



**Quinsigamond Community
College
Consulting Report**

**Submitted by Dr. Jim Black
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Executive Summary

Presently, Quinsigamond Community College has a mixed enrollment reality. Headcount enrollments, credit hour production, and resulting revenue have declined precipitously over the last two years. Some academic programs have actually increased enrollment during this period while others have contributed to the college's decline. Retention rates have remained relatively stable. More positively, enrolled students are taking more credit hours per person, which is a trend that, if continued, will allow the institution to maximize capacity. Similarly, the high demand for on-line courses reduces the demand for on-campus classroom space, parking, etc. Finally, QCC has experienced enrollment increases in two populations that bode well for the institution's future, students of color and students age 21 and younger. Students of color represent the growth populations in Massachusetts. Younger students, particularly those enrolling directly from high school, tend to take more credit hours per semester and are often retained at a higher rate than their nontraditional-aged counterparts.

In light of the aforementioned challenges, there are four strategic issues facing the college: (1) repositioning the college, (2) effective communication, (3) delivering on the QCC promise, and (4) leveraging technology.

Repositioning the college refers to QCC's position in the minds and hearts of potential students among your competitors. The institution needs a targeted brand strategy that fosters effective positioning of the school's brand among competitors along with the management of brand assets such as institutional image, brand equity, the brand

message, and the promise inherent in the brand message. The process of defining QCC's brand will begin with an image study and competitor analysis conducted by SEM WORKS and a promise exercise facilitated by college personnel. From these activities, a brand strategy will be developed accompanied by an implementation plan.

Effective communications for QCC primarily refers to integrated marketing and communications, collateral materials used to promote the college, and the campus visit experience. Regarding integrated marketing and communications, recommendations include: (1) identify key market segments and develop tailored communications plans for each, (2) communicate through multiple channels (e.g., person-to-person, direct mail, advertising, e-mail, Web chats, and phone) utilizing various people (e.g., the president, alumni, current students, parents of current students, faculty, and key staff), (3) integrate all communications through a campus-wide communications plan, (4) capture all potential prospects in the QCC database for future cultivation, and (5) redesign the college's Web presence to be a marketing tool.

Recommendations related to collateral materials consist of general suggestions for improving publications along with specifics regarding the need to enhance the customization and relevance of collateral materials. It also is suggested the materials incorporate more emotional appeal and focus less on facts and more on benefits and outcomes. Lastly, every communication needs to have a clear and compelling "call to action."

The campus visit experience at QCC is not a selling tool for the institution. To capitalize on this important event in the decision-making process of prospective students, QCC must entirely reengineer the process, including directions, signage, parking, the environment where guests are greeted, the cleanliness and landscaping of the tour route, the training of tour guides, as well as every element of the actual experience. For example, the college needs to develop a multimedia presentation for visitors that establishes an emotional appeal and sets the stage for the rest of the visit. The presentation needs to occur in dedicated space in the new Enrollment and Student Services Center followed by a tour from a highly-trained tour guide.

Delivering the QCC promise encompasses the entire campus but only two key areas are addressed in this report, student success and student services. First, student success at QCC needs to be developmental in nature—meaning meet students where they are and help them achieve their goals. The college admits a significant number of students who are academically at-risk. Enhance academic support services to serve this population and proactively engage students with said services through early intervention. Protect the first semester schedules of all entering students from high-risk courses—classes with high percentages of D, F, and W grades. Expand the ORT course to include all new students and redesign it to meet their varied transitional needs. Integrate the developmental advising, the Career Academic Plan (CAP), orientation, and the ORT class and front-load appropriate advising and CAP activities prior to enrollment. Ensure students have adequate class availability by conducting a

demand analysis and planning enough seats, sections, and instructors based on the findings.

Second, student services can best be improved by addressing service gaps. QCC has several gaps including missing essential student services functions such as health services, career exploration, as well as spring and summer orientation. Other service gaps include the timeliness of financial aid awards (should be mid-March for new students) and refund checks (should be available the first day of classes). Accuracy of information conveyed to students also could be improved by creating systems where reliable, just-in-time information is available to service providers online. Training for service providers would further ensure accurate information is disseminated, and it would foster a service mindset. Though student runaround did not appear to be a major issue at QCC, some recommendations for further reducing runaround are offered. Of particular concern is the lack of services available to nontraditional students. From the available course array at convenient times to the mode of instructional delivery and the format of classes, the needs of adults, particularly working adults, are not fully addressed.

Leveraging technology will allow QCC to be competitive in the area of student recruitment, provide 24/7 student services, use data for decision-making, and successfully manage a larger student enrollment with similar staffing patterns. In addition to these strategic issues, there are several operational matters that require attention. Included among these are automating manual processes, prioritizing of

recruitment and marketing efforts, becoming more adept at electronic recruiting and communication, and repurposing the Web site to be more of a marketing tool.

To accomplish these and other technology-dependent initiatives the college must engage in an operational analysis of existing processes—mapping basic business processes to Jenzebar functionality. The staff also must become more technology proficient through training, redesigning job descriptions, and adding key positions. Even as the staff becomes more proficient, there will undoubtedly be an ongoing reliance on central IT for support. The functional users, therefore, should be involved in setting IT priorities through the CARS Team. Similarly, a group, perhaps a subcommittee of CARS, should determine who at the college has access to what information in the system based on the individuals' role at the institution. The intent here is to broaden access while maintaining the integrity of the system and student confidentiality.

Also, included in this report are risk management issues. These consist of the use of Social Security numbers where federal reports are not required, ADA compliance of the college's Web pages, and concerns about the protection of student records from natural disasters such as fire.

Introduction

SEM WORKS, an enrollment management consulting firm, was hired by the Quinsigamond Community College (QCC) to complete an audit of existing enrollment practices. The audit was conducted February 15–17, 2005, by Dr. Jim Black, hereafter

referred to as the consultant. Findings from the consulting visit are presented in this report along with related recommendations. Said recommendations are qualified by an indication of their respective importance to meeting QCC enrollment objectives. Accordingly, recommendations are designated as mission critical (MC), essential (E), or desired (D).

Methodology

The three-day consulting visit included interviews with multiple groups and more than 50 individuals consisting of students, faculty, staff, administrators, and senior management. Prior to the site visit, the consultant reviewed the QCC Web site, recruiting publications, enrollment data, and miscellaneous other documents. During the visit, additional information was supplied to the consultant.

Using a combination of the physical evidence described above along with secondary data sources, on-campus interviews, and direct observations of existing practices, the consultant utilized a research method known as “triangulation” to validate findings. Any finding supported by all three research techniques was considered to be valid. The consultant used a complementary method called “pattern matching” to validate findings that did not appear to be triangulated. Pattern matching describes reoccurring themes that emerge from one or more of these research techniques. For example, if the lack of communication between two enrollment areas was cited in multiple interviews to be a source of student dissatisfaction, a pattern exists and thus, the hypothesis would be that the findings are reliable and valid.

The QCC Context

The Quinsigamond Community College is engaging in this audit following two consecutive years of enrollment decline. According to data available through the QCC Office of Institutional Research (2004), fall enrollment headcount of credit students has declined from a record high in 2002 of 6,622 to 6,101 in 2004—a decline of 521 students or 7.9%. In comparison, ten of the fifteen community colleges in Massachusetts increased credit enrollment from 2002 to 2003 (Massachusetts Board of Higher Education, 2004, September). At Quinsigamond, corresponding declines over the last two years in student credit hours have been dramatic. Credit hour production has dropped from 58,155 in 2002 to 55,629 in 2004. This represents a decline of 2,526 student credit hours or 4.3%. It is estimated that the enrollment decline this year alone cost Quinsigamond approximately \$1,000,000 in lost revenue.

On a positive note, the mix of students has shifted increasingly to full-time students generating more credit hours per student headcount. In Fall 2002, only 42.3% of enrolled students were full-time. By Fall 2004, that percentage had increased to 45.4%. In part, the increase in full-time students may be due to a shift to a more traditional-aged student population in recent years. Students age 18-21 represented 41.3% of the enrolled population in 2002 compared to 44.4% in 2004. According to a recent study released by the U.S. Department of Education (Adelman, 2005), the average enrollment of traditional-aged students in community colleges across the country has increased to forty-four percent—mirroring the percentage and trend at QCC. The same study depicts

a significant difference in first-year retention of students age twenty-one and younger versus those who are twenty-two and older, 72% to 46% respectively. Interestingly, QCC's increase in students twenty-one and younger has occurred while retention rates have remained relatively flat. This may be due to the high proportion of students entering the college with deficiencies in math compared to the national average of 44% (Adelman, 2005).

In terms of gross numbers, the largest decline over the last two years in a degree program was in general studies—experiencing a decline of 130 students or 5.8% since Fall 2002. For certificate programs, the largest declines over the two-year period were in early childhood education for assistant teachers (-19) and human services (-15). It is important to note that some degree and certificate programs experienced significant increases in enrollment during this period: degree programs in business administration transfer (+40), criminal justice (+32), human services (+24, perhaps representing a shift from the certificate to the degree program), and nurse education (+23) along with certificate programs in practical nursing–career (+24) and business administration (+17).

