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The Essential Components of an Efficacious Web Site for the Recruitment and Retention of Stellar Graduate Students

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THE ESSENTIAL COMPONENTS OF AN EFFICACIOUS WEB SITE FOR THE 
RECRUITMENT AND RETENTION OF STELLAR GRADUATE STUDENTS

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Submitted in partial fulfillment of the requirements
for the Master of Arts in Corporate and Public Communication
Seton Hall University

2004
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CHAPTER 1 INTRODUCTION

The potential for use of the Internet for college or university searching by prospective students cannot be overestimated. *StudentPoll, Market Intelligence for Higher Education,* performs research annually since 1996 to determine how many prospective students have access to the Internet and how they are using the Internet. The numbers speak for themselves. The most recent survey, published in January 2003, reveals that 99 percent of college-bound high school students have access to the Internet whether it be at home or school. This number has steadily risen since 1996, when only 31 percent had access. On April 15, 1998, Bill Daley, Secretary of Commerce, delivered a speech to the President and to the public on the marketing potential of the Internet. In this speech, he stated that to acquire a market of 50 million people participating, it took radio 38 years, it took television 13 years, but it only took the Internet 4 years.

Working at a university, the author became acutely aware that the Web site of a school usually creates the first impression on prospective students of the school. Working as a student services employee, the author became acutely aware of the support that could be offered through the Internet. Students can access information needed instantaneously.

This awareness created an interest in finding out the components and qualities of a Web site that would help the site attract students and then retain those students.

As the Internet has expanded and matured and its uses multiplied, so have expectations of Web experiences. Web visitors have begun to expect more timely and precise
information. Whereas an annual academic catalogue, for example, is considered current within a year, Web pages are expected to be up to the minute.

The focus of this research is to determine the most effective components and qualities of a graduate school Web site. The main objective of a Web site for a graduate school is to recruit stellar students, retain those students, and then keep those students as active alumni. It is vitally important that prospective students quickly and easily find the information they are seeking in a pleasant manner. They should also get a sense of the atmosphere and character of the school. When seekers become students, they should be able to access pertinent information.

Research Question

What are the essential components of an efficacious Web site for recruiting and retaining stellar graduate students? The author will compile information from a student survey, small focus group interviews, administration interviews, review of the current scholarly research, and an analysis of competitor Web sites to determine the most important components and qualities of a Web site and utilize that data to create an outline for a state-of-the-art Web site for the Immaculate Conception Seminary School of Theology.

Subsidiary Questions

In preparation for answering the research question and creating an outline for a Web site, the author will answer the following subsidiary questions throughout the paper.

1. Who is the Web site audience?
2. What do the users want to do when they visit the graduate school Web site?
3. Is site organization/architecture important to the average graduate student?
4. What does the graduate school want the prospective/current student to get from the Web site?
5. What information would prospective students find useful on a Web site?
6. What information would current students find useful on a Web site?
7. What information would alumni of the school find useful on the Web site?
8. What technical aspects, such as download speed, of a Web site are important?
9. What makes a Web site usable?

Purpose of the Study

At the time of this report, the popular search engine, Google, states that it searches over 4 billion Web pages. With this number of Web pages, it becomes difficult to attract Web site visitors. It has become important to study and address the needs of the stakeholders of Web sites and evaluate the effectiveness of a Web site by analyzing feedback from Web users. The purpose of the study is to do just that. The author will determine what components and qualities of a graduate school Web site are essential and then use those findings to create an outline for a state-of-the-art Web site for Seton Hall University's Immaculate Conception Seminary School of Theology.

Objectives

The author's objective is to develop an outline for a graduate school Web site with qualities and components that attract and retain students.
Definition of Terms: The following definitions are from www.dictionary.com.

Internet - An interconnected system of networks that connects computers around the world via the TCP/IP protocol.

Web page - A document on the World Wide Web, consisting of an HTML file and any related files for scripts and graphics, and often hyperlinked to other documents on the Web.

Web site - A set of interconnected Web pages, usually including a homepage, generally located on the same server, and prepared and maintained as a collection of information by a person, group, or organization.

Limitations and Issues to Research Further

During the author's work on this research paper several issues arose which are suitable for further study. One idea is that alumni could be surveyed and it could be determined what components they, as a group, would find useful. The focus school happens to also be a seminary. Research could be done on the effects of the Internet and vocation discernment. Seminarians could be surveyed to determine what components that specialized group would find helpful.

