

**Resources for use in the evaluation of  
Web and electronic communications**

Art & Science Group. (2002). *College of the Holy Cross Recruitment Market Positioning Study: Research Implications and Positioning Platform – Final Report*. October 29, 2002. Baltimore: Art & Science Group, LLC. Among the recommendations made: acknowledge and refute any potential misperceptions about being a Catholic college (e.g., diversity, tolerance); use profiles on the Web that echo positioning theme (integration of intellect/success and values); create interactive elements on the Web that engage students but also reinforce positioning (e.g., program that links interests with majors); create interactive Web programs that play out experiential application of knowledge (e.g., internships, research projects); print publications should be leading constituents to the Web; recruitment should be the initial priority on the Web; consider ‘personalized’ pages for recruits; track movement of site visitors (possibly by using cookies); create interactive application (on CD-ROM) that matches prospects interests and goals with the kind of experience they could have at Holy Cross; tailor email broadcast campaigns based on prospects Web access patterns.

Bailey, B. (2001). Web site Consistency. *User Interface Design Monthly*. Retrieved Aug. 2004 from <http://www.webusability.com>.

Physically inconsistent interfaces (variations in visual characteristics such as: color, labels, locations, shapes, sizes, etc.) measurably degrade users' performance.

Barnett, Alex. (2004). October comment: Will RSS and XML really signal the end for email? *Revolution*. London: Haymarket Business Publications, Ltd. Oct. 2004. Retrieved from <http://www.revolutionmagazine.com/Comments/index.cfm?fuseaction=ViewComment&commentID=130>.

Postulates there is evidence to suggest that customers will opt out of email newsletters and opt into RSS. ‘Fuelled by the blogging trend, RSS may well become the way many people get their content online.’

Bashford, S. (2004). Teen Web Sites: Tap into the Teen Market. *Revolution*. April 21, 2004, p92. London: Haymarket Business Publications, Ltd. General BusinessFile ASAP. Gale Group. Retrieved from [http://infotrac.galegroup.com/itweb/mlin\\_c\\_collhc/?db=GBFM](http://infotrac.galegroup.com/itweb/mlin_c_collhc/?db=GBFM).

Research shows the Internet is the prime media channel for teens. Building relationships with/through sites or creating online ‘street teams’ mentioned as methods for cultivating loyal site users.

Beckwith, Harry. (1997). *Selling the Invisible: a Field Guide to Modern Marketing*. New York: Warner Books. Includes a broad range of advice on marketing services. If you’re marketing a service, you’re selling a relationship. Every act is a marketing act, every employee a marketing person. Improve every point of contact. Find out who they are, find out what they want, find out what they need. Make choosing your service less risky for the customer and eliminate what he/she is afraid of, attack the stereotype about you. Show your warts even if it hurts, the truth will help. Don’t use adjectives, use stories.

Bermant, Charless. (2004). Timely, Focused Online Newsletter a Valuable Relationship Builder. *The Seattle Times*, April 24, 2004. Seattle: The Seattle Times Company. Retrieved from: [http://seattletimes.nwsourc.com/html/business/technology/2001911261\\_ptinbo24.html](http://seattletimes.nwsourc.com/html/business/technology/2001911261_ptinbo24.html).

Newsletters can be used to build relationships with audience, but in order to do so they must: provide unique information at a time when it can be used, be to-the-point and be relevant to the audience.

Briggs, J. (2003). Designing Blogs for Education. Retrieved Aug. 2004 from [http://www.jonathanbriggs.com/articles/Designing%20blogs%20for%20education\\_335BA.html](http://www.jonathanbriggs.com/articles/Designing%20blogs%20for%20education_335BA.html).

Burdman, Jessica. (1999). *Collaborative Web Development*. Reading, Mass.: Addison Wesley Longman. Critical to Web site success: executive-level support, including a strategic vision and a defined role for the Web within the organization. Also important for long-term planning is a clear funding path, you can’t plan if you don’t know what resources will be there from year-to-year. Balancing the needs of different departments should be done from a single point of contact using the overall organization’s objective for the site. Branding/treatment should be

consistent across departments, otherwise an unusable site may be the result. The information architect should be involved in any determination of branding/treatment.

Carnegie Communications. (2002). *Project Connect 2002: A Study on the Integration of Electronic Communication into College and University Recruitment Plans*. Retrieved Sept. 2004, from <http://www.carnegiecomm.com/downloads/ProjectConnect2002.pdf>.