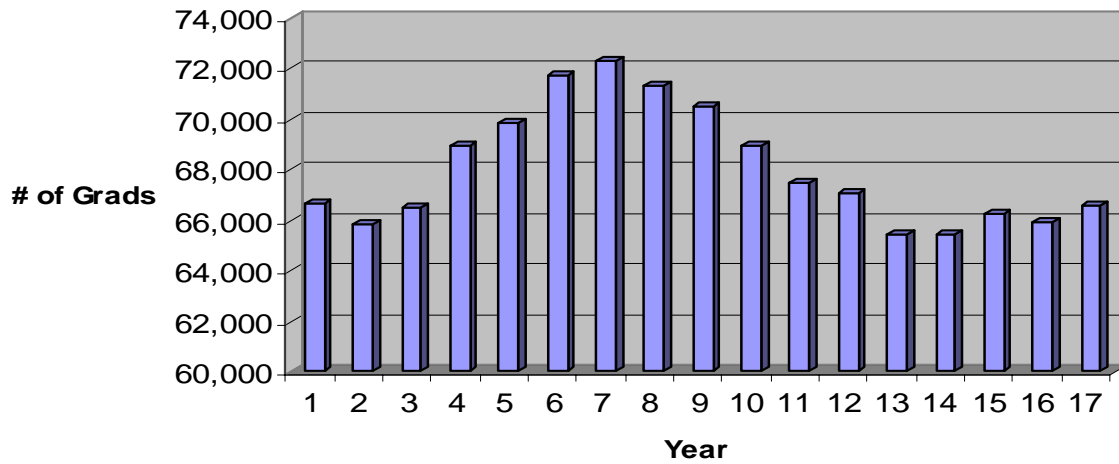
Also encouraging is the yield from accepted student to enrolled student. This yield rate is at 68.0% compared to 62.0% in 2002. However, the yield from applicant to accepted student has declined significantly from 79.1% in 2002 to just 65.2% in 2004. Among all the admission indices, this variable seems to have had the most impact on the size of the entering class—suggesting that an intensified effort to yield a higher percentage of

applicants to accepts will produce desirable enrollment results. Typically, this stage of the admissions funnel can best be affected by aggressively working the pool of students with incomplete application files.

The college cannot afford to rest on its laurels. This is acutely evident with QCC's traditional freshmen, where the margin of error is exacerbated by demographic trends. The number of projected high school graduates in Massachusetts is expected to decline by nearly 2,400 students from today until the 2017–18 academic year (Figure 1). Between now and 2007–08 the number of high school graduates in Massachusetts is projected to grow. However, even during this growth era, many nearby counties will be experiencing declines in the number of high school graduates.

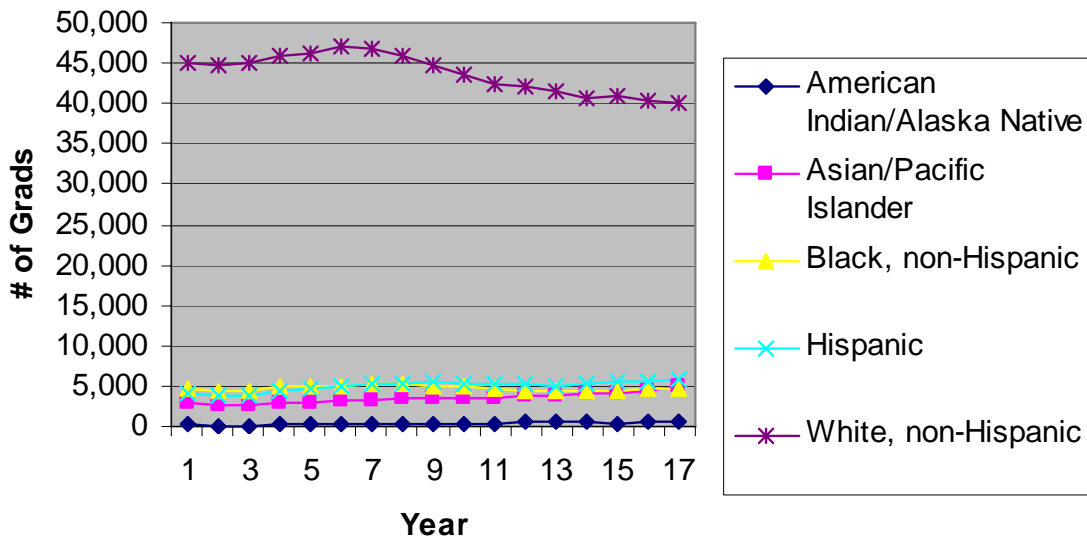
Figure 2 illustrates the projected shift in the racial and ethnic composition of Massachusetts high school graduates. Given QCC's increasingly diverse student population, the institution is well positioned to attract and retain students of color. Quinsigamond's minority undergraduate enrollment has increased from 18% of the total student population in Fall 1998 to 25% in Fall 2003 (Massachusetts Board of Higher Education, 2004, September).

Figure 1: Massachusetts High School Graduates



Source: Western Interstate Commission for Higher Education (2003, December)

Figure 2: Massachusetts High School Graduates by Race/Ethnicity



Source: Western Interstate Commission for Higher Education (2003, December)

Student retention is another critical dimension of the college’s enrollment vitality. Among entering first-time freshman cohorts in Fall 2002 and 2003, the fall to spring return rate was between 78 and 79 percent. Fall to fall return rates of first-time, degree-seeking

students was at 58.4% for the cohort entering in 2002. Compared to the other community colleges in the Massachusetts System on this measure, Quinsigamond is well above the average of 51.9% (Massachusetts Board of Higher Education, 2004, September). Fall to spring persistence of all credit students was 69.0% for the 2002 cohort year and 67.4% for the 2003 cohort year. Fall to fall persistence for the same cohort years was 46.0% and 47.1% respectively. Cumulatively, these statistics portray a fairly stable and positive retention picture for QCC.

The remainder of this consulting report will address opportunities for improving existing operations and practices as well as exploration of strategic issues: (1) repositioning the college, (2) effective communication, (3) delivering on the QCC promise, and (4) leveraging technology.

Repositioning the College

Market position refers to the college's relative position among competitors in a particular market space. Specifically for QCC, the market position issue is one of defining your brand identity in a way that is relevant for those you seek to enroll as well as those who influence enrollment decisions. The "Promise" exercise scheduled for April 22nd along with image study and competitor analysis being conducted by SEM WORKS on your behalf will provide insights from which the college's position can be defined and then articulated.

Finding: From initial consultant interviews and observations, Quinsigamond’s brand identity should have some connection to student success or changing lives. Obviously, neither of these concepts has been defined for those you serve. What is the relevant meaning of “changing lives” for credit students, non-credit students, ESL students, or employers seeking corporate training for employees? Moreover, you have yet to identify the qualities that make QCC distinctive among your competitor set and add unique value to the student experience.

Recommendation (E): Before the institution can be effectively promoted, the brand identity (how you want others to perceive the institution) must be defined. A brand rationale, brand attributes, and brand benefits should be clearly articulated and consistently reflect the institution’s values while aligning with constituent expectations. The brand lives in the hearts and minds of those you serve. Consequently, the logical place to begin defining the brand identity is with an assessment of the existing image for various constituent groups valued by the institution. The next step would be to drill down to better understand what are QCC attributes and perceived benefits that have resonated with this population. SEM WORKS will assist you in this process as part of the development of a brand strategy.

The current reality is then compared against the college’s vision for its brand identity to determine where gaps between the two exist. Recognized gaps enable marketers to target a brand strategy—increasing the probability of achieving related institutional objectives. A targeted brand strategy fosters effective positioning of the school’s brand

among competitors along with the management of brand assets such as institutional image, brand equity, the brand message, and the promise inherent in the brand message.

Brand tactics emanating from a sound brand strategy yield successful promotional campaigns infinitely more often than the fragmented “flavor of the month” or the panic-driven “let’s try anything” approaches common at many colleges and universities. Assuming that brand tactics are aligned with the brand strategy and that brand strategy is aligned with the institution’s mission and values, there are five universal tactics that should be employed:

- 1) Seek to understand constituent needs.** Surveys, focus groups, observations, a review of historical data, and the like are used to collect information for pattern matching of constituent behaviors and understandings that reflect their needs of the institution. QCC work teams already have begun to identify methods of collecting this data.
- 2) Identify market segments that are highly valued by the institution.** The Marketing Team will determine key market segments and their characteristics, including motivators and barriers to supporting the institution’s objectives.
- 3) Determine which brand attributes will remove or lessen identified barriers and exploit motivators.** To illustrate, consider the market segment of ESL students. Potential barriers may be fears about learning a new language, immigration status, balancing classes with work and family

obligations, and lack of support from home. Motivators may include the need to communicate more effectively in the workplace, the desire to complete a college degree, or an interest in experiencing new things.

- 4) Use relevant brand attributes to effectively position the institution against would-be competitors.** What are your institutional strengths and competitor weaknesses associated with the needs of a particular market segment? How can you capture this niche and defend it against all who seek to encroach upon your market space? Again, the Marketing Team will address this issue.
- 5) Differentiate the institution from competitors through relevant communications.** While remaining true to the corporate brand message, spin the marketing message in a way that differentiates your institution from competitors and is relevant to the targeted segment. Describe how their unique needs will be met by your institution (often referred to as a value proposition). Convey to them how your value proposition is different from direct competitors. Since your competitors are largely not other community colleges, differentiating QCC should be relatively easy.

Beyond the tactics themselves, practical matters of implementation must be addressed as well. What communication channels will be most effective in delivering the message? Who will have the most influence over the targeted population and hence, should deliver the message? When will the message most likely influence decision making? What resources and infrastructure are needed to ensure successful implementation? How will

the quality of execution be monitored? How will effectiveness of the branding effort be measured?

Integrated Marketing and Communications

Student marketing, like commercial product marketing, is about influencing consumer behavior. QCC is to be commended for the consistency of message and design that permeates most of your publications. Consistency is one of three ingredients to marketing power. The other two are segmentation and frequency. When the three align, colleges can influence consumer behavior and ultimately, college choice.

Finding: Segmentation is the true power of marketing. It is the lever that moves people to action—to read your materials, visit your campus, apply for admission, enroll in classes. The magic of marketing is segmenting to an “n” of one with as little effort and expense as possible. You want to tap into the interests, values, beliefs, motivators, and yes, even the very souls of your prospective students.

The college engages in some segmentation of high school students, returning adults, ESL students, corporate training participants, and distance learners. Segmented communications, in most cases, are limited to transactional letters and, at most, one or two other communications per segment. This is insufficient to influence choice. Furthermore, there are several key segments for whom QCC has no tailored communications. Each has its own motivators and barriers to enrollment and thus, is less likely to be influenced by generic communications.

Recommendation (E): Build a communications plan for each segment that incorporates multiple channels of communication, authors who can influence choice, relevant information for the target audience, and messages that are compelling.

