds to queries about Sloan-C, requests for research, software reviews, surveys, website and membership. Dr. Moore has thirty years teaching experience, including ten years teaching online in fine arts, literature and communications. Prior to joining Sloan-C in 2000, she directed faculty in undergraduate and graduate programs with 10 major degree areas for adult students, liaising with academic, corporate, military, and accrediting agencies.

**John Sener** is Founder and Chief Learner for Sener Learning Services, a consulting practice focused on supporting the evolution of online and other technology-enabled learning environments, and Director of Special Initiatives for the Sloan Consortium. Current projects include Maryland Online's FIPSE-funded Quality Matters project (<http://www.qualitymatters.org>), the Maryland Students Online Consortium, and various Sloan Consortium activities. Sener is a contributing editor for the monthly newsletter Educational Pathways and has served on the Journal of Asynchronous Learning Networks editorial board since its inception. Sener's 25+ year career in education and training encompasses a unique mélange of learning experiences. He holds degrees from Johns Hopkins University and Oberlin College.

**Marie J. Fetzner** is the Director of Online Information and Distance Learning for Montgomery College in Germantown, Maryland. Formerly, she was the Assistant to the Vice President, Educational Technology Services/Banner Project Manager at Monroe Community College (MCC) in Rochester, New York. She was a founding member of MCC's online learning support team (The "Monroe Model"). She has extensive experience with online learning, online faculty development, planning, budgeting, report writing, grant writing and compliance, and technology plan development. Marie is enrolled in the Ph.D. in Education program at the Margaret Warner Graduate School of Education and Human Development at the University of Rochester where her research focuses on online student retention. She earned her Masters in Public Administration (MPA) degree from the State University of New York (SUNY) at Brockport, and her Bachelor of Music Education degree from the University of Rochester's Eastman School of Music. Marie is on the editorial board of the Journal of Asynchronous Learning Networks (JALN), has been a national board member and Region II director for the American Association of Women in Community Colleges (AAWCC) since 2002, and she is a graduate of the National Institute for Leadership Development (NILD).

## IX. REFERENCES

1. **Gomory, R. E.** Sheffield Lecture—Yale University, January 11, 2000, Internet learning: Is it real and what does it mean for universities? *Journal of Asynchronous Learning Networks* 5(1): June 2001. [http://www.sloan-c.org/publications/jaln/v5n1/v5n1\\_gomory.asp](http://www.sloan-c.org/publications/jaln/v5n1/v5n1_gomory.asp).
2. **Institute of Higher Education Policy.** *The Investment Payoff: A 50-State Analysis of the Public and Private Benefits of Higher Education*, February 2005. <http://www.ihep.org/Pubs/PDF/InvestmentPayoff2005.pdf>.
3. **McClenney, K. M.** *Declining by Degrees*. Meet the Experts. June 2005. <http://www.decliningbydegrees.org/meet-experts-1-transcript.html>.
4. **The Chronicle of Higher Education.** *The Chronicle of Higher Education Almanac 2005–6*. <http://chronicle.com/weekly/almanac/2005/nation/nation.htm> (subscription required).

5. **Usher, A. and A. Cervanen.** *Global Higher Education Rankings: Affordability and Accessibility in Comparative Perspective, 2005.* Toronto, ON: Educational Policy Institute, 2005. <http://www.educationalpolicy.org/pdf/Global2005.pdf>.
6. **National Commission on the High School Senior Year.** "Raising Our Sights: No High School Senior Left Behind." Woodrow Wilson National Fellowship Foundation, National Commission on the High School Senior Year: October 2001.
7. **Kazis, R., H. Pennington and K. Conklin.** *Ready for Tomorrow: Helping All Students Achieve Secondary and Post Secondary Success, A Guide for Governors.* June 2003. <http://www.nga.org/cda/files/0310READY.pdf>. National Governor's Report citing Anthony P. Carnevale, "Preparing for the Future," American School Board Journal, July 2002.
8. **Foster, A. L.** Student interest in computer science plummets: Technology companies struggle to fill vacant positions. *The Chronicle of Higher Education:* May 27, 2005. <http://chronicle.com/free/v51/i38/38a03101.htm>.