When asked, students suggested colleges should spend 3 times the amount of money on Web sites than they do on print recruitment publications. Students find Web sites more useful & informative than print brochures and use Web sites more frequently. It hasn't replaced the demand for print, but has surpassed it. The Web is the single most important tool in the college search process.

Carnevale, Dan. (2004). A New Technology Lets Colleges Spread Information to People Who Want it. *Chronicle of Higher Education*, v50 i23. Retrieved from <http://chronicle.com/weekly/v50/i23/23a03101.htm>.

RSS feeds work well to communicate news and information but must be publicized to be picked up.

Churchill, Christine. (2004). Put your Web Pages on a Diet. Search Engine Guide. Retrieved Sep. 2004, from [http://www.searchengineguide.com/churchill/2004/0223\\_cc1.html](http://www.searchengineguide.com/churchill/2004/0223_cc1.html).

To improve search engine (SE) rank, move page content as close to the top of the code as possible and use external files for both CSS and JavaScript.

Clay, Bruce. (2004). *Search Engine Optimization*. Retrieved Sep. 2004, from [http://www.bruceclay.com/web\\_rank.htm](http://www.bruceclay.com/web_rank.htm).

Over 100 variables affect how a page is ranked by a search engine. To stay competitive check keywords, tag construction and inbound links to competitors' sites that outrank you then make strategy adjustments as necessary.

Dumas, Joseph S., and Janice C. Redish. (1999). *A Practical Guide to Usability Testing*. Revised edition. Portland: Intellect, Ltd.

Explains the importance of usability and methods of usability engineering - including the steps for planning and conducting a usability test, analyzing data, and using the results to improve both products and processes.

Eisenberg, B. and Novo, J. (2002). *The Marketer's Common Sense Guide to E-Metrics*. New York: Future Now, Inc. Using Web log data to measure business goals via e-metric benchmark formulas.

Fallows, D., Rainie, L., Mudd, G. (2004). Data Memo on Search Engines. Pew Internet & American Life Project. Retrieved Sep. 2004 from <http://www.pewinternet.org>.

Reports 84% of online Americans have used search engines – over 107 million people. On any given day, more than half of those online use search engines; more than two-thirds of Internet users say they use search engines at least a couple of times per week. 87% of search engine users say they find the information they want most of the time when they use search engines.

Fogg, B.J. (2002). *Prominence-Interpretation Theory: Explaining How People Assess Credibility*. A Research Report by the Stanford Persuasive Technology Lab. Available at <http://credibility.stanford.edu/pit.html>.

User involvement and motivation have a great impact on whether a site is assessed as credible. The higher the levels of motivation/involvement the more a user notices about a site. Errors, including typographical ones, become more prominent and noticeable when users have high involvement/motivation levels.

----- (2002). *Stanford Guidelines for Web Credibility. A Research Summary from the Stanford Persuasive Technology Lab. Stanford University*. Retrieved Aug. 2004, from [www.webcredibility.org/guidelines](http://www.webcredibility.org/guidelines).

Top guidelines for building the credibility of a site include: incorporate measures to prove your information and organization are valid and trustworthy, a professional design, ease of use, limit ads and limit errors.

----- (1999). *What Variables Affect Web Credibility? A Report of Ongoing Research from Stanford's Persuasive Technology Lab*. Available online:

[http://captology.stanford.edu/pdf/Web\\_Credibility\\_Variables\\_public.ppt](http://captology.stanford.edu/pdf/Web_Credibility_Variables_public.ppt).

Defines credibility as a combination of trustworthiness and expertise and subdivides credibility into four classifications: perceived, reputed, surface and experience. The mix of variables that have an impact on credibility change over time as the Web changes and user expertise increases. Need to continually reassess importance of variables making up users' credibility evaluations. Typographical errors decrease credibility proportionate to how vital the information on a page is.

----- (2003). *How do Users Evaluate the Credibility of Web Sites?* A study with over 2,500 participants. Proceedings of DUX2003, Designing for User Experiences. Available at: [http://www.consumerwebwatch.org/news/report3\\_credibilityresearch/stanfordPTL\\_abstract.htm](http://www.consumerwebwatch.org/news/report3_credibilityresearch/stanfordPTL_abstract.htm).