Identify underserved key segments, their motivators and barriers, and develop contact plans tailored to address each population. The Marketing Team will accomplish this task. Probable segments for the college to consider include:

- ◆ Readmits
- ◆ Reverse transfers
- ◆ Visiting students, particularly for summer school
- ◆ Concurrently enrolled high school students
- ◆ Displaced workers
- ◆ The nearby prison population
- ◆ Minority students
- ◆ Parents

Using nontraditional-aged students as a sample segment, possible motivators include convenience, the option of continuing current employment while pursuing an education, as well as familiarity with the college and the security associated with a known entity. Barriers might consist of juggling family and work responsibilities, fear of failure, affordability, and lack of support from home. An abbreviated contact plan for this segment follows:

Targeted Contact Activity	Timeline
Send out packet of information (e.g., application for admission, nontraditional student viewbook, academic program information, a schedule of courses).	Upon inquiry
Current adult student call to the prospective student providing encouragement and support. Review the next steps in the enrollment process.	One week after mailing packet
Direct mail or Web mail (possibly a newsletter) stressing benefits of attending school later in life (e.g., increased marketability, job security, and job mobility). Use testimonials of adult student success stories (e.g., students, employers, faculty). Invite them to visit the campus.	Two weeks after call
Offer Web chat option with current adult students.	Once a month related to specific topics or affinity groups (e.g., single parents, paying for college, overcoming math anxiety)
E-mail message to adult students by academic area of interest demonstrating success of adult graduates.	Two weeks after Web mail newsletter
Invitation to attend an adult student information session.	Ongoing
Host an adult student information session. Provide one-stop services at these events (e.g., interviews with admissions and/or career counselors, review of admission application, credit evaluation, advising session, registration for classes, payment for classes, order books, reserve parking).	Ongoing
Faculty call to admitted students who have indicated an interest in their program.	One week after admission
Contact from Financial Aid Counselor to discuss options to (for?) paying for college.	Two weeks after admission
Invitation to an adult student orientation.	Prior to semester start-up
Host an adult student orientation. Provide one-stop services at these events (e.g., advising session, registration for classes, payment for classes, order books, reserve parking).	Prior to semester start-up

Other target segments would have similar customized communications integrated into the comprehensive contact plan. In a case where a prospective student belongs to multiple market segments, priority should be given to the segment affinity that is most likely to influence the college decision-making process.

Finding: Communication should be delivered through multiple channels (e.g., promotional advertising, direct mail, Web chat, and multimedia presentations) by multiple people. QCC authors might include alumni, parents of current students, faculty, current nontraditional students, and key administrators. The channels of communication should be diverse because no one channel will penetrate the entire market. Among the channels presently underutilized by Quinsigamond are telecounseling, e-mail campaigns, and a prospective student portal.

Recommendation (MC): Vary who the communication is sent from and the medium through which it is sent. For communications that are designed to influence college choice, administrative units, such as Admissions or Continuing Education, are seldom the authors who will have the most influence over the recipient. Yet, these administrative offices should be instrumental in coordinating the flow of said communication to students and ensuring the quality of communication.

Finding: As mentioned, QCC has successfully integrated the message and design. However, there are no centralized controls for communication from the academic units nor is there a campus-wide communication plan. Both may result in inconsistent quality,

timing and sequencing issues, unmet expectations or broken promises from the perspective of the student, and the appearance that the college is not well coordinated.

Recommendation (E): Assign integration and coordination of all communications to prospective students to the Marketing Team or some newly formed entity that is representative of Admissions, Continuing Education, Marketing, Student Affairs, Student Accounts, and the academic units. The group should be charged with developing a comprehensive communications plan and monitoring consistency of quality, message, and design. The consultant can provide a sample campus-wide communications plan to serve as a guide.

Finding: Before you can market to prospective students, you must first capture information about them. The Admissions Office at QCC is capturing information about prospective students who call in, write in, e-mail, or complete an inquiry form. However, the Admissions Office does not capture information on those who walk in to the office, submit SAT scores, or originate in another QCC office.

Recommendation (MC): Consider all SAT score submissions as a sign of interest in Quinsigamond Community College. Include these students in the prospect database. Have every walk-in complete a brief inquiry form before releasing requested materials. Establish a mechanism using Jenzebar or paper inquiry forms by which all campus offices capture prospect data and forward it to the Admissions Office or Continuing Education as deemed appropriate.

Finding: QCC's Web presence is not a marketing tool. Furthermore, it lacks intuitive navigation and is inconsistent as the user moves from corporate level to unit level pages. Pages have bad links. Searches can lead to inactive pages.

Recommendation (MC): Use the pages developed by SEM WORKS for the college to expand to all units at the department level. Develop an institutional policy with specified Web requirements along with consequences for noncompliance. A sample Web policy is provided in Appendix A.

Collateral Materials

Publications, Web sites, multimedia presentations, advertising, and other materials convey the QCC story. They should be customized and relevant to each recipient, compelling, and include a specific "call to action"—something you would like the reader to do—visit the campus, apply for admission, attend an event, register for classes, or pay the bill.

Finding: Collateral materials lack an emotional appeal. The focus is not on the attributes of Quinsigamond that are most relevant to the target audience. For example, parents are most interested in campus safety, the welfare of their son or daughter, affordability, and the marketability of graduates. They want to know how you are going to improve the quality of life for their student. Determine the attributes of QCC that align

with these issues, and present them to parents in a compelling way, so that they will trust the college with their most precious asset—their child.

The college needs to infuse benefits and outcomes with important facts. Stories; testimonials; third-party endorsements such as employer quotes, guidebook copy, as well as personal statements of support; and even statistics (e.g., job placement rates) can be effective mediums for conveying benefits and outcomes in a way that “pulls on the emotional heartstrings.” Such messages can be conveyed through publications, the college Web site, multimedia presentations, and speeches to visitors.

Recommendations (E): A few general recommendations follow, some of which are currently operational at QCC.

- ◆ Begin the production phase of every promotional piece with a written marketing objective that identifies the target audience, purpose of the piece, and the “call to action.”
- ◆ Determine how the effectiveness of the promotional activity will be measured.
- ◆ Create a production timeline that allows for a quality process to occur.
- ◆ Invest your money in quality photography where it counts. Photography should be natural, visually stimulating, crisp, people-oriented, displaying the school’s very best images, representative of reality, and telling a story. Budget for a professional photographer to come on campus once or twice a year. Avoid stereotypical community college images.

- ◆ ALL publications should be printed on quality paper and look like they come from a high-quality institution.
- ◆ Catchy headers, testimonials, and interesting graphics enhance the effectiveness of recruiting publications.
- ◆ Remember the audience. In the case of recruitment pieces, you are writing for prospective students, not the president or the faculty. Speak their language. Be brief.
- ◆ The sequencing of publications and Web screens should be organized to present information from general to specific. Initially, when the interest level is the lowest, students are less inclined to read anything much less detailed information. Each piece or page in a series should leave the reader wanting to learn more.
- ◆ Information presented should accurately represent the college.
- ◆ Copy should flow smoothly and convey a clear and concise message.
- ◆ The marketing vehicle (e.g., Web, publication, CD-ROM, video) should be engaging and possibly entertaining.

Campus Visits

The campus visit should be your most productive yield activity. You have an attractive campus and friendly people, so this should be a natural strength for QCC.

Remember that decisions in the college selection process are based mostly on emotion. Positively or negatively, no other pre-enrollment experience will evoke more feelings about QCC than the campus visit. It is a “moment of truth” you cannot afford to fail.

Finding: Visitors have no designated parking or written directions to campus. Moreover, directional signage to the Admissions Office is not intuitive. When they arrive in the Admissions Office, they are greeted and connected with a tour guide, if one is available. Often, visitors are sent on a self-guided tour. Guides receive minimal formal training, and there is no evaluation feedback loop for them to improve their touring skills.

First impressions of the Admissions Office provide less than a favorable image of the institution. The facility is sterile, overcrowded, and generally in disarray. It is not warm and inviting. Visitors frequently do not even have a place to sit.

Quinsigamond has a campus visit experience that lacks emotional appeal. The Admissions Office has nothing in the way of a current video or multimedia presentation to overcome the natural surroundings of the visitor area. Other than human interactions between staff and tour guides with visitors, there is nothing designed to engage the campus visitor.

Recommendation (E): To improve on the campus visit experience, implement the following recommendations:

- ◆ Consider everything the student has to experience before he/she gets to campus—then engineer every detail of the student’s experience. Everything they see along the way shapes their image of the college.

- ◆ Develop a video or multimedia presentation with quality sound and visuals (ideally of theater quality) focused on making an emotional connection with a student who is visiting for the first time.
- ◆ Augment the training of student tour guides with discussions about the marketing message. Also, teach them how to capitalize on motivators of particular student groups and respond to barriers. This approach works best when tour guides have information about visitors prior to the visit, so they can prepare accordingly.
- ◆ Dedicate space in the new Enrollment and Student Services Center for use as a presentation room for campus visitors. The building will make an excellent first impression. Create some reserved parking nearby. Details such as reserved parking, welcome signage (preferably with the student's name prominently displayed on a classy marquee), flowers, a smiling face to welcome guests, a video or multimedia presentation with quality sound and visuals (ideally of theater quality), refreshments, and comfortable seating will combine to shape the visitor's perception of QCC.
- ◆ Generally, the campus is well kept; however, there are spots that need attention. Begin by sharing the campus tour route with the grounds crew. This route should receive top priority for beautification projects and should be policed every morning for trash and routine upkeep.

Student Success

Quinsigamond enrolls a significant number of students who need academic support and who are engaged in high-risk experiences at the college. Enrollment growth of the

magnitude desired by the college will be difficult, even in the best of demographic times, when a revolving door exists—that is to say, students are leaving faster than you can enroll new ones. You must stop the hemorrhaging, and the best way to do so is by enhancing student success.

Finding: Many of the students admitted to the college have marginal academic backgrounds, particularly in math, and may need academic support services. The availability of said services on campus is severely limited.

