

iSchool Graduate Student Admissions Major Issue Analysis

Submitted to:

Peter McNellis, Ph.D.
Goodwin College of Professional Studies
Drexel University

Prepared by:

Jessica Grace, Assistant Director
Commuter and Off Campus Student Programs and Services
Drexel University

Chad Morris, Assistant Director
Office of Graduate Admissions
Drexel University

Rick Romyn, Manager of Team Services
Department of Athletics
Drexel University

6/28/2007

Executive Summary

Online graduate students in Drexel University's College of Information Science and Technology (iSchool) have a retention rate of 75%, conversely this means that there is an attrition rate of 25%. Currently 60.6% of the school's students take classes online so this is a notable issue for the college. According to Dr. Lynne Hickle the Associate Dean for the iSchool the attrition rate is higher than the college sees as acceptable for a few reasons. The first reason is that any student who does not complete their degree program contributes negatively to Drexel's national ranking. The second reason is the loss of revenue that is associated with the attrition rate.

Due to the need for a study to be conducted on student satisfaction as a way to prevent further attrition and increase retention rates, this Six Sigma project will examine the retention problem closely and provide potential solutions to the issue for Dr. Lynne Hickle and other administrators in the iSchool.

Following the Six Sigma Strategy, a satisfaction questionnaire was developed for the graduate students in the iSchool. This questionnaire was based upon two existing assessment instruments: *The Graduate Quality of University Experience Report (G-QUE)* from the Ohio State University and the *Commuter and Off Campus Student Satisfaction Survey* from Drexel University.

The satisfaction questionnaire was distributed via the online survey site, Survey Monkey. Once the survey was uploaded on to Survey Monkey, graduate advisors from the iSchool placed an information message about the survey on the school's website and emailed all IST graduate students with the link to take the online survey. This survey was online for four weeks, and during that time 398 students participated. The college currently has 867 students enrolled in online classes, thus we had a 46% completion rate.

The iSchool online students were asked in which area they had faced their greatest problems as graduate students, the results were as follows:

Financial Issues	38.5%
I have not faced any problems	24.3%
Academic Issues	15.9%
Other	12.6%
Access to Resources	5%
Admissions Issues	3.8%

The results clearly showed that Financial Issues and Academic Issues are the areas of largest concern for Master's and Doctorate level online students. These problems are consistent across all demographic areas, academic fields, and year in the program with secondary concerns in community involvement.

From the data collected through the questionnaire, a few conclusions were drawn. First, students within the iSchool do not feel that they are able to get general questions answered in a prompt manner, and this causes the students extra stress due to the fact that their time is limited. Secondly, these students want better interaction with faculty, graduate advisors, and between departments. Lastly, these students felt that they were not provided with adequate information on academic, financial, professional, or campus related activities and opportunities. Based on these findings, several possible solutions were generated. Each solution was measured against four criteria: cost, time, effectiveness of solution, and applicability to other schools within the University.

From a review of the data collected, current literature, and current services at benchmark institutions, along with a comparison with the four criteria mentioned above, it is proposed that a single department, The Office of Graduate Student Affairs, be created, and housed

within the iSchool. This Office would consist of staff hired specifically to oversee the implementation of student services, financial information, communication about existing services, web development, community initiatives, online faculty trainings and the peer mentoring program. This Office would also act as an advocate for graduate students to the University as well as outside vendors and agencies.

1.0 Introduction

Goals for the Project

For this Sigma Six project the group wanted to focus on the problems and issues faced by Master's and Doctorate students in a specific academic program within Drexel University. We contacted each of the seven academic colleges at Drexel, and eventually decided to focus our efforts on the College of Information Science and Technology (iSchool) due to the fact that they were the only college that had retention data concerning their graduate student population.

Currently, there is no data as to the cause(s) for the College's attrition rate, therefore the goal of this project is to identify those issues and outline a plan of action that can be used to correct the problems which are contributing to the current attrition rate. It is also our hope that the information gained from this study can be used to boost graduate student retention rates across campus. The purpose of this report is to present the results of our team's problem solving process and present possible solutions to increase the retention rate of these students.

The Instrument

A satisfaction questionnaire for the graduate students in the iSchool was created with the help of Dr. Lynne Hickle, the Associate Dean for IST, and two existing assessment instruments: *The Graduate Quality of University Experience Report (G-QUE)* from the Ohio State University and the *Commuter and Off Campus Student Satisfaction Survey* from Drexel University.