Fogg, B.J., Kameda, T., Boyd, J., Marshall, J., Sethi, R., Sockol, M., Trowbridge, T. (2002). *Stanford-Makovsky Web Credibility Study 2002: Investigating what makes Web sites credible today.* A Research Report by the Stanford Persuasive Technology Lab in collaboration with Makovsky & Company. Stanford University. Available at <http://captology.stanford.edu/pdf/Stanford-MakovskyWebCredStudy2002-prelim.pdf>.

Discusses factors affecting perceived credibility and user satisfaction of Web sites. Reports that among the top controllable factors are: previous positive experience, quick feedback, professional design, easy to navigate. Among the top detractors are: ads, difficult to navigate, broken links, typos, not updated, disreputable links. Found typos had the same negative effect on a site's credibility as a company's legal or financial troubles.

Fogg, B.J., Marshall, J., Laraki, O., Osipovich, A., Varma, C., Fang, N., Paul, J., Rangnekar, A., Shon, J., Swani, P., & Treinen, M. (2001). What Makes A Web Site Credible? A Report on a Large Quantitative Study. *Proceedings of ACM CHI 2001 Conference on Human Factors in Computing Systems*. Pp 61-68. New York: ACM Press. <http://captology.stanford.edu/pdf/p61-fogg.pdf>.

Discusses the results of a study examining which elements boost or hurt users' perceptions of Web credibility. The researchers found these elements fell into one of seven categories. In order of impact, the five types of elements that increased credibility perceptions were "real-world feel (physical address, rapid response to email)," "ease of use (well-designed, good architecture)," "expertise (credentials, reference sources)," "trustworthiness (inbound links, recommendations, visible policies)," and "tailoring (personalization)." The two types of elements that hurt credibility were "commercial implications" and "amateurism (small, not updated, errors, bad links, mismatch between organization and URL)." Younger respondents put more emphasis on the "amateurism" scale, older respondents on the "trustworthiness" scale.

Fogg, B.J., Soohoo, C., Danielson, D., Marable, J., Stanford, J. and Tauber, E. (2002). *How Do People Evaluate a Web Site's Credibility? Results from a Large Study.* Retrieved June 2004, from <http://www.consumerwebwatch.org>. Reports the following factors are mentioned most often when people evaluate site credibility: design (professional and high-quality), information structure (well organized), information focus (appropriate scope of information). Postulates that because of the speed with which users navigate a site they have developed evaluative efficiencies and use a basic human processing bias: 'looking good is being good.'

Gorn, Gerald J ; Chattopadhyay, Amitava ; Sengupta, Jaideep ; Tripathi, Shashank. Waiting for the Web: How Screen Color Affects Time Perception. *JMR, Journal of marketing research*. 41, no. 2, (2004): 215 (11 pages). Reports that background site color affects relaxation, perceived download quickness of sites, consumers' attitudes towards sites and their willingness to recommend sites to others. Color values had the strongest effect and passed through to attitudes toward the brand. Generally higher values (whiter colors) were the most beneficial. Blue hues and lower (desaturated) chromas were also reported as beneficial.

Goto, Kelly and Emily Cotler. (2002). *Web Redesign: Workflow that Works*. Indianapolis: New Riders.

Hall, Scott. (2004). How Strong is Your Web Site? *Stamats QuickTakes*, v7 no.7. Cedar Rapids: Stamats. Retrieved Sep. 2004, from [http://www.stamats.com/quicktakes2004/vol\\_7\\_n7.htm](http://www.stamats.com/quicktakes2004/vol_7_n7.htm). Recommends characteristics for improving college Web sites: organized for visitors; easy-to-use navigation system (including global navigation, tools and navigation styles) that stays constant through the whole site; integration with main brand & print materials, consistent layout and look through the whole site; strong images; writing uses short sentences, short paragraphs, and short articles; captivating, interactive content, like student journals, offering reasons to engage with the site & other constituents; optimized for search engines.

Hoover, S., Schofield Clark, L., Rainie, L. (2004). *Faith Online: 64% of wired Americans have used the Internet for spiritual or religious purposes*. Pew Internet & American Life Project. Retrieved Sep. 2004 from <http://www.pewinternet.org>.