Recommendation (MC): Create the infrastructure and services necessary to meet the needs of students you admit. Proactively engage students with academic support services early in their academic career—within the first few weeks of class. Early intervention of this type can occur through structured bridge programs offered during the summer or fall semesters or by providing academic feedback in freshman level courses within the first three weeks of class.

The former usually involves introductory English and math courses, along with a first-year transition course like ORT in the summer or a minimum of twelve hours in the fall complemented with a first-year transition course. Faculty for either model are carefully selected based on their passion for serving deserving yet academically challenged students who need mentoring and academic support. Successful completion of the program ensures the student regular admission to the college.

The latter requires grades be provided to students early in the semester and that students performing poorly be required or encouraged to participate in an academic intervention. Academic tutoring, structured study groups, and Supplemental Instruction are the most common interventions linked to such a strategy.

Finding: Students are allowed to take courses that meet their academic requirements.

Recommendation (E): Identify high-risk courses—courses that have a relatively high proportion of D, F, and W grades. Protect first-semester schedules from inclusion of said courses. For 100 and 200 level high-risk courses, assign a Supplemental Instruction (SI) leader. This student leader is selected by the instructor of record in concert with the Director of Retention (currently a vacant position at QCC). The Director of Retention would provide the necessary training, evaluation, and supervision.

Finding: QCC's developmental advising model, Career Academic Plan (CAP), and the ORT class provide an excellent foundation for building a student success model. However, the ORT class is limited in terms of the audience it reaches, and the three are not integrated with orientation or an early intervention strategy.

Recommendation (E): Expand the ORT course and, if necessary, redesign it to meet the needs of all entering credit students (e.g., traditional, nontraditional, distance, ESL). Develop an integrated plan that engages new students prior to initial enrollment with developmental advising. Phases of developmental advising that will prepare the student

to design a Career Academic Plan should be completed prior to attending orientation. The CAP should serve as the nucleus of the advising session during orientation. The advising session at orientation should be facilitated by the student's ORT instructor. Progress on the Career Academic Plan as well as the student's transition to QCC should be monitored throughout the first semester by the ORT instructor with appropriate intervention occurring when the ORT instructor observes behavior or circumstances that signal the student is at risk. Interventions might include strategizing with the student's other faculty, making referrals to counseling or health service providers, encouraging tutorial assistance, and the like. The intervention system should be linked to warning signs such as failure to attend classes, missing class assignments, inappropriate behavior, or requesting a transcript.

Finding: There is a lack of required courses available to students. Beyond the obvious frustration this creates for students, the lack of available courses results in a loss of credit hour production and consequently, revenue.

Recommendation (E): Engage in course demand analysis. Given the projected size of the entering class and the historical trends of major choices by those who are enrolling, predict the needed number of sections and seats required. This analysis will enhance the planning capacity of academic units, eliminate the panic-driven hiring of adjuncts at the last minute, reduce student frustration related to the lack of class availability, and accelerate time-to-degree.

Service Gaps

Every day Quinsigamond Community College has hundreds of “moments of truth”—encounters with those you serve (Carlson, 1987). The capacity to manage “moments of truth” determines, to a large extent, an organization's image and success with its customers. Among higher education institutions, there exists a multitude of constituents we serve: students, parents, alumni, donors, foundations, employers, and society—just to name a few. However, for the purpose of this report, the focus is exclusively on students.

No organization can afford to disenfranchise its primary customers. Failure to effectively manage “moments of truth” often leads to the dissatisfaction and even the departure of QCC students. To understand the true financial impact of student attrition, add lost tuition and fee revenue with the public relations damage caused by dissatisfied students who leave spewing venom.

Finding: The college is missing essential student services functions: health services, career exploration, as well as spring and summer orientation.

Recommendation (D): Senior management should evaluate the feasibility of adding said services to the array of options that currently exist at the college.

Finding: In any customer service environment, customer loyalty is only possible if the customers trust the organization and the people who deliver the services. In higher

education, we must build trust and thus loyalty by delivering accurate, timely information. Throughout the consulting visit, issues of information accuracy and timely delivery of information, such as financial aid awards and refund checks, were mentioned.

Recommendation (E): Financial aid awards for new students should be sent by mid-March and for current students soon thereafter. Refund checks should be available for pickup the first day of classes. Systems for ensuring accuracy of information should be developed and incorporated into training. The consultant will work with the enrollment management task forces to design systems and training modules.

Finding: There is some evidence to support claims that the service mindset of QCC staff needs improvement. Several factors are suspected to be contributing to this phenomenon: salary levels, salary inequities, work to rule, inadequate training, and working conditions (e.g., cramped office space, poor air quality, the lack of hardware such as fax machines to accomplish job responsibilities). In addition, staff remarked that they did not feel valued or recognized for their contributions.

Recommendation (E): To improve student satisfaction, you must first improve staff satisfaction. Senior management should develop a strategy for systematically addressing the issues cited above. SEM WORKS is available to provide initial service training for staff. The training we offer focuses on mindset, service processes, and using technology to deliver services.

Finding: Quinsigamond continues to behave like a traditional campus relative to other urban community colleges when much of the growth opportunity is in the nontraditional student market. Nontraditional students select colleges and universities primarily based on location, convenience, cost, and program availability. Of these, convenience and program availability are the factors that the QCC needs to address. Classes and services are extensively delivered in traditional times and formats.

Recommendation (MC): To appeal to the nontraditional market, QCC must respond to student needs by:

- ◆ Teaching courses throughout the day, evening, and week.
- ◆ Offering degrees and certificates that can be completed at night or on the weekend for programs with demonstrated demand (e.g., business, education, criminology, social work, and nursing).
- ◆ Providing a two-year schedule of courses, so that students can plan accordingly.
- ◆ Reducing time to degree through some combination of offering 8-week courses, summer courses specific to evening or weekend degree and certificate programs, or credit for life experiences.
- ◆ Increasing the availability of online and blended-delivery courses that fulfill evening and weekend degree and certificate program requirements.
- ◆ Providing convenient services online 24/7 and perhaps through extended office hours.

- ◆ Offering support services such as tutoring, day care, counseling, and health care at times that are convenient for this population.
- ◆ Discounting parking for “evening only” students.

Finding: Some student runaround is endemic to the process, although not near as much as we have found at comparable institutions.

Recommendation (D): While student runaround is common to many institutions, you should not accept this practice as irreversibly imbedded in the culture. It can be minimized, if not eliminated. Consider the following:

- ◆ Train staff in each student services department as generalists, capable of addressing common Quinsigamond student issues without sending them all over campus. Conduct regular training sessions for generalists, so that information is current, and there is a common foundation from which all generalists are operating.
- ◆ Establish standard protocols for handling various student scenarios. Hold staff accountable for consistently following protocols. For example, student runaround will be significantly reduced if EVERY staff member: 1) asks enough questions to understand exactly what the student needs, 2) does everything possible to solve the student’s problem before sending him or her to another office, 3) calls ahead when a student must be sent to another office to ensure that the person he or she needs to speak with is available, is briefed on the student’s situation, and is, in fact, the right person to address the issue, and 4) follows up with the student to determine if the matter has been resolved.

Leveraging Technology

Technology is an enabler that allows for rapid turnaround, data mining for actionable intelligence, mass customization of communications, effectiveness measures, information available to students 24/7, and so much more. Institutions that leverage technology effectively while developing capacity within their people will have a sustainable competitive advantage.

Finding: The college has not automated many of its routine business transactions. For example, the manual management of the communications flow to prospective students, application data entry, and financial aid packaging is consuming enormous amounts of staff time. Few of the other recommendations in this report can be implemented without automation or an increase in staff size.

Recommendation (MC): Make automation an institutional priority. This may require reprioritizing assignments of the IT staff, outsourcing programming tasks, purchasing off-the-shelf solutions, and training Enrollment and Student Services staff to become more technical and self-sufficient.

Finding: QCC did not engage in an operational analysis when implementing Jenzebar, and consequently, no comprehensive reengineering of business processes occurred.

Recommendation (E): Engage in an operational analysis through the Enrollment Management Process Team. Map business processes to Jenzebar functionality. Search for opportunities to integrate, streamline, or even eliminate existing business processes.

Finding: In order to achieve the level of segmentation described earlier in this report, you must leverage technology. QCC has no e-mail campaign capability, prospective student portal, or Web chat capability. The Web presence is lacking critical functionality to be a recruitment tool.

Recommendation (E): Hire an online creative designer for Enrollment and Student Services. Outsource the pieces that can be done more efficiently and effectively by an external firm.

Finding: The Enrollment and Student Services staff, as a whole, are not as technology proficient as they need to be, particularly in the Jenzebar environment. Your success in recruitment, the delivery of student services, report generation, and the like will be severely limited without an increased emphasis on technology skills among your functional staff.

Recommendations (E): Invest heavily in staff training related to the Jenzebar system. The college has reserved \$60,000 for consulting and training services. Use these funds strategically and budget a similar amount for ongoing consulting and training. With

every staff vacancy, look for opportunities to restructure positions to make them more technically oriented. Consider a train the trainer model.

Finding: Like every technology enterprise SEM WORKS has worked with, the demand for technology services at QCC far surpasses the supply of central IT staff. Assuming you cannot meet this unquenchable demand centrally, the aforementioned training and subsequent increased self-sufficiency are critical. Similarly, project management and thoughtful prioritization will help to maximize what you can accomplish with the technology support you do have. There is little evidence of project management at QCC and priorities appear to be determined by “the loudest voice” rather than agreed upon institution priorities.

Recommendation (E): Charge the CARS Team with responsibility for recommending IT priorities to senior management. While project management should be the responsibility of central IT, the CARS Team could serve in an advisory capacity.

Finding: One of the primary benefits of an enterprise system, such as Jenzebar, is the ability to provide information to people when and how they need it to better perform their jobs and serve students. QCC has two impediments in this regard: (1) access to screens needed in Jenzebar by functional users and service providers and (2) reporting capability, particularly as it relates to measuring effectiveness.