A primary limitation of this study pertains to the survey. The survey instrument was sent by email and posted on the Internet. This was beneficial in that the survey reached many people and a substantial amount of data was received by the researcher. Because the
survey was almost exclusively electronic, it must be assumed that the students who were most comfortable with computers returned the survey. In retrospect, the author would have appreciated a more diverse response.

The current literature regarding optimum Web site creation for schools was perused and competitor Web sites were analyzed. In the next chapter, *The Emerging Dynamics of Collegiate Web Sites*, the author shares her findings.
"A bad Web site is like a grumpy salesperson."

- Jakob Nielsen, Web Usability Guru

The current literature on effective Web pages contains a prevailing theme of usability. It is a simple premise: If the Web site is not usable, the user will not return. The researcher searched the current literature on usability.

Usability

Common business sense dictates that both the buyer (in this case, the student) and the seller (in this case, the graduate school) benefit from the transaction. Therefore, in the case of a Web site, "user-centered design is just plain business sense." (Brinck, 2002)

The goal of a Web site is to have the user succeed within the context of achieving the goals of the graduate school. Usability is the way to attain this goal. An article in the New York Times on November 4, 2003, spoke of the fabulous success of the search engine, Google. This great success is attributed to its ability to search, yes, but equally important, its usability. The Google site contains 35 words and the corporate logo. The site is quick, clean and clear, the epitome of usability.

According to Jakob Neilsen, usability expert, Web usability is a quality attribute that assesses how easy user interfaces are to use. Usability has five quality components as
Chapter 2 - The Emerging Dynamics

shown in the diagram below.

Figure 1: Components of Usability

1) Learn-ability: How easy is it for users to accomplish basic tasks the first time they encounter the design?

2) Efficiency: Once users have learned the design, how quickly can they perform tasks?

3) Memorability: When users return to the design after a period of not using it, how easily can they reestablish proficiency?
4) Errors: How many errors do users make, how severe are these errors, and how easily can they recover from the errors?

5) Satisfaction: How pleasant is it to use the design?

These five qualities combine to make the site usable. The balance between the five changes for different kinds of projects. The initial phases of learnability have dominated Web usability because people leave Web sites that they can't figure out on the first visit. But if you can make a site sufficiently approachable to get a substantial number of repeat visitors, then memorability would be important as well, and if people used the site frequently, then efficiency for the expert user would become important.

A highly usable site is one which is intuitive. The site allows the user to accomplish their goal easily and quickly. Brinck (2002) sees the design goals of a usable site as the following: functionally correct, efficient to use, easy to learn, easy to remember, error tolerant, and subjectively pleasing.

In his article, "Ah, What Rotten Webs We Weave," Raisman (2003) writes of the common mistakes that Web site designers make and the result of these mistakes. He feels that most college and university Web sites are poorly designed. The problems he talks about range from the small (but embarrassing) mistakes to failure to use the newest technology.
Raisman (2003) visited hundreds of college and university Web sites and surveyed over one thousand students. He made some very interesting findings which will surely influence this author's final product. One interesting and disturbing find was that 86% of the hundreds of sites he surveyed did not provide any email addresses for specific members of admissions staff or information on how to contact them. There might have been a directory but they were useless unless you knew the name of the person you wished to contact. That is a cause for frustration for the visitor and potential student.

Fifty-two percent of these Web sites had a link to send an email to the admissions office in general, but 34% of the 1,244 students that Raisman interviewed reported that they felt they were sending their question into cyberspace and would have preferred a name of a particular person. Moreover, very few students received responses from those general links.

Broken links were a common find of Raisman's research. For example, the link to a spring schedule of courses was inactive on one site. Another college had a link to "The Administration" and when Raisman clicked on it he was shown a list of employees of the human resources department. Still another college had a list of 63 possible links and only 31 of them were active links. These broken links cause the visitor to develop a poor impression of the school. Chances are that the potential student will abandon this Web site and visit another institution's site.

Regarding the hiring of designers to create a Web site, Raisman advises, "Be sure to hire a designer who understands that simpler is often better." He advises using a font which
reflects your institution and using a limited number of fonts. Raisman also thinks that the use of gimmicks, such as flying words should be kept to a minimum or not used at all.