Reports on a 2004 survey - 64% of U.S. Internet users perform spiritual and religious activities online. 38% of U.S. users have sent and received email with spiritual content; 35% have sent or received online greeting cards related to religious holidays; 32% have gone online to read news accounts of religious events and affairs; 21% have sought information about how to celebrate religious holidays; 17% have looked for information about where they could attend religious services; 7% have made or responded to online prayer requests; and 7% have made donations to religious organizations or charities.

Horrigan, J. (2004). *28% of American adults are wireless ready: A PIP Data Memo*. Pew Internet & American Life Project. Retrieved Sep. 2004 from <http://www.pewinternet.org>.

Reports on a 2004 survey in which 18% of Internet users said that in the past month they had used a wireless-enabled laptop and 29% of cell phone users said they had used a cell phone that can send and receive emails.

Johnson, Thomas J., Kaye, Barbara K. (2004). For Whom the Web Toils: How Internet Experience Predicts Web Reliance and Credibility. *Atlantic Journal of Communication* 12, no. 1 (2004): 19-45.

Reports that higher levels of involvement and interest are predictors of reliance on the Web, but that years online or experience levels were not predictive of Web reliance or credibility. Suggests in conclusion that content may have more to do with credibility assessments than users' experience/activity levels.

Johnson, Thomas J., Kaye, Barbara K. Using the Internet - Webelievability: A Path Model Examining How Convenience and Reliance Predict Online Credibility. *Journalism & Mass Communication Quarterly*. 79, no. 3, (2002): 619 (24 pages).

Web reliance was not found predictive of online credibility, however reliance on traditional media and convenience of online information were both predictive of credibility assessments online.

Kirp, David L. (2003). *Shakespeare, Einstein, and the Bottom Line*. Boston: Harvard University Press.

Presents case studies of about a dozen institutions of higher education relating how they've dealt with increasing competitive and market pressures and what impact their new strategies have had on the institutions.

Krug, Steve. (2000). *Don't Make Me Think: A Common Sense Approach to Web Usability*. Indianapolis: New Riders.

Discusses how people use the Web and makes recommendations for improving the usability of sites in order to increase effectiveness and improve users' perceptions. Includes guidelines like: users don't read - they scan; get rid of half of the words on a page - then get rid of half of those; people don't want to have to figure out how a site works - they'll just 'muddle through.'

Lenhart, A., Fallows, D., Horrigan, J. (2004). *Content Creation Online*. Pew Internet & American Life Project. Retrieved Sep. 2004 from <http://www.pewinternet.org>.

Reports statistics from a 2003 survey: 21% of Internet users say they have posted photographs to Web sites. 13% of Internet users maintain their own Web sites, approximately 7% have Web cams running on their computers. Between 2% and 7% of adult Internet users have created diaries or blogs, 11% of Internet users have read the blogs or diaries of others.

Miller, Ellen. (2005) Applications Jump at C.U.; Fall at Yale. *The Cornell Daily Sun*, February 15, 2005. Retrieved Feb. 2005, from <http://www.cornellsun.com/vnews/display.v/ART/2005/02/15/421191cb315d6>. Discusses applicant pool increases at Ivy League schools which redesigned their Web sites in 2004 compared to Yale which did not redesign its site and experienced a decrease in the number of applications received.

Neilsen, Jakob. (2005). Usability of Websites for Teenagers. *Jakob Neilsen's Alertbox*, January 31, 2005. Retrieved Jan. 2005, from <http://www.useit.com/alertbox/20050131.html>.

Summarizes results of a series of usability studies to determine how Web site designs can better cater to teens. Concludes teenagers don't read much online, have very limited patience and unsophisticated research strategies.

Cool graphics appeal to them, but they must be simple. Avoid dense text & make sites easy to scan. Interactive features work well: forums, message boards, polls, etc

----- (2004). Newsletter Usability: Can a Professional Publisher do Better? *Jakob Nielsen's Alertbox*, October 11, 2004. Retrieved Oct. 2004, from <http://www.useit.com/alertbox/20041011.html>.

Discusses various factors that have an impact on the usability of email newsletters, including: setting users' content expectations, integrating links to newsletter sign-ups from Web site pages, creating easy subscription maintenance, and keeping headlines short and specific.

----- (2003). Return on Investment for Usability. *Jakob Nielsen's Alertbox*, January 7, 2003. Retrieved Sept. 2004, from <http://www.useit.com/alertbox/20030107.html>.