9. **Friedman, Thomas.** *The World Is Flat: A Brief History of the Twenty-first Century.* New York: Farrar, Straus and Giroux, 2005.
10. **Carey, K.** *A Matter of Degrees: Improving Graduation Rates in Four-Year Colleges and Universities.* The Education Trust, May 2004. <http://www2.edtrust.org/NR/rdonlyres/11B4283F-104E-4511-B0CA-1D3023231157/0/highered.pdf>.
11. **Twigg, C. A.** Using asynchronous learning in redesign: Reaching and retaining the at-risk student. *Journal of Asynchronous Learning Networks* 8(1): February 2004 [http://www.sloan-c.org/publications/jaln/v8n1/v8n1\\_twigg.asp](http://www.sloan-c.org/publications/jaln/v8n1/v8n1_twigg.asp).
12. **Gladieux, L. and L. Perna.** *Borrowers Who Drop Out: A Neglected Aspect of the College Student Loan Trend.* National Center Report #05-2. The National Center for Public Policy and Higher Education, May 2005. <http://www.highereducation.org/reports/borrowing/index.shtml>.
13. **Newman, F, L. Couturier and J. Scurry.** Higher education isn't meeting the public's needs. *Chronicle of Higher Education,* October 15, 2004. <http://chronicle.com/prm/weekly/v51/i08/08b00601.htm> (subscription required).
14. **Hayward, G. C., D. P. Jones, A. C. McGuinness Jr., A. Timar, and N. Shulock, N.** *Ensuring Access with Quality to California's Community Colleges.* National Center for Public Policy and Higher Education, May 2004. <http://www.highereducation.org/reports/hewlett/Hewlett3.pdf>.
15. **National Center for Higher Education Management Systems.** Conceptualizing and researching the educational pipeline. *NCHEMS News* 20: 6, May 2003. <http://www.nchems.org/News-May%202003/NCHEMS%20News%20May%202003.pdf>.
16. **Bridgeland, J., J. DiLulio, and K. Morison.** *The Silent Epidemic: Perspectives on High School Dropouts.* The Bill and Melinda Gates Foundation, March 2006. <http://www.gatesfoundation.org/Education/TransformingHighSchools/RelatedInfo/SilentEpidemic.htm>.
17. **Measuring Up 2004: The National Report Card on Higher Education,** Sept. 15, 2004. <http://measuringup.highereducation.org/default.cfm> (login required).
18. **McClenney, K. M.** Quoted in *Declining by Degrees.* Learning Matters. June 2005. <http://www.decliningbydegrees.org/meet-experts-1-transcript.html>.
19. **Peter, K. and E. F. Cataldi.** *The Road Less Traveled? Students Who Enroll in Multiple Institutions.* National Center for Education Statistics, May 2005. <http://nces.ed.gov/pubs2005/2005157.pdf>.
20. **Declining by Degrees: Higher Education at Risk. Fact sheet.** Learning Matters: June 2005. <http://www.decliningbydegrees.org/press/Program-Fact-Sheet.pdf>.
21. **American Council on Education.** "Student Success: Understanding Graduation and Persistence Rates," ACE Issue Brief, Washington, DC: ACE Center for Policy Analysis, 2003. <http://www.acenet.edu/AM/Template.cfm?Section=CPA&Template=/CM/ContentDisplay.cfm&ContentFileID=411>.
22. **Cunningham, A. F., J. Milam and C. Stratham.** Feasibility of a Student Unit Record System within the Integrated Postsecondary Education Data System. National Center for Education Statistics, March 2005. <http://nces.ed.gov/pubs2005/2005160.pdf>.

23. What We Know about Access and Success in Postsecondary Education: Informing Lumina Foundation's Strategic Direction. [http://www.luminafoundation.org/research/what\\_we\\_know/index.html](http://www.luminafoundation.org/research/what_we_know/index.html).
24. Consortium for the Student Retention Data Exchange (CSRDE): <http://tel.occe.ou.edu/csrde/>.
25. NCHEMS. Information Center for State Higher Education Policymaking and Analysis. <http://www.higheredinfo.org/>.
26. **The National Center for Academic Transformation.** <http://thencat.org/>. See especially C. Twigg, "Increasing Success for Underserved Students: Redesigning Introductory Courses," July 2005. <http://thencat.org/Monographs/IncSuccess.htm>.