Recommendation (E): Establish a Jenzebar Security Committee (perhaps a subcommittee of the CARS Team) to determine who within the college has access to screens and related information. This is typically done by roles within the institution with distinctions made between the need for “read” access versus “change” access. Requests for new access should be submitted to this committee for consideration.

Fully utilize the reporting tools owned by the institution. Most reporting done by the functional areas is being run using Access. This is fine for basic reporting needs but do not overlook the power of a tool like Cognos for creating performance report cards and key metric dashboards. Leverage this technology to improve operational effectiveness.

Finding: During the consulting audit, there was concern expressed about the lack of service support available to nontraditional learners. Specifically, this referred to support for online courses and after hours technology-related needs.

Recommendation (E): Charge the Student Success Team with recommending a strategy and needed infrastructure to adequately support the needs of nontraditional students.

Finding: QCC student e-mail accounts are not an effective medium for conveying information or providing student services.

Recommendation: Require QCC students to use their college e-mail account, and do not provide them with the option of forwarding e-mail to a third party account like Hotmail or AOL.

Risk Management

Finding: QCC uses Social Security numbers as student identifiers in areas where federal reports are not required. This practice is in direct violation of the Social Security Act.

Recommendation (D): Resolution of the Social Security risk can occur through a shift to generated IDs or the pervasive use of the word “optional” when requesting a Social Security number.

Finding: QCC’s Web pages are not ADA compliant. Currently, there is no guidance on compliance or infrastructure to support those seeking to become compliant.

Recommendation (D): A sample Web accessibility policy and procedural guidelines are provided in Appendices B and C respectively. You are encouraged to review what other campuses have done to ensure compliance and begin to map out a strategy for QCC. Said strategy may include a policy, an awareness campaign, training, central support for compliance efforts, and accountability mechanisms including but not limited to a “takedown” strategy for perpetual offenders. If ALL pages, including instructional

pages, are routed through the Marketing Department, the aforementioned may not be necessary.

Finding: Admissions files are kept in the office in filing cabinets that are not fireproof. System backups are occurring, but it is unclear where backups are stored, how frequently backups are done, and how much information is captured. Regarding the latter, academic transcripts are among the information not loaded into the system, so a fire in the building would have catastrophic consequences.

Recommendation (D): Purchase fireproof files or a vault. Ensure appropriate redundancy occurs and information is stored in a separate location.

Next Steps

Findings and recommendations in this report are intended to generate discussion, questions, and even discomfort. You will receive maximum benefit from the consulting audit if this report is disseminated broadly on campus and opportunities for dialogue are created. Ultimately, the leadership team at Quinsigamond Community College will need to determine which recommendations to accept, reject, or modify, but what you learn from this campus discussion will further guide your decisions.

As you grapple with setting priorities remember, do not try “to eat the whole elephant.” Select a few initiatives that can be accomplished quickly (“the low hanging fruit”) as well as a few long-term initiatives with the highest potential return on investment. Regarding

the former, early successes are needed to build momentum and symbolically convey the importance of the change effort. The more complex, prolonged change efforts generally reap the most meaningful results. They tend to focus on changing the culture, organizational structure, policies, processes, or other core operational functions. Once priorities have been established, assignments can be made to existing task forces, newly formed work teams, or specific operational units.

Final Thoughts

In the Jim Collins book, *Good to Great*, the author describes a common phenomenon among companies that is equally as prevalent among colleges and universities. Collins calls it “the flywheel”—the belief that one dramatic strategy or effort transforms an organization from good to great. You are discouraged from searching for the “quick fix” that will propel QCC to reach an enrollment target that optimizes your capacity. Unfortunately, there is no single defining action or strategy significant enough to turn the giant flywheel—to yield dramatic recruitment or retention results that are sustainable over time.

It will be the cumulative effect of your efforts that will pave the path to success. It will not be the strategies per se that will get you there but rather your ability to execute better than your competitors. Indeed, every strategy currently in place at QCC or recommended in this report can be replicated. There is no sustainable competitive advantage in a strategy. QCC will ultimately be successful in achieving its bold aspirations by fostering a singular focus on improving the capacity to execute.

That capacity is your people. An investment of time and resources in staff learning can be correlated directly to high-performing enrollment organizations. Be intentional about the development of human capital as well as the motivation of your employees. The flywheel will turn if everyone is pushing in the same direction with equal vigor.

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Appendix A: Sample Web Policy

UNCG Unit Web Site Requirements

Introduction

The UNCG Web site is the most far-reaching component of the University's public presentation. The home page and top-tier pages are intended to meet the informational needs of external audiences. That places a vital responsibility on the site to market the University by presenting accurate and cohesive information that elicits a favorable impression of UNCG.

Faithfulness to appearance and programming standards within the UNCG site, including those managed by units, ensures a seamless, integrated Web experience for the site visitor.

The Unit Web Site Requirements provide comprehensive standards to which all unit Web managers are expected to comply.

The requirements do not apply to personal pages (including tilde accounts), course-related pages, or pages behind portals.

The University's commitment to Web site standards is stated in the policy II:C:015 entitled "University World Wide Web Site/WWW."

See www.uncg.edu/apl/POLICIES/iic015.html

Definition—“Unit”

A unit is defined in this document as a distinct entity having an identifiable affiliation with UNCG. A unit may or may not be a block on the University's organizational chart; units can be subsets of larger entities, as well as the programs and services they provide.

Examples:

- University divisions (e.g., Division of Student Affairs)
- Academic departments (Department of Nutrition)
- Administrative offices (Human Resources)
- Special academic programs (Freshman Seminars)
- Service points (Spartan Mail Center)
- Centers and institutes (Center for New North Carolinians)
- Sponsored organizations (Alumni Association)
- Public programs (University Concert/Lecture Series)

Other examples of units may be found at www.uncg.edu/apl/unit.codes.html.

Level 1—Minimum Standards

These are the minimum standards for unit Web sites at UNCG. By meeting Level 1 standards, the University will comply with basic requirements as set forth by:

Federal law

Americans with Disabilities Act of 1990

See www.usdoj.gov/crt/ada/pubs/ada.txt

Section 508 of the Rehabilitation Act Amendments of 1998

See www.section508.gov

Section 504 of the Rehabilitation Act

See www.section508.gov/index.cfm?FuseAction=Content&ID=15

North Carolina law

N. C. Office on the Americans with Disabilities Act

See www.osp.state.nc.us/ADA/theact.htm

UNCG's commitment to accessibility

Office of Disability Services

See ods.dept.uncg.edu

University's commitment to consistent Web presentation

UNCG Graphic Standards

See www.uncg.edu/ure/graphic_standards/index.html

Sitewide Programming Standards (Code)

*Federal, State, and World Wide Web Consortium's Web Accessibility Initiative Priority 1
Compliance*

Unit Web sites are required to meet the minimum federal guidelines for accessibility, as well as those put forth as a recommendation by the State of North Carolina.

Summary of Section 508 Standards

See www.section508.gov/index.cfm?FuseAction=Content&ID=11

World Wide Web Consortium (W3C) "Web Content Accessibility Guidelines,"

Priority 1

See www.w3.org/TR/WCAG10

XHTML 1.0 Transitional

XHTML 1.0 is the minimum World Wide Web Consortium (W3C) programming standard for UNCG unit Web sites. XHTML is a reformulation of HTML into an XML format; it will allow future compatibility with various devices and user agents. The transitional implementation of XHTML 1.0 is the most lenient and easiest to upgrade from HTML. XHTML may be either hand-coded or created with University-supported Web development software.

See <http://www.w3.org/TR/xhtml1>

Unit sites must be built according to this standard, not to a Web technology product such as Internet Explorer or Netscape Navigator.

Deprecated and presentational tags such as , , and <i> must be avoided in favor of CSS rules.

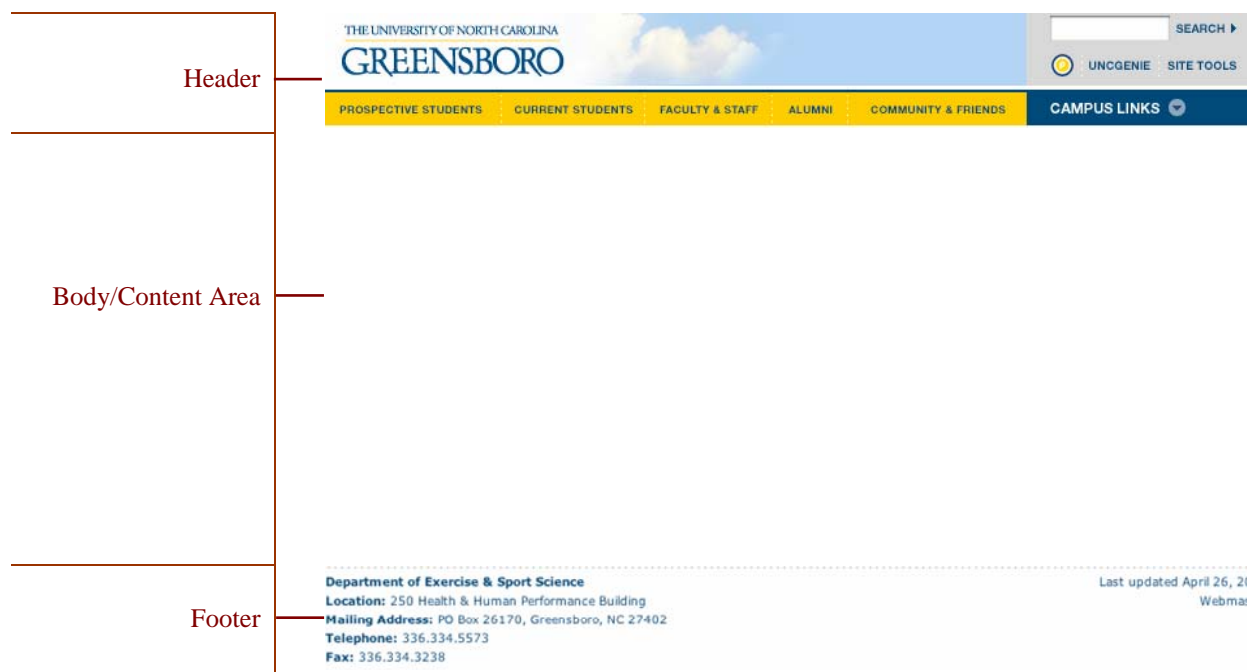
CSS 1.0

Cascading Style Sheets (CSS) 1.0 offers a simple mechanism for adding style (e.g. fonts, colors, and spacing) to Web documents and Web sites as a whole. CSS must be used for presentation of fonts and colors instead of HTML. CSS can be either external files attached to an XHTML page or snippets of code within an XHTML page.