Following a usability redesign, Web sites increase usability-related metrics (such as traffic, user productivity) by 135% on average.

----- (2004). Targeted Email Newsletters Show Continued Strength. *Jakob Nielsen's Alertbox*, February 17, 2004. Retrieved Sept. 2004, from <http://www.useit.com/alertbox/20040217.html>.

----- (2004). The Need for Web Design Standards. *Jakob Nielsen's Alertbox*, September 13, 2004. Retrieved Sept. 2004, from <http://www.useit.com/alertbox/20040913.html>.

With the average user spending 2 minutes or less on a site, any time spent figuring out how things work is time that is not contributing toward ROI. Users expect 77% of the simpler Web design elements to behave in a certain way - design to accommodate that.

----- (2000). *Designing Web Usability*. Indianapolis: New Riders.

Nielsen advocates prioritizing speed and simplicity of access above all other site characteristics - if a site is difficult to use it won't get used and by extension won't be able to meet stated objectives.

----- (1994). *Ten Usability Heuristics*. Retrieved Sept. 2004, from [http://www.useit.com/papers/heuristic/heuristic\\_list.html](http://www.useit.com/papers/heuristic/heuristic_list.html).

Presents ten general rules of thumb for effective interface design - basic industry standards.

Nielsen, J. and Tahir, M. (2002). *Homepage Usability: 50 Web sites Deconstructed*. Indianapolis: New Riders. Nielsen details 113 heuristics for the evaluation of Web sites, particularly homepages.

Olejniczak, B. (2003, Sep. 1). Using XHTML/CSS for an Effective SEO Campaign. *A List Apart*, i159. Retrieved Sep. 2004, from <http://www.alistapart.com/articles/seo/>.

Discusses methods for boosting search engine rankings by using XHTML and CSS to improve the readability of code for spiders and maintain a good content-to-code ratio without going beyond file-size and word-count limits.

O'Reilly, D. (2004). Web-User Satisfaction on the Upswing. *PC World*, May 07, 2004. Retrieved Sept. 2004, from <http://www.pcworld.com>.

Site visitors are more likely to finish Web tasks successfully than in prior years, but site searches are still troublesome. The more experienced Web users are, the more likely they are to rely on search (vs. navigation) to find information in a site. Site search tools have much lower success rates than major search engines (33% and 56% respectively). The length of time users spend on a page is very dependent on experience level: the inexperienced spend 35-60 seconds while the experienced spend 25-45 seconds.

Outing, S., Ruel, L. (2004). *The Best of Eyetrack III: What We Saw When We Looked Through Their Eyes*. Research from The Poynter Institute, the Estlow Center for Journalism and New Media, and Eyetools Inc. Retrieved Sept. 2004, from <http://www.poynterextra.org/eyetrack2004/about.htm>.

Clean clear faces on homepages attract more eye fixation, larger images hold attention longer. Smaller type encourages focused reading, larger type promotes scanning. People tend to read only first third of a headline or blurb. Navigation oriented at the top of a page performed best with users.

Pearrow, Mark. (2000). *Web Site Usability Handbook*. Boston: Charles River Media.

Princeton Survey Research Associates (2002). *A Matter of Trust: What Users Want From Web Sites*. Results of a National Survey of Internet Users for Consumer WebWatch. Available online at <http://www.consumerWebwatch.org/news/report1.pdf>.

Reports 80% of users say it is very important to be able to trust the information on a Web site and credibility is a key reason for choosing one site over another. Top five credibility-building characteristics: easy to navigate, trustworthy information, identify sources of information, frequent updates, able to locate information about the site.

Ragan Communications. (2004). Back to School: How Your University Web Site Can Stand Above the Crowd. *Web Content Report*. Chicago: Lawrence Ragan Communications, Inc. September 2004 p2(3,6).

Recounts advice from Genovese Coustenis Foster researchers. Focus on content and ease of use. Inject your brand into your home page via visual elements. Humans process visual information 60,000 times faster than textual information and visual aids can improve learning by 400%. Provide mission statement, tag line and brand design on home page. Increase interaction among constituent groups. Position your site as a resource throughout college search process. Dedicate content to parents. Reinforce key positioning messages throughout the site, not just on top level pages.

----- (2004). More than Just the Next Tech Fad. *Web Content Report*. Chicago: Lawrence Ragan Communications, Inc. October 2004 p3(1-2,8).