The satisfaction questionnaire was placed on the online survey site, Survey Monkey. Once the survey was uploaded on to Survey Monkey, graduate advisors from the iSchool placed an information message from about the survey on the iSchool website and emailed all iSchool graduate students with the link to the online survey.

The Results

Following the Six Sigma problem-solving strategy, we concluded from the *Graduate Student Experience Survey* (GSES) developed for the iSchool that the Master's and Doctorate level, online graduate students in the iSchool are concerned with the following issues:

1. Paying for tuition and living expenses
2. Having better quality interactions with faculty and fellow students
3. Quality of the curriculum and instruction
4. Lack of communication between students and University departments, graduate advisors and faculty
5. Not enough information listed on the iSchool website concerning academic, financial, professional and campus resources

This report presents a detailed explanation of the steps we followed using the Six Sigma problem solving strategy - define, measure, analyze, improve, control - to determine why the customer was dissatisfied with their educational experience at Drexel University. The goal will

be to improve the students' Drexel experience in the above mentioned areas in order to increase retention for the iSchool.

2.0 Improvement Opportunity: The Define Phase

This project will focus on possible reasons why graduate students within Drexel's iSchool leave the University. Currently the retention rate is at 75%, and, as such, the attrition rate is at 25%. According to Drexel's Enrollment management, retention numbers for undergraduates is around 65%, whereas the Graduate Studies Office believes that retention rates for Master's level students should be between 70-80%. Based on the need to increase retention rates in the iSchool, the issue of graduate student retention was chosen for this project for three reasons: accessibility to needed information, shared experiences, and the need for campus wide information on graduate student retention.

To help gain access to retention information and contacts within the iSchool, two members of the project group communicated with the iSchool, Chad Morris, Assistant Director in the Office of Graduate Admissions, and Jessica Grace, Assistant Director of Commuter and Off Campus Student Programs and Services. Both Jessica and Chad work on a daily basis to recruit, help retain and advocate for the needs of graduate students on campus, so this project will allow them to use their expertise in the area of graduate student retention. Secondly, each member of the project group has or is working toward his or her Master's Degree, and as such, we wanted to focus on a project that could help students flourish in situations where we perhaps had met challenges. Finally, no current information on graduate student retention exists at the University aside from the iSchool. This project will hopefully be a catalyst for further research on graduate students across the University. In all, these reasons make this project very appealing to the group, and we hope that the solutions derived from the *GSES* and current literature will help Master's and Doctorate students in the future at Drexel.

The Scope of the Project

Our project scope was limited to just the iSchool within Drexel University. We focused on the iSchool because they were able to provide the most complete background data on their Graduate level students. The iSchool was also very responsive to the group's requests, and the College provided us with statistical information from 2003-2005 concerning Master's and Doctorate student retention. The information provided helped the group to not only create the *GSES*, but allowed the group to see that the iSchool would be a key collaborator on this project.

The scope of this project was limited because of a time constraint and availability of information. The group wanted to complete this project in the time allotted by the Six Sigma program, therefore the group decided to focus only on one academic college. In addition, information did not exist in other academic Schools and Colleges for retention that the group could use as a basis for the project.

Defining the Success of the Project

There are two key measures that we will use to define the success or failure of the project. The first key measure would be the number of Master's and Doctorate students who complete the questionnaire. In the iSchool, as of the Winter term 2007, the iSchool reported that there were 867 Master's/Doctorate level students enrolled in the program. Of those 867 students, 398 completed the questionnaire, which is a 46% completion rate. We set 30% response rate as our goal heading into the project.

The second key measure would be our ability to provide a usable solution based upon the feedback we receive. We were able to use the data collected to provide a final solution, which factored in the main complaints voiced by the students. Based upon the data collected and the group's final solution, we consider this project to be a success, even though the group had the inability to actually implement the final solution.

The impact of our project will initially be felt in the iSchool, and hopefully eventually throughout the University. At the Master's and Doctorate degree level, a student who does not stay long enough to complete the degree program translates directly to lost revenue for Drexel University. It is also our hope that the information gained from this study can be used to boost graduate student retention rates across campus. By boosting the graduate student retention rates, we are increasing the income to the university as well as creating a better reputation for the institution and academic program. The reputation will help to attract a higher level of faculty, and as such, a more advanced student.