Sitewide Identity Standards (Presentation)

Body/Content Area

No restrictions apply in the Body/Content area—the content between the Header and the Footer. Units are free to create content (including text, images, sound, animation, and interactivity) in any manner they choose, provided the site adheres to acceptable practices for Web presentation.



Technical specifications:

- The Body/Content Area must be 720 pixels wide or greater.
- If the unit pages are not a liquid layout (i.e., set to a percentage of screen width), the CSS media attribute must be set to "screen" or an alternate style sheet for other media, such as PDA or cell phones.

- The Body/Content Area must have no margins or padding; it must align to the upper left of the viewing area (0, 0).

Colors

A unit is not restricted to University Colors in the Body/Content area. However, if a unit chooses to employ University Colors the correct Web hex values are required, as detailed in the University Colors specifications.

See www.uncg.edu/ure/graphic_standards/color.html

Unit Home Page Identity Standards

Header

As the UNCG header is the primary form of site identification, it is required on unit home pages.



The header has two horizontal elements: The white/gray band is the Identity Bar, containing the University Wordmark, unit content, and a gray box (Search, Campus Pipeline, UNCGenie, and Site Tools). The gold/navy band is the Navigation Bar containing unit-specified links and the Campus Links pull-down menu.



Identity Bar

The Identity Bar has four segments:

1 200 pixels wide	2 140 pixels wide	3 200 pixels wide	4 180 pixels wide

Units have flexibility to display unique content (e.g. logo, text) in segment 3. The dimensions are 200 x 55 pixels.

If the unit chooses a photograph for segment 3, the image may graduate to the left (into the segment 2) within a 15-pixel buffer of the University Wordmark.



If the unit does not wish to use the third segment for unique content, then the tagline, “Inspire. Change.” is the default. The image may be downloaded from [\[Add link.\]](#)

Segment 1 (with the University Wordmark) and segment 4 (with the gray box and its contained links) must be employed exactly as provided by the University. [\[Add link.\]](#)

Navigation Bar



Units have flexibility to display unique content (e.g. links, text) in the gold section of the Navigation Bar.

If the unit employs the same affinity groups as the UNCG home page (Prospective Students, Current Students, Faculty & Staff, Alumni, Community & Friends), the links must point to the UNCG affinity group pages. The links cannot point to unit affinities unless so designated within the bar. For example, the Alumni button must go to www.uncg.edu/alumni and not to a unit's alumni page, unless the button says, "*Unit* Alumni," (e.g. "School of Music Alumni").

The navy bar must contain the Campus Links drop-down menu exactly as provided by the University.

Footer

A standard University Footer style is required on unit home pages, containing these elements

- Separator from page content
- Unit contact information at the left margin
- Other site information (accessibility statement, privacy policy, date of last update, developer credit, Webmaster link) at the right

Example

Department of Exercise & Sport Science
Location: 250 Health & Human Performance Building
Mailing Address: PO Box 26170, Greensboro, NC 27402
Telephone: 336.334.5573
Fax: 336.334.3238

Last updated April 26, 2004
Webmaster

Other examples may be viewed at
library.uncg.edu
saf.dept.uncg.edu

Noncompliance

The Web Oversight Committee recommends a procedure for addressing noncompliance to be implemented only when the complete cycle of voluntary conversions has run its course. Following the University's existing hierarchy, notification of noncompliance would be sent to the unit or department-level supervisor, along with instructions on how to ensure compliance and an offer of support from central teams. Copies of said communication will be forwarded to the relevant deans, associate vice chancellors, or associate provosts. If units fail to comply by the stated deadline (90 days from the original notification), a second communication will be sent to the provost or appropriate vice chancellor for whatever action they deem necessary. If noncompliance includes a violation of ADA legislation, University Counsel also will be notified at this stage in the process. University Counsel may take action independent of a unit or division's remedy to ensure ADA compliance.

Compliance and related notifications will be monitored by University Advancement. However, it is incumbent upon the senior administrators of the University to ensure

compliance within their respective areas. Senior administrators have the option of requesting that noncompliant Web pages under their supervision be removed from University servers.

Appeal Process for Exceptions

If a unit would like to deviate from Level One Requirements without being considered to be noncompliant, an appeal may be submitted to the Web Oversight Committee for approval. An appeal should include the name of the individual requesting an exception to Level One Requirements, the approval of the request for an exception by the unit head, and a brief justification. Decisions on appeals will be rendered within ninety days of receiving a formal appeal. Notification of the appeal decision will be sent to the person requesting the exception with a copy to the unit head from the chair of the Web Oversight Committee.

Appendix B: Sample Web Accessibility Policy

UNCG Web Accessibility Policy

I. Purpose

The World Wide Web is a major source of information for the faculty, staff and students of The University of North Carolina at Greensboro. Because UNCG is engaged in Web page and Web site development, this policy establishes standards for Web page accessibility.

II. Policy Statement

UNCG is committed to providing equal access to Web-based information in its programs and services in connection with Section 504 of the Rehabilitation Act of 1973 and the Americans with Disabilities Act. All official University Web Pages associated with University administration, services, courses of instruction, programs, and activities must conform to the Web accessibility standards and requirements below listed.

III. Definitions

- a. Official UNCG Web Pages: Any UNCG administrative or academic Web pages that are utilized for the transmission or receipt of official University materials or information.
- b. University Web manager: Anyone who develops or manages official University Web pages including, but not limited to, faculty, staff, students, volunteers and outside contractors.

IV. Standards

- a. Development of all official University Web Pages must include reasonable efforts to conform to the accessibility standards required under the above referenced laws.
- b. Development of all official University Web Pages must include reasonable efforts to make the sites functional and usable for persons with disabilities.
- c. Development of all official University Web Pages should include a good faith effort to select linked sites, which are accessible.
- d. If accessibility cannot be addressed in the Web page design, the institution must develop alternative ways for addressing the needs of disabled persons. An official University Web Page that is not accessible under the federal standards may be given an exemption provided that it meets one or more of the following criteria:
 - i. Compliance is not reasonably attainable with current technology;

- ii. The content cannot be effectively delivered in an accessible format without fundamentally altering the nature of the content; or
- iii. The content is undergoing initial development; this exemption is limited to a six (6) month development period.

V. Procedures

- a. Implementation and Enforcement. The Vice Chancellor for Information Technology and Planning through his designee, the ADA Web Accessibility Coordinator, is responsible for implementing and enforcing this policy and procedure.
- b. Accessibility Criteria. The criteria and guidelines for University Web Page accessibility are identified in the UNCG Web Accessibility Guidelines.
- c. Requests for Exemptions. All requests for exemption must be made to the ADA Web Accessibility Coordinator who will grant or deny the exemption based on the criteria above listed.
- d. Findings of Accessibility or Policy Violation. The following standards apply to potential violators:
 - i. All notices of policy violations or questions about accessibility will be submitted to the ADA Web Accessibility Coordinator.
 - ii. If the ADA Web Accessibility Coordinator finds that a University Web Site is inaccessible and/or that it has not been exempted from this policy, he will notify the Web manager (and unit Web accessibility officer) and seek correction of the deficiency or application for an exemption.
 - iii. If no correction or exemption is undertaken, the ADA Web Accessibility Coordinator may recommend to the Vice Chancellor for Information Technology and Planning that the Web manager's authority over the Web Site be removed.
 - iv. If no correction or exemption is undertaken, the ADA Web Accessibility Coordinator may recommend to the Vice Chancellor for Information Technology and Planning that the Web documents be removed from service.

VI. Statement on the Acquisitions of Web Related Products

a. Overview

As future IT procurement decisions are made by the University, an increased focus on people with disabilities, approximately 17% to 19% of our total population, will be of primary concern. The State of North Carolina, in conjunction with the Information Resources Management Commission (IRMC), has developed rules and regulations to

govern the activities of State Agencies. The University is not governed by any rules or regulations adopted by the IRMC, but they are a useful resource as below noted.

With respect to Federal standards, Section 504 and the ADA are the applicable mandates for the accessibility issues. While some federal grants and contracts require compliance with Section 508, the University is not covered by this law. The statute is, however, a useful resource for accessibility related questions and thus the references below are offered as useful guidelines. Based on the University's present exemptions and the above resource guideline, the following recommendations are offered for purchasing Web-related products.

b. Software

i. Where practicable, vendor-supplied components and solutions should be procured using Section 508 Federal Acquisitions Regulations. The Federal language is listed below in the "Terms and Conditions" section.

ii. For regular State contracts, the terms and conditions for the State of North Carolina require that the products and/or deliverables from an outside vendor or contractor must comply with Chapter 13 of the North Carolina Statewide Technical Architecture. Because the University does not fall under the requirements for the Statewide Technical Architecture or the requirements of the Information Resource Management Commission (IRMC), the University should consider language below in the "Terms and Conditions" section.

c. Hardware

i. Where practicable, vendor-supplied components and solutions should be procured using Section 508 Federal Acquisitions Regulations. The Federal language is listed below in the "Terms and Conditions" section.

ii. For regular State contracts, the terms and conditions for the State of North Carolina state that the products and/or deliverables from an outside vendor or contractor must comply with Chapter 13 of the North Carolina Statewide Technical Architecture. Because the University does not fall under the requirements for Statewide Technical Architecture or the requirements of the Information Resource Management Commission (IRMC), the University should consider language listed below in the "Terms and Conditions" section.