27. **National Survey of Student Engagement.** <http://www.iub.edu/~nsse/>.
28. **National Survey of Student Engagement in the Community College.** <http://www.ccsse.org/>. See especially *Engagement by Design*. [http://www.ccsse.org/publications/CCSSE\\_reportfinal2004.pdf](http://www.ccsse.org/publications/CCSSE_reportfinal2004.pdf).
29. **Educational Policy Institute.** National Student Retention Clearinghouse. <http://www.studentretention.org>.
30. **College Results Online.** <http://www.collegeresults.org>.
31. **Cary, K.** One Step from the Finish Line: Higher College Graduation Rates are Within Our Reach. A report by the Education Trust: January 2005. <http://www2.edtrust.org/NR/rdonlyres/10D6E141-08E4-42D7-B7E5-773A281BCDB7/0/onestep.pdf>.
32. **Carey, K.** Choosing To Improve: Voices of High-Performing Colleges and Universities. A report by the Education Trust: January 2005. [http://www2.edtrust.org/NR/rdonlyres/40EEF8D0-1257-48C2-8622-10AEB8988727/0/Choosing\\_to\\_improve.pdf](http://www2.edtrust.org/NR/rdonlyres/40EEF8D0-1257-48C2-8622-10AEB8988727/0/Choosing_to_improve.pdf).
33. **Allen, I. E. and J. Seaman.** *Entering the Mainstream: The Quality and Extent of Online Education in the United States, 2003 and 2004.* Needham, MA: Sloan-C, November 2004. <http://www.sloan-c.org/resources/survey.asp>.
34. **Berge, Z. L. and Y. Huang.** A Model for Sustainable Student Retention: A Holistic Perspective on the Student Dropout Problem with Special Attention to e-Learning. *American Center for the Study of Distance Education, DEOSNEWS* 13(5): May 2004.
35. **Frankola, K.** Why online learners drop out. *Workforce* 80: 53–58, 2001.
36. **O'Connor, C., E. Sceiford, G. Wang, D. Foucar-Szocki and C. Griffin.** Departure, Abandonment, and Dropout of E-learning: Dilemma and Solutions. Masie Center and e-Learning Consortium, October, 2003. [http://www.masie.com/researchgrants/2003/JMU\\_Exec\\_Summary.pdf](http://www.masie.com/researchgrants/2003/JMU_Exec_Summary.pdf).
37. **Tello, S. F.** An Analysis of the Relationship between Instructional Interaction and student persistence in Online Education. Unpublished dissertation, 2002. Available at <http://www.alnresearch.org> (login required).
38. **Bartkovich, J. and M. Fetzner.** *Data Driven Retention Strategies for Online Students*, a presentation at the Instructional Telecommunications Council (ITC) national conference in San Diego, California on February 21, 2004. Also see: **Moore, K., J. Bartkovich, M. Fetzner, S. Ison.** Success in Cyberspace: Student Retention in Online Courses. *Journal of Applied Research in the Community College* 10(2): 107–118, 2003.
39. **Muilenburg, L. Y. and Z. L. Berge.** Student barriers to online learning: A factor analytic study. *Distance Education: An International Journal* 26(1): 29–48, 2005. [http://www.emoderators.com/barriers/stbarr\\_final\\_may05.pdf](http://www.emoderators.com/barriers/stbarr_final_may05.pdf).
40. **Carr, S.** As Distance education comes of age, the challenge is keeping the students: Colleges are using online courses to raise enrollment, but retaining it is another matter. *The Chronicle of Higher Education*. February 11, 2000. <http://chronicle.com/prm/weekly/v46/i23/23a00101.htm> (subscription required).
41. University of Central Florida. Research Initiative for Teaching Effectiveness: Impact studies. <http://pegasus.cc.ucf.edu/~rite/impactevaluation.htm#Success>.
42. **Ingle, F. K.** *Student retention and completion rates in a postsecondary online distance learning environment.* Doctoral dissertation, Nova Southeastern University, Fort Lauderdale, Florida, 2005.