Defining the Sample

National Statistics

In understanding who the graduate students are at Drexel University and to define this project's survey group, it will be beneficial to look at national and campus trends in graduate education. In June of 2006, the National Center for Educational Statistics published, *Student Financing of Graduate and First Professional Education, 2003-04: Profiles of Students in Selected Degree Programs and Part-time Students (NPSAS)*. This report's purpose is to "provide a snapshot of graduate and first professional students and how they finance their education and to provide a useful reference tool for federal and state policy makers, college administrators and others seeking detailed information on financial aid" (p. iii, NPSAS, 2006). This report also provides detailed information on the defining characteristics of today's graduate student and first-professional students. The information below is taken from the 2006 NPSAS.

Nationally, there were 2.8 million students enrolled in a graduate or first-professional programs. Of those students, 60% were enrolled at the Master's level with 47% of those students attending part-time. Of the total graduate population, 4% were doctorate students with 50% attending classes part-time. Twelve percent were enrolled in professional schools, while the remaining 14% were either taking graduate courses without being enrolled in a post-baccalaureate or post-master's program.

Most national statistics and literature revolve around the doctoral student's experiences. Doctoral students pursuing doctorate degrees in fields other than education are 31.6 years old on average. Of those pursuing the above mentioned doctorate degree, 45.2% are female, 43.2% are married and 25.9% have dependants (5.8% of the 25.9% are not married).

Fifty-five percent of all doctoral students received some sort of grant, while 30% of these students took out federal loans with the average total amount of aid being \$15,100. "Assistantships were particularly important for doctoral students, 41 percent received an assistantship in 2003-2004 with an average amount of \$13,300" (p. v, NPSAS, 2006). Concerning part-time students, 27% of those students receiving loans are part time, 39% received grants and 10% had assistantships.

The average age of a Master's student pursuing a Masters of Science (M.S) degree is 32 years old. Of M.S. students enrolled in graduate programs, 48.5% are female. Concerning marital status, 38.1% of M.S. students are married, while 31.8% of these students have dependants (9.2% of the 31.8% are not married, yet have dependants). On average 41.3% of M.A./M.S. students are working to meet expenses. Thirty-six percent of M.A./M.S. students received

some sort of grant with 35.3% of these students taking out federal loans. In addition 47.2% of these students worked 35 or more hours per week.

Campus Statistics

Drexel University graduate student demographics in the iSchool paint a similar picture to the national statistics. A Hyperion report, downloaded on December 30, 2006 concerning students in the iSchool, reflected that at Drexel University there are 4,192 graduate students, which represents 25% of the student population. In the iSchool, there were 781 students enrolled for the winter quarter (5% of the student population), compared to the 388 undergraduate students (2% of the student population) enrolled in the College. Of those students, 183 are full time and 598 are part time. 753 students are pursuing their Masters degree while 28 are working toward their doctorate degree.

In the College, 531 students identified as female, which is 68% of the graduate students. Ethnically, 7% of students identified as African American, 7.5% as Asian or Pacific Islander, 18 as Hispanic, 66% as White/Non-Hispanic, 14.7% gave no response and 2.4% students did not identify their ethnicity. The average age of the students in IST is 34 years old. Of those who answered, 6.5% students noted that they are married, and this does not account for domestic partnerships. No information is available on whether or not the students have any dependants or not. In addition, 5.4% of students are international students.

The Graduate Student Experience Questionnaire (GSES)

Specific information related to those graduate students who took the *GSES* also reflected in national and campus demographics. Of the 398 Questionnaire participants, 382 were Masters Students and 16 Doctorate Students. A majority, 64.1%, of the students are enrolled part time; 25.6% students are enrolled full time; and 10.3% vary between part time and full time enrollment. The ages of participants ranged from 26-35 years old. The majority of the respondents are female 283, or 77.1% of the participants, and 301 students, or 84.1% of the sample population, are white with few students identifying as Asian or Pacific Islander, Black or Hispanic.