Discusses ways to use RSS feeds to increase communications and traffic to/from Web sites. Recommends registering feeds with aggregators for maximum exposure.

Raisman, N. (2003). Ah, What Rotten Webs We Weave. *Chronicle of Higher Education*, February 14, 2000. Retrieved March 2004, from <http://chronicle.com/weekly/v49/i23/23b01701.htm>.

As primary marketing tools academic Web sites reflect poorly on their institutions. Spelling and grammar errors, broken links, inconsistent navigation, lack of contact information as well as unprofessional and inconsistent design are the highlighted problems.

Read, Brock. (2004). Web Logs Help New Students Prepare for Campus Life. *Chronicle of Higher Education*, v51 i02. Retrieved from <http://chronicle.com/weekly/v51/i02/02a03501.htm>.

Blogs can alleviate first year fears and build communities between prospectives, students and alumni. Students trust blogs because of the grassroots, unfiltered quality of the information or advice they find on there.

Russell, Jenna. (2004). Freshmen Break the Ice with the Click of a Mouse. *The Boston Globe*, Aug. 15, 2004. Boston: Globe Newspaper Company. Retrieved from <http://www.boston.com/tools/archives/>.

Web sites for accepted students can ease first year jitters, build relationships and prevent students from switching at the last minute to schools where they had been wait-listed.

Qimei Chen, Sandra J. Clifford, William D. Wells. (2002) Attitude toward the site II: new information. *Journal of Advertising Research*, March-April 2002 v42 i2 p33(13).

Retrieved Sept. 2004, from <http://web3.infotrac.galegroup.com/>.

Suggests 'Informativeness,' 'Entertainment' and 'Organization' are the categories of site characteristics most important to users' attitudes toward a site. Relative importance of each category depends upon the type of site. Trust is a key factor in the 'Informativeness' category.

Sevier, R. A President's Primer on Developing on Effective Web Strategy. A Stamats White Paper. Cedar Rapids: Stamats. Retrieved Aug. 2003, from <http://www.stamats.com/whitepapers/pdf/WhitePaper12.pdf>.

A comprehensive Web strategy should include: institution-wide marketing strategy and goals, ROI expectations and measurements, a marketing or Web audit, defining the role of the site, defining audiences and discovering their needs, developing a plan to achieve objectives tailored to goals, organizing site architecture around audience needs & vocabulary, making the site usable, defining the measures you'll use to evaluate success. Tie all print campaigns to Web URLs to measure their success rates as well.

Shiu, E., Lenhart, A. (2004). *How Americans Use Instant Messaging*. Pew Internet & American Life Project. Retrieved Sep. 2004 from <http://www.pewinternet.org>.

Reports more than four in ten online Americans instant message (IM). That reflects about 53 million American adults use instant messaging programs and about 11 million of them IM at work.

Spool, J. et al. (1998). *Web Site Usability: A Designer's Guide*. San Francisco: Morgan Kaufmann.

Stamats. (2003). *2002 Stamats TeensTALK Study: Results of Market Research Findings*. Cedar Rapids: Stamats Communications, Inc.

This survey of 800 prospective students reports they rank college sites in the top 3 most important recruiting strategies and their first click on a college site is to: majors 33%, admissions 17%, academics 16%, athletics 5%, other 5%, prospective students 3%. Also reveals 38% read unsolicited email from colleges throughout the selection process and 22% more read at least the first few unsolicited emails.

----- (2003). Activities Undertaken by Parents as Part of College Search. *StamatsSTATS*, v4 no.6. Cedar Rapids: Stamats Communications, Inc. Retrieved 2004, from <http://www.stamats.com/stamatsstats/stamatsstatsvol4no6.htm> .

Stamats 2003 *ParentsTALK* study revealed that during the college search process 90% of parents discussed colleges with other parents, 70% visited college Web sites.

----- (2004). First Click on a College Web Site. *StamatsSTATS*, v5 no.7. Cedar Rapids: Stamats Communications, Inc.. Retrieved Oct. 2004, from [http://www.stamats.com/stamatsstats/vol\\_5\\_n7.htm](http://www.stamats.com/stamatsstats/vol_5_n7.htm) .