Since commercial sites use the most sophisticated technology that has the ability to load pages rapidly, no one has much patience for slow loading pages. Accordingly, Raisman feels strongly, as does virtually all Web developers and users, that a simple, quick loading page is the key to keeping the visitor’s attention. Steve Telleen, Managing Director of the Web site ScoreCard, puts it in no uncertain terms, "Increasingly, Web developers are enamored of special effects and forgo the kind of simplicity that's key for a good customer experience. Consumers come to the Web for ease of use. Take that away from them and they're not coming back." (2002)

Ng, Parette, and Sterrett (2003) are graduate students who evaluated a graduate school Web site and published their findings in the College Student Journal. The purpose of their study was two-fold. First, they wanted to examine how graduate students perceived college and University Web sites in general. Secondly, they wanted to evaluate the effectiveness of a specific graduate school Web site by asking students to perform selected tasks and then rate the Web site based on their experience. Findings of their study suggested that graduate students perceive these Web site characteristics as being important (in order of highest to lowest ranked):

a. Organization/Site architecture

b. Ease of Navigation

c. Content

d. Download Speed
Chapter 2 - The Emerging Dynamics

e. Organization by target audience

f. Friendliness

g. Minor emphasis on graphics

Ng, et al. found that these results were consistent with the findings of other studies.

Analysis of Competitor Web sites

The author searched and analyzed Web sites of various graduate schools concentrating on those which are considered similar. One such School is Fordham University's Graduate School of Religion and Religious Education. This site is located at http://www.fordham.edu/general/GraduateSchools/ReligionReligious5722.html. This Web site had some positive attributes as well as some problems. First of all, the Fordham banner remained on the top of the page while navigating through the various pages. This is considered to be important to the user enabling the user to remember where they started and where they are. At any time while navigating the School's Web site, the user can easily get back to the University's homepage. The site was simple and loaded quickly but was missing some key elements. There was no link on the homepage to be able to apply online and no clear link for contact information. The list on the left hand side to navigational points was repeated in the middle of the page. This is a waste of space. A list of courses offered in the current academic year was listed but it was not specified whether the courses were offered in the Fall or Spring, who was teaching them, or what time or day they were offered. It also had one broken link (Financial Aid).

Broken links are probably the major error on the Internet.
Another site the author visited and analyzed was that of Boston College's School of Theology. This site is located at http://www.bc.edu/schools/cas/theology. This Web site was very attractive. It was simple and downloaded quickly but had 5 important links clearly labeled right on the front. There were several features which were very attractive. First, each page fit onto the screen perfectly. In other words, there was no need to scroll down to see more information. Secondly, there was specific contact information allowing the viewer to see the names, phone numbers, email address and titles of key personnel.

The Question and Answer page was a very useful one. The link labeled "Faculty" lead the author to a list of links to each faculty member. When following those links the user was able to get specific information on each Professor. The author feels this site is a very good, usable, attractive site.

Drew University's Theological School was another Web site which the author analyzed. This site's homepage is at http://www.drew.edu/theo/index.php. The author found this site to be very well organized and very deep. The homepage was simple and downloaded relatively quickly. The page contained one picture which changed occasionally. On the left pane there was a list of links to such areas as academics, admissions, alumni, catalog, faculty and staff, and other vital information. All links were active. The author particularly liked the link to "registration." The link brought the student to clear instructions in registering online. The link to "faculty and staff" brought the user to a page of all the professors and then a link to a sort of homepage for each professor. The page included direct contact information. The author believes this type of link would fulfill a need of students. Most of the links provided additional links which provided a tremendous amount of other information. For example, when the author pressed the link
to "academics", the next page brought the user a list of useful links such as catalog, common ground, community fellow, degrees offered, special programs, and many more. The author believes that several aspects of the Drew Theological School Web page could be used as a guide for developing a Web site for the Immaculate Conception Seminary of the School of Theology.

The Process of Web page creation

"The dumbest mistake is viewing design as something you do at the end of the process to 'tidy up' the mess; as opposed to understanding it's a 'day one' issue and part of everything."

- Tom Peters (@issue Journal of Business and Design, Vol. 6 No. 1)

Creating a usable Web site takes organization and planning. In the book, "Developing Online Content, the Principles of Writing and Editing for the Web," the authors clearly layout suggested stages of Web page creation. They are shown in Figure 2 above.
Stage 1 in the process of Web site creation is to determine the requirements of the site. This is the most important step of all. The target audience must be identified and understood. The goals of the user of the Web site, in this case prospective students, current students, and alumni, must be identified. The goals of the business, or in this case the school, need to be identified. The technical requirements of the site should be analyzed. Hammerich and Harrison (2003) suggest that this information be gathered by
surveys, competitor site analysis, interviews and analysis of the current site. The author will show how this research was completed in the next Chapter, Chapter 3, Research Design and Development.
CHAPTER 3 METHODOLOGY - RESEARCH DESIGN AND DEVELOPMENT

The Survey

The author prepared a survey to ask graduate students what they thought were the most important components of a usable and effective graduate school Web page. The survey was posted on the Web at http://piratcs.hued/ smolinma. The entire survey, as it appears on the Web, is printed and attached as Appendix A. The survey was set up so that after the survey taker completed the survey, it could be submitted electronically. The results were immediately emailed to the author’s email inbox. The results were received as seen in Figure 3. As the reader can see, the results were completely anonymous. At the same time, the results were automatically entered into an Excel database so the results could be analyzed. This database is attached as Appendix B.