The IST student population that took this *Questionnaire* consists predominantly of domestic students, 94.2%. Concerning relationships, 50.3% of the respondents are married; 8.6% are in a domestic partnership. Thirty two percent of the students, however, indicated that they had 1 or more dependants, which is slightly higher than the national average. In regards to loans, 58% of students used a loan or credit card to pay for their academic and living expenses, while 7% of students used Drexel sponsored assistantships as a source of funding. The number of students using loans and credit cards is 22.7% higher than the national average for Master's students and 28% higher for Doctoral students. Furthermore, the respondents also averaged much lower for assistance from the University, 31% lower for Master's students and 48% lower for Doctoral students. However, 27% of students did take advantage of Drexel Tuition Remission and 31% used the iSchool's Partner Organization Discounts to pay for up to 30% of their tuition.

The *GSES* yielded additional demographics essential to understanding the retention of graduate students in IST. The first is the field of study for each participant. There are 73.6% students enrolled in Library and Information Science, 19.8% in Information Systems, 3.8% N/A, 1.8% are earning a dual degree in IS/LIS and 1% are in software engineering. The iSchool does offer a multitude of online classes and this popular class format yielded 60.6% of the respondents who took classes purely online, 24% who took both online and face-to-face classes, and 15.4% of students took purely face-to-face classes.

Operational Definition of “Graduate Student”

Based upon national, campus and *Questionnaire* demographics, a graduate student will be defined as any student who is pursuing his or her Master’s degree, attending the institution either part time and/or full time. In addition, for the purposes of this study, a graduate student will also be defined as any student who is attending classes specifically online and not face-to-face.

3.0 Performance: The Measure Phase

Current Performance Levels

The main focus of this project is on the improvement of the graduate-level student retention rate within the iSchool. As such, retention/attrition rates will be our main indicators of performance for this project. According to a study performed by the iSchool, the current graduate-level student retention rate is approximately 75%. This means there is currently a graduate-level student attrition rate of roughly 25%.

Data Collection

Two main areas of data collection were focused on in this project. The first area of concern was obvious, graduate-level retention rates within the iSchool. The baseline data that was used for this project was obtained from a study on retention rates that was performed by the Dean’s Office in the iSchool. The complete data set for this study has been provided in Appendix A. This study tracked enrollment numbers of cohorts of students entering the college between the Fall term of AY 2003 and the Fall term of AY 2005. At the time of this project, the study encompassed enrollment data through the Winter term AY 2005.

Once data was obtained about the current retention rates, the performance indicators for this project, information need to be collected to determine the possible causes behind the current attrition rate. To accomplish this, a questionnaire - the *GSES* -was created to collect data regarding the current iSchool graduate student experience. This information would help identify problem areas that might be affecting the current retention rate. Based on the *G-QUE* and the *Commuter and Off Campus Student Satisfaction Survey*, the questionnaire created focused on several factors which may impact the graduate student experience, including:

- Finances
- Time commitment
- Academic concerns
- Access to resources
- Sense of community
- Campus involvement

In addition, the *GSES* contained questions to ensure collection of basic programmatic and demographic data about the respondents. This type of information could be used to further define problems contributing to the current attrition rate as well as provide indicators that allow comparison to available national data. A copy of the *GSES* used in this project can be found in Appendix B.

Originally created in a paper-based format, the questionnaire was reviewed by Dr. Mira Lalovic, Associate Dean Lynne Hickie, and several members of the iSchool faculty and staff. The college offers a doctorate program and several Master’s degree programs in both face-to-face and online formats. It was decided that the *GSES* would be distributed to all graduate-level iSchool students regardless of degree program or format. Once in its final draft, online distribution and collection of *GSES* was identified as the most efficient means of data

collection due to the large number of current graduate students and the large percentage of graduate online students in the college.

SurveyMonkey.com online survey software was used to create the online version of the questionnaire and collect the results. In order to drive students to take the survey, the iSchool's Dean's Office sent an email to all current graduate students. Information about and links to the survey were also posted in the weekly student newsletter and on the iSchool website. The first notifications were sent and posted on November 30, 2006. An email reminder was sent to all graduate students in the college on December 12, 2006. The questionnaire remained open until midnight on December 15, 2006. Students were also encouraged to take the *GSES* through gift incentives, which were mailed to their homes.

Measurement System Analysis

The nature of the data that needed to be collected for this project lent itself well to use of a questionnaire. Although reviewed several times before distribution, several typos were not identified. This may have proved confusing for some respondents but did not seem to affect most of them. It was also noticed that some questions might be better worded to gather accurate data regarding the online student experience. For example, question 9 is worded as follows: "How many times during an academic quarter do you meet with your graduate advisor?" The word "meet" implies a physical interaction; however, the real reason behind asking the question is to determine how often the students make use of the knowledge that their graduate advisors could provide. In order to make the question more inclusive of online students, the question may better be worded as follows: "How many times during an academic quarter do you interact (either by email, phone or face-to-face) with your graduate advisor?"