d. Terms and Conditions

i. Federal Acquisition Language. (a)(3)(vii): "(to) (a)ssess the availability of electronic information technology that meets all or part of the applicable accessibility standards issued by the Architectural and Transportation Barriers Compliance Board at 36 CFR part 1194 (see subpart 39.X)." We believe that such a template will provide a useful and convenient mechanism for making preliminary assessments regarding the availability of commercial electronic and information technology (EIT) products and services with features that support accessibility. It is assumed that offerors will also provide contact information to facilitate more detailed inquiries.

ii. Suggested University Specific Language

1. Services Acquisitions. All Web developed applications and/or deliverables developed for UNCG must comply with the State of North Carolina's Accessibility Architecture, which can be found online:

- The North Carolina Statewide Technology Architecture (NCSTA) Web Site is located online at http://ets.state.nc.us/ncsta/ets_index.html
- Specific PDF documents within the NCSTA site that reference principles, practices and standards: http://ets.state.nc.us/ncsta/ets_principles.html
- Architecture Domain General Implementation Guidelines: http://ets.state.nc.us/ncsta/ets_implementation.html
- Specific to Web Development Guidelines (PDF): <http://ets.state.nc.us/NCSTA/docs/Implementation/Web%20Site%20Development%20Guidelines.pdf>

2. Hardware Acquisitions. All hardware and/or deliverables provided by contractor for UNCG must comply with the State of North Carolina's Accessibility Architecture, which can be found online:

- The North Carolina Statewide Technology Architecture (NCSTA) Web Site is located online at http://ets.state.nc.us/ncsta/ets_index.html
- Specific PDF documents within the NCSTA site that reference principles, practices and standards: http://ets.state.nc.us/ncsta/ets_principles.html
- Architecture Domain General Implementation Guidelines: http://ets.state.nc.us/ncsta/ets_implementation.html
- Specific to Web Development Guidelines (PDF): <http://ets.state.nc.us/NCSTA/docs/Implementation/Web%20Site%20Development%20Guidelines.pdf>

3. Software Acquisitions. All applications and/or deliverables developed for UNCG must comply with the State of North Carolina's Accessibility Architecture, which can be found online:

- The North Carolina Statewide Technology Architecture (NCSTA) Web Site is located online at http://ets.state.nc.us/ncsta/ets_index.html
- Specific PDF documents within the NCSTA site that reference principles, practices and standards: http://ets.state.nc.us/ncsta/ets_principles.html
- Architecture Domain General Implementation Guidelines: http://ets.state.nc.us/ncsta/ets_implementation.html
- Specific to Web Development Guidelines (PDF): <http://ets.state.nc.us/NCSTA/docs/Implementation/Web%20Site%20Development%20Guidelines.pdf>

e. Related Web Sites

- i. National Information Technology Council
http://www.itic.org/policy/access_0106.htm
- ii. Voluntary Product Accessibility Template
<http://www.itic.org/policy/vpat.html#webdetails>
- iii. IRMC Web Site for Accessibility Standards
<http://irm.state.nc.us/techarch/archfrm.htm>

Appendix C: Web Accessibility Guidelines

UNCG Web Accessibility Guidelines

Under federal law, Section 504 of the Rehabilitation Act and Titles I and II of the American with Disabilities Act are the applicable mandates for the university's efforts to provide electronic accessibility to persons with disabilities. Also, for some federal grants and contracts, there may be requirements that grantees and contractees comply with Section 508 of the Workforce Investment Act of 1998, codified as Section 508 of the Rehabilitation Act Amendments of 1998. Because of that possibility and because the standards included in Section 508 provide one route to electronic accessibility, the following criteria drawn from that statute are offered as guidelines. Other accessibility models, however, may also be permissible under Section 504 and the ADA.

Methods of compliance with the North Carolina Persons with Disabilities Protection Act are based upon recommendations found within the Final Report of the IRMC Accessibility Work Group (<http://irmc.state.nc.us/access/finalrpt.htm#webpages>) and April 12, 2000 minutes (<http://irmc.state.nc.us/access/41200min.htm>)

Specifically, it recommends that WAI Checkpoints "Priority One and Priority Two would appear as 'best practices' within the Technical Architecture"¹.

See the following Web site for reference: Electronic and Information Technology Accessibility Standards – <http://www.access-board.gov/508.htm> – and from the World Wide Web Consortium's Web Accessibility Initiative guidelines and checklists – <http://www.w3.org/WAI/>.

Unless otherwise noted, all Web pages referenced in this document are accessible.

Text, Fonts, and Colors

Summary

- Choose fonts that are easy to read for users with low vision.
- Don't rely on color alone to convey information.
- Create text based upon function, not presentation.
- Be clear with your content.

Guidelines

- Divide large blocks of information into more manageable groups where natural and appropriate.
- When possible, text should use sans-serif fonts, such as Verdana and Arial. These are easier to read on a computer screen than fonts with serifs.

Example:

¹ <http://irmc.state.nc.us/access/41200min.htm>

- The font in this sentence is Verdana.
- This sentence is in Arial font.
See:
 - Lighthouse International's "Making Text Legible: Designing for People with Partial Sight" – http://www.lighthouse.org/print_leg.htm – for help in making effective font choices.
- All information that is conveyed with color should also be available without color.
See:
 - The Access Board's Section 508 Guide – [http://www.access-board.gov/sec508/guide/1194.22.htm#\(c\)](http://www.access-board.gov/sec508/guide/1194.22.htm#(c)) – for explanation and an example.
- Choose colors that can be distinguished by people who are colorblind. When choosing backgrounds and colors, make sure that color combinations are effective.
- Ensure that foreground and background color combinations provide sufficient contrast when viewed by someone having color deficits or when viewed on a black and white screen.
- See:
 - Lighthouse International's "Effective Color Contrast: Designing for People with Partial Sight and Color Deficiencies" – http://www.lighthouse.org/color_contrast.htm – for help in making effective color choices.
- Use:
 - Vischeck – <http://vischeck.com/index.php3> – to see how your Web page appears to users with colorblindness. Note: Vischeck is not a good example of an accessible site.
- Don't use background images that blend in with overlaid text. It may not be noticeable to users with good eyesight, but this can make your Web page hard to read for users with low vision.
- Mark up lists and list items properly.
- Mark up quotations. Do not use quotation markup for formatting effects such as indentation.

Graphics, Multimedia and Dynamic Content

Summary

- Non-text materials cannot be read by screen readers and text-only browsers. Provide text alternatives.

Guidelines

- Use the ALT attribute to provide text equivalents for all IMG elements.
See:
 - "ALT text and 'Equivalent Alternatives'" on NC State University's Web Accessibility F.A.Q. – <http://www.ncsu.edu/it/dss/webaccess/access-faq.html#1> – for more information about using ALT text.
- Provide text equivalents for all other non-text items.

See:

- “Text and non-text equivalents for applets and programmatic objects” on the W3C’s HTML techniques for Web Content Accessibility Guidelines 1.0 – <http://www.w3.org/TR/WCAG10-HTML-TECHS/#applet-text-equivalent> – for some specific code examples.
- Provide equivalent alternatives for any multimedia presentation and synchronize these alternatives with the presentation.

Examples:

- For audio materials, provide a text transcript of the audio – <http://www.webaim.org/tutorials/alt#1.1.12>.
- For video-based multimedia materials, provide captioning for the audio portion that is synchronized with the video – <http://www.webaim.org/tutorials/alt#1.1.13>.
- People with photosensitive epilepsy can have seizures triggered by flickering or flashing in the 4 to 59 flashes per second (Hertz) range with a peak sensitivity at 20 flashes per second as well as quick changes from dark to light (like strobe lights). If you include animated gif images or other refreshing content that cause the screen to flicker, avoid causing a flicker with a frequency greater than 2 Hertz and lower than 55 Hertz.
- Until user agents provide the ability to stop the refresh, do not create periodically auto-refreshing pages.
- When an appropriate markup language exists, use markup rather than images to convey information. Ex. MathML, CML
- Until user agents provide the ability to stop auto-redirect, do not use markup to redirect pages automatically. Instead, configure the server to perform redirects.

Image Maps

Summary

Use client-side image maps instead of server-side image maps where possible.

- Navigating image maps can present problems. Provide textual alternatives.

Guidelines

Image maps fall into two categories: server-side image maps and client-side image maps.

A client-side image map's functions are provided on the client's end (the user's browser) rather than at your Web server's side. All the information needed to run the map is included in your Web page document. Since text-only browsers, screen readers, and other devices may not be capable of interpreting links in server-side image maps, use client-side image maps instead of server-side image maps whenever possible.

Example:

- WebAIM Alternative Content Tutorial: Client-side image map regions – <http://www.webaim.org/tutorials/alt.php#1.5>.

- Server-side image maps do not allow you to use ALT tags to describe individual links in the image map. So if you use a server-side image map, provide a redundant set of text links to duplicate the links in the map. This allows users to interact with the links without having to use a pointing device, such as a mouse.

Example:

- WebAIM Alternative Content Tutorial: Server-side image map regions – <http://www.webaim.org/tutorials/alt.php#1.2>.

Tables

Summary

- Make sure tables will be read in the correct order by non-graphical browsers.

Guidelines

Used for Page Layout

Page layout tables visually format images, text, and other information on the page such as a navigation bar, or a newspaper page with stories, links, and images.

Each cell in a layout table is normally independent and can be viewed on its own.

If you use a table for layout purposes, make sure the table makes sense when it is linearized. This means that the cells are read in the order in which they appear in the HTML source code. This is not necessarily the order in which the text is laid out on the screen.

See:

- “Layout Tables” on NC State University’s Web Accessibility F.A.Q. – <http://www.ncsu.edu/it/dss/webaccess/access-faq.html#tables-layout>.

• Used for Data Presentation

- Data tables present relational data such as a bus schedule, a comparison of regional sales figures, or a listing of employee contact information.
- Provide information about the table by using appropriate table markup (e.g., markup headers on data tables using the TH element; use the SUMMARY attribute; etc.).