In the introductory section of the survey the reader was notified that the survey was a part of research being conducted for a thesis project to complete the requirements for a Master’s degree. The confidentiality of the survey was stressed, contact information given and words of appreciation expressed.

The main part of the survey was titled, Part 1: Survey Questions. The survey taker was asked to rate the specific components of graduate school Web sites based on a scale of 1 to 5, 1 being very unimportant and 5 being very important. In the next chapter, the author will list the specific component and give the results of the survey.
In the third part of the survey, titled Part 2: Optional Questions, the following questions were asked: Gender, Age, Occupation and How Comfortable are you with the Internet. In Chapter 4 the author will impart the results of part 3.

The author emailed the link to the survey to all graduate students in the School of Theology and the Stillman School of Business at Seton Hall University, as well as several graduate students in the Master of Arts in Corporate and Public Communication. It was not possible to know how many people received the link because mailgroups were used. One hundred and forty four surveys were received completed via email, representing a very significant quantitative sample.
Figure 3: Sample of Survey Response
Interviews

The author spoke with Marie Somers, Web Development Manager at Seton Hall University, to present her intentions of updating the School of Theology Web site and seek her advice and input. Ms. Somers first advised the author that a complete redesign was not advisable because the Information Technology Department of the University recently proposed a complete restructuring of the entire Seton Hall University Web site. She suggested that the author review the current site and do some research and based on that research and review, create an outline for a new site.

The Web Development Manager offered some invaluable advice on creating school Web sites. First, she stated that one of the key elements in redesigning a Web site is to understand your audience. Understanding who the audience is and what they expect from the site is a primary need. The author followed Ms. Somers' suggestion in developing the survey instrument which is discussed in the previous section of this chapter. Secondly, she suggested that the author determine what the administration of the School wants the users of the Web site to do upon visiting the site. The needs of the administration must be met and fulfilled. The author had open access and constant feedback from the administration of the School of Theology to make sure their needs were fulfilled. Ms. Somers suggested that the administration know who will be providing the content and most importantly, who will be doing the updating of the Web site. She states, "If these last two responsibilities are not clearly defined you may end up with a great-looking, but dead Web site." The author has found much research that supports this statement. If the
content of the Web page is not current, the site is useless to all stakeholders. This matter was discussed with the administration of the School. In the past, the person who controlled the updating of the site was off-campus. It was determined that this was not ideal because updates should be done on a continual basis. It was determined that the School would have a person on campus be responsible for this important task. The author suggests the use of a database-driven site design so the content can be kept up-to-date by the person in the office responsible for each item. At this point, unfortunately, the technology is not readily available at the University.

The University suggests using a template that several other Schools within the University have already adopted. The School of Theology, however, is somewhat different that the other schools in that it is also a Seminary. Ms. Somers acknowledges this difference and suggested that the author look not only at the suggested template but also at other seminaries and schools of theology to determine what she calls “best practices” with that specialty and to see what kind of functionality is included in those sites.

A technical question that was posed to Ms. Somers was what program was used throughout the University to publish the Web page. She stated that all the publishing was through Microsoft’s FrontPage but other programs could be used to create them.

Father Nick Lombardi, SJ, Ph.D., Instructional Technologist and Director of Faculty Resource Centers at Fordham University, was contacted by the author for his expert opinion regarding graduate school Web sites. Following are the questions asked of this expert as well as the answers received:
Q: How important is a grad school web site?
A: Unfortunately much more important than most deans, program directors and chairs know. It is not just important for recruitment of students, but for drawing the best faculty as well by creating important research sites that reflect the best work of the school.

Q: What is the biggest goal of a graduate school Web site?
A: In one simple word: communication. The communication I'm talking about is getting the word out to the world (prospective students and faculty, present and future colleagues) about the school: its goals, its resources, its achievements, its projects/research.

Q: What is the biggest challenge in maintaining a graduate school Web site?
A: The word here is "maintenance" or possibly "dynamism." The challenge is not just keeping the web presence up to date (though that is at the very top of the priorities list) but making sure you have the personnel to do it and that they have the communication skills to garner the information necessary to keeping the site dynamic from all
Chapter 3 - Research Design and Development

the proper players. They have to know who the players
are, what they are doing, and communicate it intelligently

and in a timely fashion.