An additional concern regarding the use of a questionnaire in a project that focuses on a very customer service based project is that questionnaires focus very much on quantitative data. Questionnaires are great tools for collecting quantitative data about qualitative subjects; this is good for the data driven side of the Six Sigma methodology. Because of the nature of the project, though, qualitative data also needs to be considered in evaluating the causes of the current attrition rate. Although the questionnaire contained several open-ended questions in addition to the majority of close-ended questions, interviews and focus groups might have allowed for collection of more and more honest qualitative data. This kind of data might yield more effective and viable solutions.

Target Performance Levels

The Graduate Studies Office nor the Enrollment Management Division at Drexel has retention standards for graduate students. Most attrition studies, such as those from the Council of Graduate Schools and the National Foundation for the Sciences, focus on doctoral students. Little to no information exists purely from the Master's student perspective. Dr. Teck Lim, Associate Vice Provost in the Graduate Studies Office, did note that nationally there is a retention rate of 50-60% for doctorate students and he would estimate that the retention rate for Master's students should be in the range of 70 - 80%. Therefore, the aim of this project is to reduce the graduate-level student attrition rate within the iSchool by 5%, bringing the retention rate from 75% to 80%.

4.0 Data Analysis and Interpretation: The Analyze Phase

Analyzed Factors

In order to efficiently and effectively analyze the satisfaction of graduate students in the iSchool, the *GSES* focused on five main areas: time commitments, academic concerns, access to resources, sense of community and campus involvement. In addition, two primary

characteristics, online status and type of degree, i.e. the Masters degree, were specifically analyzed.

Online Students

A majority, 60.6% of the graduate students in the iSchool take classes purely online. Online education can be defined as, “at least 80% of course content delivered online and typically having no face-to-face meetings” (Chambers, 2004) Therefore, the data analysis will look at only characteristics regarding graduate students who only take classes online.

What we do not know from the previous retention data is if online or on campus students are the one’s leaving the program. Future retention data analysis should reflect the student’s online or on-campus status.

Master’s Students

Of the online graduate students, 99.6% are pursuing Master’s degrees and one student, .1%, is pursuing his or her doctorate degree. Based upon these statistics the project will focus solely on Master’s degree seeking students.

Time Commitments

National statistics show that the average age for a Master’s student is 32 years old, with 38.1% of the students being married and 31.8% of Master’s students having dependants. Furthermore, 41.3% of these students are working to pay expenses. Given these statistics, the survey contained questions related to students’ time commitments surrounding family, work and academics.

Most Master’s students (69.3%) are taking their classes part-time with 11.6% of students taking classes between full-time and part-time status. Reasons for part-time status for these online students can show how they are spending their time away from their academic work. Concerning work other than an assistantship, 67% of students are spending 29 or more hours per week at work. In addition, 45% of students spending 29 or more hours per week with family responsibilities.

Academic Concerns

National and campus statistics did not provide any incentives to test for students’ academic concerns, however, discussions with Associate Dean Lynne Hickle, encouraged the group to include questions surrounding the students’ new academic and faculty advising system as well as course selection. In addition the Ohio State University’s *Graduate Student Quality of University Experience Survey* highlighted many questions surrounding academic concerns.

When asking the students in the *GSES* in which area they faced the most difficulties, 15.9% of students felt that academic issues were causing the most problems for them. Specifically, the academic issues that caused the biggest problems for the students were course offerings at 16.3% followed by registration at 9.6%, academic advising at 5%, and the curriculum at 4.2%.

Graduate Advising

The iSchool’s academic advising is done by a core staff of graduate advisors who assist students in making course selections. When asking students how many times they meet with their academic advisor, only 15.8% of students responded that they met with their advisor; though 68.5% of students did note that they were contacted by their advisor.