43. **Garland, M.** Ethnography penetrates the “I didn’t have time” rationale to elucidate higher order reasons for distance education withdrawal. *Research in Distance Education* 5(1&2): 6–10, 1993.
44. **Schreck, V.** Successful online course retention at Marylhurst University: constructing a model for online course retention using grounded theory. Unpublished dissertation, November 18, 2003.
45. The National Center for Academic Transformation. Roadmap to Redesign: Five Principles of Successful Course Redesign. [http://thencat.org/PlanRes/R2R\\_PrinCR.htm](http://thencat.org/PlanRes/R2R_PrinCR.htm).
46. **Twigg, C. A.** Increasing Success for Underserved Students: Redesigning Introductory Courses. The National Center for Academic Transformation: July 2005. <http://www.thencat.org/Monographs/IncSuccess.htm>.
47. **Sloan-C Catalog.** <http://www.sloan-c.org/programs/index.asp>. Programs listed in the catalog are peer-reviewed for adherence to the quality framework of learning and cost effectiveness, access, and faculty and student satisfaction.
48. **McClenney, K. M.** Becoming a learning college: milestones on the journey. <http://www.league.org/publication/abstracts/learning/lelabs0303.htm>.
49. **Cuseo, J.** Academic advisement and student retention: Empirical connections and systemic interventions. Policy Center on the First Year of College: February 13, 2003. <http://www.brevard.edu/fyc/listserv/remarks/cuseorientation.htm>.
50. **Florida Gulf Coast University (FGCU)**, for example, FGCU focuses on retention through its Retention Management Council, see <http://www.fgcu.edu/info/retention/Index.html>, seeking to involve all members of its community, publishing its retention strategies, and benchmarking its efforts internally and externally. FGCU refers learners who do not find the online courses they want to schools who are also affiliated with the Southern Regional Education Board’s Electronic Campus.
51. **Pace University.** <http://www.nactel.org>.
52. **Bismarck State College.** <http://www.epceonline.org>.
53. **Carnegie Mellon University.** Open Learning Initiative. <http://www.cmu.edu/oli/>.
54. **Merlot.** <http://www.merlot.org>.
55. **Rice University.** Connexions. <http://cnx.org/>.
56. **Dickeson, R. C.** Collision course: Rising college costs threaten America’s future and require shared solutions. A policy brief from the Lumina Foundation: 2004. <http://www.luminafoundation.org/issues/collegecost/CollisionCourse.pdf>.
57. For examples of cost reduction, avoidance and sharing, see effective practices at <http://www.sloan-c.org/effective>.
58. **Swan, K.** Relationships between Interactions and Learning in Online Environments. <http://www.sloan-c.org/publications/books/interactions.pdf>.
59. **Chickering, A. W. and S. C. Ehrmann.** Implementing the Seven Principles: Technology as Lever. <http://www.tltgroup.org/programs/seven.html>. Originally appeared in print as: A. Chickering and S. C. Ehrmann, “Implementing the Seven Principles: Technology as Lever,” AAHE Bulletin: 3–6, October 1996.
60. **Shea, P. J., A. M. Pickett and W. E. Pelz.** Enhancing student satisfaction through faculty development: The importance of teaching presence. In J. Bourne and J.C. Moore (eds.), *Elements of Online Education: Into the Mainstream*, Volume 5 in the Sloan-C Quality Series. Needham, MA: Sloan-C, 2004.
61. **Bransford, J., A. Brown, R. Cocking, M. Donovan and J. W. Pellegrino.** *How People Learn*. Washington, D.C.: National Academy Press, 2000. <http://books.nap.edu/catalog/6160.html>.
62. **Anderson, T., L. Rourke, D. R. Garrison and W. Archer.** Assessing teaching presence in a computer conferencing context. *Journal of Asynchronous Learning Networks* 5(2): September 2001. [http://www.sloan-c.org/publications/jaln/v5n2/v5n2\\_anderson.asp](http://www.sloan-c.org/publications/jaln/v5n2/v5n2_anderson.asp).
63. **Coppola, N. W., S. R. Hiltz and N. Rotter.** Building trust in virtual teams. *IEEE Transactions on Professional Communication* 47(2): 95–104, June 2004.