Stamats 2004 *TeensTALK* survey results report that 31% of college-bound high school students look for 'Majors' first on a college site, an additional 11% look for 'Academics.' 11% go to 'Admissions,' 8% to 'Cost,' 7% to 'Athletics,' 6% to 'About,' or 5% to Financial Aid as first choices. Results suggest having selected profiles, biographies, and success stories on department sites are very important. Results also have implications for consistent navigation and design.

----- (2003). Top Six Influencers of College-Bound Teens. *StamatsSTATS*, v5 no.4. Cedar Rapids: Stamats Communications, Inc. Retrieved 2004, from <http://www.stamats.com/stamatsstats/stamatsstatsvol5no4.htm> .

Stamats 2003 *ParentsTALK* study revealed that 54% of students say their parents are their main source of information and/or guidance during college decision process.

Stoner, Michael. (2004). How the Web Can Speak to Prospective Students. *Chronicle of Higher Education*, v50 i34. Retrieved from <http://chronicle.com/weekly/v50/i34/34b01001.htm>.

Letting current students speak directly to prospectives via blogs, journals, or email enhances content as well as provides variety and freshness. The 'My Hamilton' prospective student site boosted yield for accepted students to 40% in the year it was introduced.

Subodh Bhat; Michael Bevans; Sanjit Sengupta. (2002) Measuring users' Web activity to evaluate and enhance advertising effectiveness. *Journal of Advertising*, Fall 2002 v31 i3 p97(10). Retrieved Sept. 2004, from <http://web3.infotrac.galegroup.com/>.

Advocates use of multiple Web metrics in order to effectively evaluate site popularity, site stickiness, usefulness of communications for users, and effectiveness of targeting to users.

Sullivan, Danny. (2001). Checking Your Listing in Search Engines, Search Engine Watch. Retrieved from [http://searchenginewatch.com/webmasters/print.php/34751\\_2167861](http://searchenginewatch.com/webmasters/print.php/34751_2167861).

Various URL commands that allow you to check inbound links to pages.

----- (2004). Delving Deep Inside the Searcher's Mind, Search Engine Watch. Retrieved from [http://searchenginewatch.com/webmasters/print.php/35601\\_3406901](http://searchenginewatch.com/webmasters/print.php/35601_3406901).

40% of searchers are lost after the first page of search results, 80% after the third page. Searchers 'zero in' on lists of search results ignoring information on the perimeters of pages. When a search fails 47% of searchers switch to a different engine – don't optimize for just one SE.

----- (2003). How Search Engines Rank Web Pages, Search Engine Watch. Retrieved from [http://searchenginewatch.com/webmasters/print.php/34751\\_2167961](http://searchenginewatch.com/webmasters/print.php/34751_2167961).

Unique algorithms used to determine results rankings are secret. Some elements used in formulas: click-through measurements, keyword location and frequency, title tag text, inbound link analysis.

----- (2002). How to Use HTML Meta Tags, Search Engine Watch. Retrieved from [http://searchenginewatch.com/webmasters/print.php/34751\\_2167931](http://searchenginewatch.com/webmasters/print.php/34751_2167931).

Robots and description Meta tags are the only tags widely indexed. Meta keywords tag is now often ignored because of spamming (although internal site search appliances may still use them). Write body copy to include target keywords, but don't repeat them too often or ranking will be penalized.

----- (2003). Link Analysis and Link Building, Search Engine Watch. Retrieved from <http://searchenginewatch.com/webmasters/print.php/>.

Link text relevant to URLs boosts credibility & rankings, internal links count toward link popularity, internal redirections don't incur SE penalties.

----- (2002). Link Issues and Google, Search Engine Watch. Retrieved from <http://searchenginewatch.com/webmasters/print.php/>.

Internal cross-linking helps crawlers find pages and increases link popularity. Link text containing trigger/target keywords helps land you in results listings for searches on those keywords. Good inbound links boost rankings, no penalties for bad inbound links. Outbound links to bad sites may incur penalties. Too many outbound links on one page reduces the impact any single link from that page has on the popularity of the subject link.

----- (2002). Google Web Crawler: Ranking Well, Search Engine Watch. Retrieved from <http://searchenginewatch.com/webmasters/print.php/>.

Ranking boosts are given on text styles that indicate increased importance: heading or bold tags or larger sizes. Smaller than normal text sizes reduce weight given to the content of that text.