Students were also asked to note their level of satisfaction with graduate advising and 56% stated that they were satisfied or very satisfied with the services received. In general, responses from students in the *GSES* were positive. One student even commented that, “Linda Carlin, my graduate advisor, has been great. She has helped me with all sorts of things and never turns away a question. My faculty advisor is also friendly, but I have had relatively little occasion to ‘talk’ with her online....” Another student commented, “I would have liked to have a little more interaction with my graduate advisor. I would like to be able to discuss my academic and career path to make sure I have chosen the correct courses to accomplish my goals. I have been registering for the required course my first 2 terms, but will need assistance in selecting the courses for the rest of my program.”

Faculty

The students are also assigned faculty advisors, and when asked how many times students have met with their faculty advisors only 4.6% of students took advantage of this opportunity. However, on the whole, 76% of students felt that they were very satisfied or satisfied with relationships with the faculty. Many students (78%) also felt that faculty members were willing to work with them. In addition, 90% of students were very satisfied or satisfied with the quality of their academic program while 84% are very satisfied or satisfied with the intellectual environment of their program.

Despite the 76% approval rate of the faculty, the open-ended section of the *GSES* painted a different picture. A theme throughout this section of the survey was the faculty’s indifference toward their students in online forums and lack of communication. The comments listed below are just a few of the plethora of comments surrounding this issue:

“Find a way to make on-line education more personal and the educational process more engaging. Most of my on-line education at Drexel has been one long recycled PowerPoint presentation. I miss the demonstrations and the casual ways teachers in undergrad would relate course content with their real industry experiences.”

“I felt that, on the whole, grading was extremely generous. For those of us that put in considerable time and effort, this was quite disappointing. Also, the level of intellectual rigor was significantly lower than I had expected and desired.”

“Teaching online and teaching in a classroom are not the same, and can’t be handled the same. Online students miss out on a lot of the back-and-forth dynamic of a classroom, and really don’t benefit as much from lecture notes posted on Blackboard versus a full lecture in front of a class.” The student goes on to say that, “if the instructor is not active on the site, it tends to feel like we’re teaching ourselves, which doesn’t feel too good at over \$2,000 per class. Instructors should also appear to care about their topic which can be as simple as proofreading their postings before sending them.”

“Besides cost, I would say the lack of guidance from faculty has been a major impediment to my education at Drexel. I do not feel that anyone has attempted to explain how the coursework could be taken to give me the maximum return on my investment. Faculty are hard to reach and not very interested in guiding part-time students.”

“I think the IST faculty are being pulled in too many directions. There are now a fairly large number of Ph.D. students who need faculty members for committees, and it is obvious that faculty members are feeling taxed by this. Also, it seems like during my time here the faculty has been changing constantly, which makes it more difficult to figure out which faculty members are going to stick around, and which are going to leave.”

“Professors often provide very little or very obvious feedback. I have had major problems getting any kind of information about the specifics of a class before it begins, even including how to get in touch with the professor.”

Despite the many comments expressing concern about the faculty, students did note that some professors were excellent and dedicated to their students. "Teachers were willing to work with everyone. They recognized that we have busy, hectic lives sometimes." Others noted that professors responded to their concerns right away and posted very useful information.

Professional development also seemed to be a challenge for many graduate students, as 39% of students participate in 8 or less hours of professional development per week. Wiedman, Twale and Stein (2001), note that a graduate student's socialization to their profession is essential and "if new graduate students are to succeed in their new environment, they must learn not only to cope with the academic demands but also to recognize values, attitudes and subtle nuances reflected by faculty and peers in their academic programs" (p. 2). A student also noted from the *GSES* that, "Teachers need to acknowledge that most professionals are there to learn and [we need] more practical experience rather than just theoretical. [The iSchool should provide] more interactions on a professional level, as professional organization or societies can be sponsored or have events at the campus."

Furthermore, 52.9% of students felt that they have had a conflict with a faculty member that could have a serious impact on their academic success. While 16.7% feel that they have been exploited by faculty members. Students further commented in the general response section of the *GSES* noting the strengths and weaknesses of the faculty.

Course Selection/Curriculum

Course selection, availability and caliber of the information given by faculty were concerns of the students regarding areas that have contributed to some of the major challenges graduate students face in the iSchool. "The biggest challenge I have faced as a graduate student is the lack of available online courses. I think the iSchool has done a tremendous job of getting many courses online, but I felt that my education would have been greatly enhanced by having a large section of courses to choose from." The students also commented on the intellectual caliber of the curriculum, "The tuition for online students is nowhere near the value received. With scant exception, the course I've completed so far have consisted nearly exclusively on the assigned textbooks. I could save thousands of dollars by simply studying the texts and end up graduating with the same education." This type of statement was echoed throughout the open-ended answer section of the Survey.