Fr. Lombardi reinforces some basic ideas such as the importance of keeping the Web site
current and getting the information out to as many people as possible. But Fr. Lombardi
adds an enlightening fact—when creating an outstanding Web site, outstanding faculty
will also be attracted. Job seekers are certainly browsing the Web sites of their
prospective employers. While this author is focusing on students' perspectives,
maintaining an efficacious Web site will also benefit faculty recruiting.

Focus Groups Interview

The author met with two small groups of non-seminarian students of the Immaculate
Conception Seminary School of theology to seek input and ideas. One group met during
the day hours and the other group in the evening. This allowed the author to seek
views from both daytime and evening students. Daytime students, in general, are not employed
full-time so their needs may be very different.

The focus groups consisted of adult graduate students whose gender and ages were a
cross section of the non-seminarian school population. The students were mixed in the
way that they use the Web site. One student relayed the fact that she could never find the
Web site. She was able to find the University Web site but never found the School site.
Others used the Web site when they were looking into applying and attending to the
School. In general the students did not use the Web site once they were enrolled. Several
students stated that some of the professors within the School utilize BlackBoard

(Blackboard is a comprehensive software platform that delivers a course management system, a customizable institution-wide portal, and online communities) as a teaching tool and they were using that site.

The author asked the students to identify components which would be helpful to them as current students and characteristics what makes the site a usable one. Several suggestions were made. Primarily, the Web page should be easy to find from the University's homepage. There are several ways to get to the School of Theology Web site. Several mentioned that they click on Catholic Tradition, while the majority clicks on Academic Programs and Resources. One student relayed the fact that when she was looking for a program on Christian Spirituality she searched the university site but was unable to locate the Christian Spirituality program that is currently offered. The author used the search utility located on the University homepage to search for "spirituality" and the engine returned 220 results. The tenth result was the School of Theology Web site citing the Certificate program in Spirituality. The author found this to be an adequate search.

All students agreed that a current course schedule be made available on the site and be kept current. This seemed to be of utmost concern to current students. A suggestion was made that contact information be made clear and available on the site. Several students suggested making the professors' email addresses readily visible as well as those of staff and administrators.
Several members of the focus group mentioned that it would be very helpful if some common forms would be available on the Web, not only for print but to submit them also.

Time is a valuable commodity for graduate students as the majority is also working full-time and have family and other commitments. To be able to access forms such as Course Adjustment forms, and submit them from their computers would be helpful.

Another suggestion was that links to important University sites be put on the Seminary Web site. Of particular interest was a link to Health Services homepage. Other sites could be Financial Aid, Bursar, or Enrollment Services.

The focus groups provided a good opportunity for the author to meet with graduate students and hear, first hand, their ideas and concerns of the specific Web site of the Immaculate Conception Seminary School of Theology.

Administration Interviews

The administration of the Immaculate Conception Seminary School of Theology has several main objectives for the School Web site. Primarily they want the site to be user friendly, one that potential students and current students can easily find pertinent information. Prospective students should be able to readily find information such as phone numbers and other contact information. Current students should also be able to find information. A few specific requests include a place for relevant forms, the Academic Handbook and a link to the University Graduate Catalogue. The administration agrees with the need to design the site with information set off in categories according to
The administration also wants the site to portray what the School is in reality; a School that teaches a solid theology, has exemplary professors, and boasts a welcoming environment. The seminary should be portrayed as a vibrant, dynamic community of administrators, faculty, seminarians, and students. They would like to see the site reflect a clear sense that we are centered around Prayer and Spirituality, not that we necessarily have prayers for all each day, but that it underlies all else we do.

In the next chapter, the author integrates the information gleaned from the interviews, research, the survey instrument, and current "best practices" and designs an outline for the Immaculate Conception Seminary School of Theology.
CHAPTER 4 RESEARCH RESULTS

Survey Results

The following components of a Web site were listed on the survey and the survey taker was asked to use a rating of 1 (low) to 5 (high) and rate the importance of the particular component. The author will list the component as it was on the original survey and give the average rating. To arrive at the average, the author programmed the Excel spreadsheet to automatically list the results for each component and calculate the average. The results are as follows:
Chapter 4 - Research Results

Average response

5.00
4.50
4.00
3.50
3.00
Cl>
Ill
c
0 2.50 a. 
Ill 
Cl> 
a::
2.00
1.50
1.00
0.50
0.00

Components

Figure 4: Survey results - Part II
1. **Course descriptions**: Brief descriptions of courses offered. The average for Course Descriptions was 4.15. This amounted to being the third most important component for a graduate school Web site according to current graduate students.