64. **Pferdehirt, W.** Email about University of Wisconsin-Madison completion rates that exceed 99%. June 30, 2005.



65. **Deil-Amen, R.** Do Traditional Models of College Dropout Apply to Non-Traditional Students at Non-Traditional Colleges? Paper presented at the meeting of the American Sociological Association, Philadelphia, PA: August 16, 2005. Cited by David Glenn, Community-College Students' Reasons for Dropping Out Are Familiar Ones, Study Finds. *The Chronicle of Higher Education*: August 17, 2005. <http://chronicle.com/daily/2005/08/2005081701n.htm>, login required.
66. **California State University, Chico.** <http://www.csuchico.edu/celt/roi>.
67. **Oregon State University.** <http://ecampus.oregonstate.edu/faculty/manual/course-standards.htm#9>.
68. **Laster, S.** Model-driven design: Systematically building integrated blended learning experiences. In J. Bourne and J. C. Moore (eds.), *Elements of Online Education: Into the Mainstream*, Volume 5 in the Sloan-C Quality Series. Needham, MA: Sloan-C, 2004.
69. **Sloan-C Quality Framework.** <http://www.sloan-c.org/effective>.
70. **Middlesex Community College.** <http://www.middlesex.mass.edu/DisclosureStatements/>.
71. **Wiley, D.** Freire, the Matrix, and Scalability. Iterating towards openness: April 20, 2005. <http://opencontent.org/blog/archives/155>.
72. Beyond the Administrative Core: Creating Web-based Student Services for Online Learners <http://www.wcet.info/projects/laap/index.asp>.
73. **Sloan-C Effective Practices** in Access: <http://sloan-c.org/effective/SortByAccess.asp>.
74. **Garrison, R., M. Cleveland-Innes, and T. Fung.** Student role adjustment in online communities of inquiry: Model and instrument validation. *Journal of Asynchronous Learning Networks* 8(2): 2004. [http://www.sloan-c.org/publications/jaln/v8n2/pdf/v8n2\\_garrison.pdf](http://www.sloan-c.org/publications/jaln/v8n2/pdf/v8n2_garrison.pdf).
75. **Mercy College.** [http://www.mercy.edu/merlin/Wizard\\_Webpage/](http://www.mercy.edu/merlin/Wizard_Webpage/).
76. Accountability for Better Results—A National Imperative for Higher Education. A project of the State Higher Education Executive Officers with support from the Ford Foundation. March 10, 2005. <http://www.sheeo.org/account/accountability.pdf>.
77. **Scorza, J.** Do online students dream of electric teachers? *Journal of Asynchronous Learning Networks* 9(2): June 2005. [http://www.sloan-c.org/publications/jaln/v9n2/v9n2\\_scorza.asp](http://www.sloan-c.org/publications/jaln/v9n2/v9n2_scorza.asp).
78. **Schifter, C. C.** Compensation Models in Distance Education. *The Journal of Distance Learning Administration* 7(1): Spring 2004. <http://www.westga.edu/~distance/schifter31.html>.
79. 10 Techniques to Change Your Teaching. *The Chronicle of Higher Education*. June 24, 2005. <http://chronicle.com/prm/weekly/v51/i42/42b00101.htm> login required.
80. **Ragan, L. R. and S. L. Terheggen.** Effective Workload Management Strategies for the Online Environment. Project Dates: February 2002–December 2002. [http://www.ed.psu.edu/acsde/Workload\\_Mangement\\_Strat\\_5.pdf](http://www.ed.psu.edu/acsde/Workload_Mangement_Strat_5.pdf).
81. Babson-Olin Symposium for Engineering Entrepreneurship Educators, commentary provided by John Bourne, June 26, 2005.
82. **Sloan-C Effective Practices** in Faculty Satisfaction: <http://www.sloan-c.org/effective/SortByFacultySat.asp>.
83. **Aviv, R., K. Swan and P. J. Shea.** Concept Network Analysis of Students' quotes on Asynchronous Learning Networks, a work in progress, 2005.
84. **The Beatles.** "Getting Better." *Sergeant Pepper's Lonely Hearts Club Band*, 1967.