In terms of the online program, in general, students commented that, "I believe you are aware of the time pressure of part time school plus a family, plus full time work. Offering the online program is a wonderful gift, and I deeply appreciate the flexibility Drexel provides through its online offerings." Students also noted that IST has a, "great online instruction interface - very well designed. Blackboard works very well and is very user friendly. Also, online library resources are great." Although students would also like the iSchool to, "declare a commitment to quality online instruction. Do some research on the state of the art in good online course methods, and standardize on some of them. There is no excuse for anything but the best online instruction for the price of \$2,400 per course. Redesign the IST web site to comply with modern web standards (valid HTML and CSS), accessibility guidelines (WAI, Section 508, etc.) and usability principles (Nielsen, Krug)."

Administration

Course offerings and the curriculum are challenges that students felt they faced on a regular basis as the statistics are already noted above. However, students commented throughout the general answer section of the *GSES* not only about course offerings and the curriculum, but the way the University interacts with them as students.

Graduate students noted several areas of concern with Financial Aid and the Bursar's Office at the top of this list. "If there's any way to shorten the time I'm on hold with Student Resources, I'd like that. Also maybe more informative pages for Fin Aid (checklists?). I didn't have fin aid as an undergrad and I think it was pretty much assumed I knew all about it when I applied for graduate school." Another student stated, "The only problems I have ever run into with Drexel University have come from the red-tape generating policies of the Finance and Bursar's Office. Every other aspect of the program has been top notch."

Difficult communication was also stated by students as a challenge of their time here at Drexel. One student stated that Drexel should "delineate the role of graduate advisor and faculty advisor so academic advising can be more effective." A student who is a Drexel employee also noted that a challenge she faced is the, "lack of communication between departments, especially: Bursar's/Comptroller's, Accounts Payable, Payroll, Registrar, and Financial Aid. As an employee for 3 years, as well as a graduate students, I see the lack of communication and feedback as the biggest problem facing Drexel."

What information is provided on the website and how the website is designed was also an administrative challenge for students. "The Drexel website(s) could be organized in a more logical way, with the emphasis on supplying answers to commons and practical questions." Another student noted that IST should, "make sources of information clearer. Make a single webpage with relevant links to all important information sources for graduate students." Furthermore, "for online courses, streaming audio or video of lectures held on campus could be extremely helpful and accommodate the visual/audio learning styles that many people have. You could do that as a podcast or webcast. A wiki with FAQ answers could help maybe more than a discussion board." Furthermore, students also discussed electronic communications, "quit sending me 'commuter' emails and emails about campus activities...I live in Atlanta! I get flooded with emails that I start to ignore and I'm afraid I'll miss something important when it comes along. You need to have separate communications for those of us who are e-Learners and don't live anywhere near Philly."

Another theme that appeared about communication is informing students about opportunities on campus. In this student's quote, she brings up the need for professional development information, as stated in the previous section, and community service. "Please provide better career services for those of us who are changing careers. Advice, seminars, and more of a hands-on approach would be appreciated. I feel like I'm out there on my own with no guidance. Also, provide some information on weekend volunteer opportunities for those of us who work 9-5 jobs."

Access to Resources/Financial Concerns

Access to resources for students showed to be very important in the *GSES*. 7.9% of students noted that access to campus resources was one area where they faced the most problems. The library (6.7%), faculty (5%), computer laboratories (2.1%) and administrative staff (2.5%) are all areas to which students wish they had more access.

When asking students to provide suggestions for improving the atmosphere of graduate student life on campus, one student noted that, "Hagerty library has excellent electronic resources and a helpful staff. I have never needed to go anywhere else for research from my classes. However, the library needs a major overhaul. It has become a place for [undergraduates] to socialize and nap and chat on their cell phones. There are not enough places for 'quiet' study, and it's usually uncomfortable temperature wise. It would also be great to have a place on campus strictly for graduate students to study, maybe eat lunch, etc."

Furthermore students mentioned issues about transportation, parking, kitchen items in the lobby of Rush, especially information and services concerning job placement and resume critiques. Students commented about finding out about resources: "make sources of

information clearer. Make a single webpage with relevant links to all important information sources for graduate students.”