2. **Current course schedules**: List of courses offered current semester and next. With a score of 4.38, this component was the most important component of a graduate school Web site according to the survey results.

3. **Faculty biographies**: Biographical sketches of current faculty. This component received a score of 3.29 making it the 8th most important component. Only two other components were considered less important according to surveyed graduate students. This component might have scored higher if prospective students were surveyed.

4. **Current news and events**: Recent and upcoming events, activities and publications. At a score of 3.14, Current News and Events scored the lowest score. It is the component which is least important according to the results of the survey.

5. **Alumni information**: Alumni events, job placement, update information, email directory, ability to donate on-line. Alumni information ended with a score of 3.20 which was the second lowest. According to current students, this was not an important component. If a different population sample was surveyed, especially alumni, this component would be much higher.

6. **Admission requirements**: Application requirements and procedures. This component scored a 4.12 which made this item the fourth most important one.
Again, this item is more important for prospective students but apparently there is strong opinion among current students that this information should be available on the site.

7. School contact information: Contact information for Administration, Faculty and Staff. According to the survey results, contact information received a score of 4.02 which put it right in the middle. When the author spoke with small focus groups, this item was rated as a high preference.

8. Links to University related sites: Links to Financial Aid, Campus Maps, University Library, etc. This component received a score of 3.74 making it the sixth most important component of graduate school Web sites.

9. Downloadable forms: Common forms such as Tuition Discount, Course Adjustment, Application for Degree, etc. With a score of 3.95, downloadable forms ranked about in the middle in importance.

10. Program Description: Descriptions of each program offered including requirements. Program Descriptions ranked very high in importance with a score of 4.29. Apparently, current students remember the need for this as prospective students and have a use for it while in the program of their choice.

The components that the survey takers ranked in importance from highest to lowest in the following order:

a. Current course schedules
b. Program description
c. Course descriptions
Chapter 4 – Research Results

d. Admission requirements

e. School contact information

f. Downloadable forms

g. Links to University related sites

h. Faculty biographies

i. Alumni information

j. Current news and events

Part three of the survey asked optional questions relating to the demographics of the survey takers. The participant was asked if they were male or female. Of the 144 responses, 60 were female and 84 were male. Of those, 12 were under 21, 68 were between the ages of 21 and 30, 26 were between the ages of 31 and 40, 22 were between the ages of 41 and 50, 10 were between the ages of 51 and 60, and 4 identified themselves as being over 60. All the respondents replied that they preferred receiving information from their school via the Internet as opposed to mail or phone. One respondent replied that they also liked receiving calls or mail from time to time. The survey was delivered to graduate students. The survey taker was asked to enter his or her occupation. Many graduate students are part-time students. There were 18 people who identified themselves as being students and 9 identified themselves as being seminary students. The remainder either did not answer the question or chose to put their job as their occupation.

The responses are tallied in the table below:

| Total Respondents | 144 |
### Chapter 4 - Research Results

<table>
<thead>
<tr>
<th>Category</th>
<th>Number</th>
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<td>Marketing Assistant</td>
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The survey takers were given the opportunity to add additional comments in Part II. The comments were very constructive and helped the author tremendously. Some of the more helpful comments are as follows:

In this age of advanced technology, a university's Web site is the first impression made upon a student. In some cases the Web site is the deciding factor on whether that student pursues their interest in the university and takes the time to request additional information and maybe even apply to the program.
I am actually looking at a few PhD programs currently and am surprised at the lack of information I find on some Web sites compared to the abundance of pertinent info on others. Also, I've found it uniquely frustrating when links are not current (i.e., to Financial Aid) or I have to search the entire site to find something that should be obvious to begin with (i.e., Admissions information, Graduate Catalog links, request for materials).

Finding a Prof on the Web site is a nightmare; we should have a search button that should easily do this.

The essential ingredient to any Web site is that the material stays current. When I notice that a Web site has a lot of old material, I just stop visiting the site.

The contact information does not always have phone number information. The links are sometimes not helpful for certain questions. Also, the requirements need to be more specifically spelled out. For instance, when I applied to the M.Div. program, I was not told that I would have to pay $325.00 for a psychological exam. This information is not included in any of the literature that I saw.
Anything available by paper should be available online.

The comments submitted by the survey takers reiterated the fact that people are impressed or turned away by a Web site. Students want current, pertinent and complete information clearly available to them. Web sites can clearly make or break a person's decision to apply and attend a specific school.