----- (2001). Measuring Link Popularity, Search Engine Watch. Retrieved from [http://searchenginewatch.com/webmasters/print.php/34751\\_2167951](http://searchenginewatch.com/webmasters/print.php/34751_2167951).

Quality and context of inbound links is as important as quantity in determining link popularity.

----- (2004). Nielsen NetRatings Search Engine Ratings, Search Engine Watch. Retrieved from [http://searchenginewatch.com/webmasters/print.php/34701\\_2156451](http://searchenginewatch.com/webmasters/print.php/34701_2156451).

Audience reach (1<sup>st</sup> visits only): Google 41%, Yahoo 31%, MSN 27%, AOL 13%. Media Metrix Search Share (multiple visits): Google 37%, Yahoo 27%, MSN 14%, AOL 13%.

----- (2002). Search Engine Placement Tips, Search Engine Watch. Retrieved from [http://searchenginewatch.com/webmasters/print.php/34751\\_2168021](http://searchenginewatch.com/webmasters/print.php/34751_2168021).

Rewrite dynamic symbols in URLs, spiders shy away from them because they are afraid of getting caught in a loop. Image maps and frames can impede spiders. Cross-linking within sites is very important to insure good rankings & indexing.

Thurrow, Shari. (2004). The 'Design' Part of Search-Friendly Design. Retrieved Sep. 2004, from <http://www.clickz.com/experts/search/results/article.php/3406421>.

Base site architecture on keyword phrases and relationships – design for conversion goals along with SE optimization.

----- (2003). Search Engines and Web Server Issues, Search Engine Watch. Retrieved from <http://searchenginewatch.com/subscribers/articles/print.php/>.

Use 301 redirect commands to let spiders know pages have moved permanently. Link depth can make it tougher for pages to be indexed – cross-linking important. Rewrite dynamic URLs to appear as static pages to sidestep spiders ignoring them.

----- (2004). Titles and Search Engine Marketing. Retrieved Feb. 2004, from <http://www.clickz.com/experts/search/results/article.php/3306541>.

Title tags must be editable in CMSs – vary them for optimal positioning. Use title attributes in anchor (a href) tags for accessibility but this doesn't help SE rank Multimedia files must contain metadata to assist SE ranking.

----- (2004). Top Five SEO Mistakes. Retrieved Sep. 2004, from <http://www.clickz.com/experts/search/results/article.php/3412591>.

User test with comps to see if audiences can tell where they are and where they can go. Design site based on how target audience looks for content – with the words they use to search. Keyword density should be 3-8%. Avoid splash pages.

User Interface Engineering. (2001, May). Are There Users Who Always Search? *UIETips*, May 2001. Retrieved from [http://world.std.com/~UIEWeb/Articles/always\\_search.htm](http://world.std.com/~UIEWeb/Articles/always_search.htm).

Examines Jakob Nielsen's assertion that over half of all Web users are naturally search-dominant. Suggests that search-dominant behavior may occur in response to the nature of a site's content (e.g., book titles lend themselves better to a search than trying to locate an item of clothing) or the architecture of the site.

Weinstein, B. (2000). Students Rate Colleges' Web Sites. *The Boston Sunday Globe*, March 26, 2000.

Reports that the Web Site Effectiveness Study of 10,000 high school students concluded Web sites are the leading source of higher education information and that students closely equate the quality of the site with the quality of the institution. Students ranked sites markedly higher when they liked the design, regardless of whether they stated that the information quality of the site was the most important criteria. Web sites are most influential early in the students' decision making process.

Zeldman, J. (2003, Nov. 14). Tackling Usability Gotchas in Large-scale Site Redesigns. *A List Apart*, i159. Retrieved Oct. 2004, from <http://www.alistapart.com/articles/tacklingusability/>.

Stresses the importance of redirecting URLs and remapping content for maintaining site usability in Web redesigns. Recounts techniques the author used to remap *A List Apart's* site during its recent redesign.

Zhang, Ping; von Dran, Gisela.(2001). User Expectations and Rankings of Quality Factors in Different Web Site Domains. *International Journal of Electronic Commerce* 6, no. 2.

Web sites often function as first point of contact for users and crucially affect their perceptions of and attitudes toward the organization. Not meeting users' expectations for key qualities & features (search, navigation, accuracy, comprehensiveness) will result in negative perceptions. Users' expectations quickly change, so a site must continually stay current with Web trends.