See:

- “Data Tables” on NC State University’s Web Accessibility F.A.Q. – <http://www.ncsu.edu/it/dss/webaccess/access-faq.html#tables-data>.
- For data tables that have two or more logical levels of row or column headers, use appropriate markup to identify those divisions.

See:

W3C HTML 4.01 Specification Recommendation "Table rendering by non-visual user agents" – <http://www.w3.org/TR/REC-html40/struct/tables.html#h-11.4>.

Frames

Summary

- Title frames to minimize confusion for screen reader users.

Guidelines

- To facilitate frame identification and navigation, title each frame, using the HTML TITLE attribute.

Example:

WebAIM Frames Tutorial showing an example of providing a title for each frame – <http://www.webaim.org/tutorials/examples/frameset>.

- Use the <NOFRAMES> element to define frames content for browsers that cannot display frames.

Example:

- Describe the purpose of frames and how frames relate to each other if it is not obvious by frame titles alone
- W3C's "Writing for browsers that do not support FRAME" – <http://www.w3.org/TR/WCAG10-HTML-TECHS/#noframes>.

Style Sheets

Summary

- If you use style sheets, make sure the content makes sense without the style sheet.

Guidelines

- Use style sheets to control layout and presentation.
- Use relative rather than absolute units in markup language attribute values and style sheet property values.
- Style sheets are used to control the layout and appearance of Web pages. Some browsers, including screen readers and text-only browsers, ignore style sheets when reading the content to users. If you use a style sheet, check your page with styles turned off to see if the page still makes sense.

How to turn off style sheets in your browser:

- In Microsoft Internet Explorer:
Tools --> Internet Options --> Accessibility --> Check all boxes under "Formatting"
- In Netscape Navigator:
Edit --> Preferences --> Advanced --> Uncheck "Enable style sheets"
- In Opera:
Press "Ctrl + G" or click the "Toggle Document Settings" button on the main browser window toolbar.

Scripts, Applets, PDF Files, and Other Applications

Summary

- Some browsers/screen readers do not support some plug-ins, applets, scripts, or other propriety formats. Provide alternatives for their users.

Guidelines

Provide alternative content for users with browsers that don't support scripts. Put the content within a <NOSCRIPT> tag.

Example:

- WebAIM Tutorial: Alternate content – <http://www.webaim.org/tutorials/alt#1.1.8>.
- If your Web page requires the user to have an applet, plug-in, or other application to interpret the page's content, you should provide a link on the page to it.
- Adobe PDF (Portable Data Format) files can be interpreted as graphics rather than as text by screen readers, rendering them inaccessible. If you must include a PDF file, make an HTML version of the file and include links to both versions.
Some PDF files can be converted to HTML with:
Adobe's "Online conversion tools for Adobe PDF Documents" –
<http://access.adobe.com/onlinetools.html>.

For scripts and applets, ensure that event handlers are input device-independent.

Avoid movement in pages

Ensure that any element that has its own interface can be operated in a device-independent manner.

Include ALT attributes when you use Java applets so browsers that don't support Java will give the user information about the applet's function.

Example:

- "Applets and Programmatic Objects" in WebAIM's Tutorial "Provide equivalent alternatives to auditory and visual content" –
<http://www.webaim.org/tutorials/alt#1.1.5>.

Interactivity

Summary

- Design forms so that all input elements are clearly labeled.
- Ensure that all interactive elements (like menus) are usable without the mouse or that alternatives are available that do not require the mouse and provide the functional equivalent.
- Do not change the user's focus without permission.

Guidelines

- Electronic forms that are supposed to be completed online should allow people using assistive technology to complete the forms. They should be able to access the information, field elements, and functionality required for completion and submission of the form, including all directions and cues.

See:

- WebAIM tutorial "How to Create Accessible Forms" –
<http://www.webaim.org/howto/forms>.

- For all form controls with implicitly associated labels, ensure that the label is properly positioned.
- Associate labels explicitly with their controls
- If a timed response is required, alert the user. Provide a way for the user to indicate if they need more time to respond.
- Screen readers and some browsers are unable to read moving text. Do not use moving, blinking, scrolling, or auto-updating objects or ensure, at the very least, that those objects can be stopped by the user.
- Until user agents allow users to turn off spawned windows, do not cause pop-ups or other windows to appear and do not change the current window without informing the user.

Navigation

Summary

If you repeat navigation bars on a page, let users skip them. Ensure that all links have meaningful text.

Guidelines

Navigation links, menus, or banners are often repeated on each Web page. Include a "skip to main content" link at the top of each page so that screen reader users can save time and don't have to listen to a repeated menu each time they move to a new Web page.

See:

- "Navigation" on NC State University's Web Accessibility F.A.Q. – <http://www.ncsu.edu/it/dss/webaccess/access-faq.html#4>.

Use navigation mechanisms in a consistent manner.

All links should have text that is meaningful. Some users and methods of browsing rely on the link text (and not the surrounding context) to determine the purpose of the link. Link text like "click here" does not provide the user with any useful information about the link.

See:

- "What should I use for the text of my links?" on NC State University's Web Accessibility F.A.Q. – <http://www.ncsu.edu/it/dss/webaccess/access-faq.html#nav-linknames>.

Programming and Structure

- Create documents that validate to published formal grammars.
- Use header elements to convey document structure and use them according to specification.
- Use W3C technologies when they are available and appropriate for a task and use the latest versions when supported.
- Avoid deprecated features of W3C technologies.
- Provide metadata to add semantic information to pages and sites.

- Provide information about the general layout of a site (e.g., a site map or table of contents).

Text-Only Page

Summary

When all else fails, provide separate, equivalent text versions of your pages.

Guidelines

- If you cannot accomplish compliance with these guidelines in any way on your Web page, you must still provide users with disabilities with the equivalent information or functionality. This can be done with a text-only page.
- The content of the text-only page must be updated whenever the primary page changes. By choosing to offer a text-only version of your Web pages, you will have two versions of your Web site to maintain and update.
See:
 - “Text-Only Pages” on NC State University’s Web Accessibility F.A.Q. – <http://www.ncsu.edu/it/dss/webaccess/access-faq.html#5>.

Web Accessibility Tools

Some suggested tools, tutorials, and simulations to help you make your Web pages accessible.

Accessibility Assessment Tools

Bobby – <http://www.cast.org/bobby/>

Bobby is a service provided by the Center for Applied Special Technology (CAST) to help Web page authors identify accessibility problems in their pages. It is available as a free online service or as a downloadable application.

- *WAVE* – http://www.temple.edu/inst_disabilities/piat/wave/
WAVE (Web Accessibility Versatile Evaluator), is a Web-based application developed at The Institute on Disabilities at Temple University. It is similar to Bobby, but its output centers on a graphical report, rather than a text report of the page’s HTML source. It also identifies the reading order of all the elements on the page, which is useful for assessing the underlying structure of a Web page.
- Accessibility Repair Tools
 - *A-Prompt* – <http://www.aprompt.ca/>
A-Prompt is a free Windows software application that allows developers to “wizard” over pages they have created and assess and fix problems as they go. When A-Prompt detects a problem, it prompts the user and guides her or him through the fix. It also has a number of automated fixes that speed up the process of repair. A-Prompt was developed by the Adaptive Technology Resource Centre (ATRC) at the University of Toronto in collaboration with the TRACE Center.

- Format Conversion Tools
 - *HTML TIDY* – <http://www.w3.org/People/Raggett/tidy/>
HTML TIDY is a free utility for making HTML source more readable and more correct. In addition to a variety of other features, including the ability to convert HTML formatting elements to CSS code and convert HTML to XHTML, HTML TIDY helps clean up hard to read and poorly generated HTML source from WYSIWYG editors and can help you identify potential accessibility problems.
 - *Adobe PDF Document Converters* – <http://access.adobe.com/onlinetools.html>
These online tools convert PDF documents into either HTML or ASCII text, which can then be read by a number of common screen reader programs. These tools approximate the logical reading order of the text in an Adobe PDF document and reformat it into a single column of text. Note: conversion will not work with all PDF documents—be sure to verify that your HTML or text versions are complete and correct.
 - *PowerPoint Slides* – <http://www.webaim.org/howto/powerpoint>
Short tutorial on methods for posting accessible PowerPoint content to the Web. Includes a link to and information about a free PowerPoint plug-in to help make accessible online presentations.

- Captioning Tools
 - *Media Access Generator (MAGpie)* – <http://ncam.wgbh.org/webaccess/magpie/index.html>
MAGpie is a free tool to help multimedia developers add captioning and audio description to their multimedia presentations. MAGpie version 1.0, available for Windows, supports Apple’s QuickTime, the Synchronized Multimedia Integration Language (SMIL), and Microsoft’s Synchronized Accessible Media Interchange (SAMI). The upcoming release of version 2.0 will include many new features and support for more operating systems.

- Code Validators
 - *W3C HTML Validation Service* – <http://validator.w3.org/>
Checks HTML documents for conformance to World Wide Web Consortium HTML and XHTML recommendations and other HTML standards.
 - *W3C CSS Validation Service* – <http://jigsaw.w3.org/css-validator/>
Checks for conformance with Cascading Style Sheets Level 2 standards.

- Simulations
 - *WebAIM Screen Reader Simulation* – <http://www.webaim.org/simulations/screenreader>
This simulation will help demonstrate what it is like for a person with a visual impairment to access the Internet using screen reading software.
 - *WebAIM Low Vision Disability Simulation* – <http://www.webaim.org/simulations/lowvision>
This simulation provides an opportunity for users to experience a Web page as someone with a visual impairment might see it. Visual impairments simulated include macular degeneration, cataracts, and glaucoma.

- *Vischeck Color Blindness Simulation* – <http://vischeck.com/index.php>
Vischeck simulates some kinds of colorblindness. Note: Vischeck is not a good example of an accessible Web site.

Other Resources

Standards and Guidelines

- Federal Section 508 Standards
 - <http://www.access-board.gov/508.htm>
 - <http://www.section508.gov/>
- Web Content Accessibility Guidelines 1.0
 - <http://www.w3.org/TR/WCAG10/>
 - <http://www.w3.org/WAI/>