Immaculate Conception Seminary School of Theology Website

The Immaculate Conception Seminary School of Theology's Web site as it appears today, was created approximately five years ago. The School of Theology is very unique among the schools of Seton Hall University because it is also the major seminary of the Archdiocese of Newark. The School of Theology is run under the auspices of the Archdiocese as well as the University. Whereas Seton Hall University suggests a particular layout for its graduate school Web sites, some leeway is given to the Seminary because of its unique status.

A basic rule of usability within graduate school sites is to make sure the page is consistent in design with that of the University so the user always knows where they are. If a prospective student is seeking information regarding the various degrees offered at Seton Hall University at the graduate level and happens to enter the School of Theology page, there is a chance that they can forget what University they are presently researching. There is no University banner or symbol and no link to return to the main
University page. The color scheme is totally different. The author suggests a clearer connection to the University site be made.

On the first page of the site, there is general contact information on the top of the page. This includes one phone number, land-mail address and one general email. The author suggests that this is not adequate. This may be adequate for the first page but there should be a link to more specific contact information clearly labeled on the main page. A link to specific contact information for each faculty member and each department should be easy to find. For example, there could be a link to Office of Academics, Office of Student Services, Office of the Dean, Office of Formation, etc. Personal email addresses for each faculty member should be available to students. Drew University's Theology School has an excellent contact page that could be emulated. The main link says Faculty and Staff.

When you click on that link you are brought to a page that has each department listed with the specific faculty and staff members. Each name is a link to specific information.

On the Immaculate Conception Seminary School of Theology's main Web page, there are eleven links to various other pages including the following: Graduate Degree Programs, Special Programs, Certificate Programs, Course Schedule, Course Descriptions, Faculty, More Info, Cornerstone Newsletters, Gerety Lectures, Seton Hall Home and Apply Online. Below the links is a description of the School, general admission information as well as some photographs. There is a list of the administration near the top of the page. While the page has a very nice artistic look and important links to information, there are some changes that could be made. To make the first page more
usable, the entire page should fit on the screen or there should be links to the information that appears below. As it is now, the user will not see admission and tuition information unless they scroll down. There is no way for the user to know that important information is below. Also, the download time for home page is estimated by FrontPage to be 79 seconds over a modem which has a speed of 56k. The author believes this is too slow for the home page because research shows that many people will not wait for the page to load. Prospective students will be lost.

The author suggests that the links be reorganized according to target audience. Ng, Parette, and Sterrett (2003), found in recent literature and in their own survey, that it was relatively important to arrange information according to target audience. The links that this authors suggests would include: About the School; Current Students; Prospective Students; Priestly Formation Program; Alumni; Administration, Faculty and Staff; and News and Events.
CHAPTER 5 SUMMARY AND CONCLUSION

Summary

This thesis project developed into one with two distinct phases, a research phase and a design phase. In the research phase, there was a large survey, expert interviews, small focus group interviews, a literature review, and Web site evaluation. In the design phase, the author compiled the information gleaned from the research phase, and applied it to the actual updating of the School of Theology Web site.

Hammerich and Harrison (2003) suggested that to develop an efficient Web site, the developer should use five distinct phases of development. The first stage was to determine the requirements of the site. The author performed this stage by taking a survey of approximately 144 students, interviewing the administration of the School, interviewing small focus groups of current students of the School, and reading the most current literature. This stage is the most important and the bulk of this project. The second step is to come up with a conceptual design incorporating the findings of the first stage. Next, Hammerich and Harrison suggest creating prototypes of the site that was conceptualized. The fourth step is to produce the final site and finally it would be launched. This proposal encompasses stages 1, 2 and 3. The author determined the needs of the site, conceptualized a design and began to create a prototype. The final product has not yet been created or launched but will be in the near future.
Requirements of the Web site

Survey

The main survey instrument was electronically distributed and received. The results were clear. Current graduate students want a functional site that distributes pertinent information. The most important components they want to find easily are current course schedules, program descriptions, course descriptions, admission requirements, and contact information. Less important components are downloadable forms, links to University related sites, faculty biographies, alumni information, and current news and events.

Interviews

The author interviewed three distinct groups. First small focus groups of current students of the School of Theology met and discussed their ideas about the Web site. The greater part of the group was not frequent users of the site although they did have some ideas on what would make it more valuable to them. All students agreed that a current course schedule be made available on the site as well as contact information is made clear and available on the site. Several students requested that the professors' email addresses readily visible as well as those of staff and administrators. Several of the students suggested that forms be available on line and the technology be added that would make it possible to submit these forms. Lastly, this group thought that links to opposite University sites be available on the School site.
The second group of interviews was to gather information from professional web developers at the university level. First the author approached the Seton Hall University Internet Developer. This Web developer validated information garnered from the surveys, other interviews and research. Primarily, she suggested, know your audience and what they expect from the site. Secondly, she advised the author to determine what the administration of the School wanted the site to accomplish. The expert reiterated the need to keep the Web site updated and know who will provide the content as well as who will be doing the updating.

Another expert interview was performed. The author interviewed the Instruction Technologist from Fordham University via email. This professional suggested that the goal of the site should be to communicate to all stakeholders, information about the school. He suggested the key word in dynamism, in other words keeping the information current and clear.

Lastly, the Administration was asked their goals for the site. Primarily they desire that the site convey to the user what the School is in reality; a School that teaches a solid theology, has exemplary professors and boasts a welcoming environment. The administration wants the site to portray the Seminary and School of Theology as a vibrant community that is centered on prayer and spirituality. Practically speaking, they also want the site to be user friendly and provide pertinent information. Specifically they requested that forms be available for download, and links be available to the Academic Handbook and University Graduate Catalogue.
In perusing the most current literature on the creation of effective Web sites for graduate schools, the author found that the most important quality must be usability. To attract and keep users coming to the site (and therefore the School) the design goal is for the site to be functionally correct. The site should be efficient, easy to learn, easy to remember, tolerant to user error, and subjectively pleasing. Researchers have found that the organization or architecture of the site should be carefully thought out and tested. It should be easy to navigate, quick to download, contain the most pertinent information, and be error free.

Conclusion

The author incorporated all the information from the first stage of Web developing and applied it to when creating an outline and conceptual design of a new Web site for the Immaculate Conception Seminary School of Theology. Although there is a delay in the launching of the specific site, the author anticipates that it will eventually be launched. The school has also taken measures to ensure the site will be maintained.

The major factors gleaned from this project are primarily, to make the Web site as efficient and usable as possible. The Internet has a huge audience who is reachable with a minimum amount of effort. Especially when seeking schools, potential students will primarily begin by looking at Web sites. Besides being usable, the site should be able to deliver pertinent and useful information. The information should be kept absolutely
current. Keeping these factors in mind, and adding some creativity, will make for a
successful Web site.
BIBLIOGRAPHY


Survey

This survey is a vital part of research being conducted for a thesis project to complete the requirements of the Master of Arts in Corporate and Public Communication. The purpose of this research is to determine the most important components of a usable and effective graduate school web page.

All survey results are strictly confidential. If you would like to know the final survey results, please contact me at smolinma@shu.edu and I will provide you with a copy.

Your participation in this project is greatly appreciated. If you have problems with submitting this survey online and would like to mail it to me, please send it to:

Margaret Smolin
90 Ward Place
South Orange, NJ 07079

Thank you.

Part 1: Survey Questions

Please rate the following components of a graduate school Web site based on a scale of 1 to 5. (1 = very unimportant and 5 = very important.)

1. Course descriptions: Brief descriptions of courses offered.
   1 2 3 4 5

2. Current course schedules: List of courses offered current semester and next.
   1 2 3 4 5

3. Faculty biographies: Biographical sketches of current faculty.
   1 2 3 4 5

4. Current news and events: Recent and upcoming events, activities and publications.
   1 2 3 4 5
5. Alumni information: Alumni events, job placement, update information, email directory, ability to donate online.

6. Admission requirements: Application requirements and procedures.

7. School contact information: Contact information for Administration, Faculty and Staff.

8. Links to University related sites: Links to Financial Aid, Campus Maps, University Library, etc.

9. Downloadable forms: Common forms such as Tuition Discount, Course Adjustment, Application for Degree, etc.

10. Program Description: Descriptions of each program offered including requirements.

Please add additional comments:

Part 2: Optional Questions

Please answer the questions below:

Gender: Male
Age: Under 21

Occupation:

How comfortable are you with the Internet:
I prefer to obtain information from the Internet.
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<th><strong>Week 2</strong></th>
<th><strong>Week 3</strong></th>
<th><strong>Week 4</strong></th>
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</tbody>
</table>

**Notes:**
- Week 1: Introduction to the project.
- Week 2: Planning and scheduling.
- Week 3: Resource allocation.
- Week 4: Review and updates.
- Week 5: Mid-project milestones.
- Week 6: Final preparations.
- Week 7: Project completion.

**Tasks:**
- Task 1: Research
- Task 2: Design
- Task 3: Implementation
- Task 4: Testing
- Task 5: Documentation
- Task 6: Quality assurance
- Task 7: Client feedback