By far the greatest concerns of graduate students nationally and at Drexel is financial. When asked in the *GSES* 32.2% of students noted that financial issues were one of the areas where they faced the most problems. In addition, when asked if they have dealt with financial issues, what specific issues cause the biggest or most frequent problems, 315 of the students responded with tuition prices, 15.5% with billing and 12.6% with financial aid.

As already noted above 67% of students are spending 29 or more hours a week working outside of Drexel. Tuition remission also played into how students paid for their expenses with 1% receiving remission from Drexel. And 28% receiving some sort of remission from outside entities. 58% of students also relied heavily on using loans and credit cards to pay for their expenses.

Assistance from the University ranged for the students: 0% had a Research Assistantship, 5% had a Drexel assistantship that helps pay for 30% or less of their expenses and 6% of students had Non-Drexel fellowships, scholarships or grants that paid up to 30% of their tuition. Whereas, 1%, or 2 students, had Non-Drexel fellowships, scholarships or grants which paid for their entire tuition. Online Master's Students (38%) also took advantage of IST Partner Discounts which paid for up to 20% of their expenses. Family members and/or Spouses and Partners also assisted with 31% of students receiving some sort of aid from this group.

Throughout the comments section of the *GSES*, the students filled pages of comments concerning Financial Aid, the Bursar's Office and the need for financial assistance from the University. “The only problems I have run into with Drexel University have come for the red-tape generating policies of the Finance and Bursar's Office. Every other aspect of the program has been top-notch.” Another student suggested that, “student financing should be made available to graduate students taking a minimum of 3 credits/one course per quarter.” In all, the sentiments of this student sum up the comments from many other students in the Survey, “I am glad to be a part of Drexel. I wish I had other alternatives in paying for school besides financial aid. I have to take 3 classes before my aid covers all my classes. This is killing me as being a full time worker and father. I can only afford to take two classes at a time”

Sense of Community

Students' connection to campus is essential to their developing a holistic learning environment and to increasing retention of students. “It is apparent that the more students are involved in the social and intellectual life of a college, the more frequently they make contact with faculty and other students about learning issues, especially outside the classroom, the more students are likely to learn.” (Tinto, 1993, p. 69). Creating connection and retention comes through the development of community.

In looking at the resources graduate students use on and off campus, there is little connection to campus beyond the iSchool. In general over 90% of students never use the: recreation center, dining services, student health center, Drexel shuttle service, and public transportation information. This does make sense since many online students currently do not have access to campus. What is interesting, however, is that 90% or more of students also do not access: the Office of Campus Activities even though they pay student activity fees; the Counseling Center, despite the fact that there is an increasing number of graduate students with emotional and mental challenges; the Steinbright Career Development Center, although students are asking for and need access to career services for their professional development; and the Drexel Learning Center, which provides academic support to all students. Each of these areas also provides online options for students to access, but they are not being used.

Graduate students rarely used the University Bookstore (57%), the Graduate Studies Office (33%), campus computing services (29%), and the Student Resource Center (47%). They most

frequently used the Drexel One Portal (89%), the Campus Library services (69%), the Bursar's office (67%), and the registration system (61%). Throughout the open answer section of the *GSES*, students did note a very negative experience with the University Bookstore concerning customer service, information on available titles, and accessibility to purchasing needed materials.

In response to the idea of community on campus in the *GSES*, graduate students noted that, "Because of everything being online (i.e. registration) I feel a sense of distance from the university as a whole. It's certainly convenient, but it doesn't really foster a sense of community." Another student goes on to say, "I don't feel valued; I feel invisible. On-line studies do not lend themselves to close contact with the university."

Though when discussing online classroom interaction, "Surprisingly, to me, the atmosphere in the classes is warm and friendly, especially between students. I actually have more student-to-student contact than I did when I went to a brick and mortar university." Although students did note that, "the biggest challenge to online education is its impediment to building a network of mentors and colleagues."

Students also noted, "make sure students know about the iGrad community online." Another student stated that IST should look for, "ways for online students to interact. A robust message board with space for off-topic questions, and chat areas would maybe help." Students also suggest that the College incorporate more internet meetings with video streaming seminars which would, "make online students more engaged and feel a part of the culture."

Questions were also asked by students concerning community, "Do you offer services for the mature students, who are returning to school after many years?" Are there networking opportunities geared toward geographical regions to encourage students studying from the same areas to connect? Can there be a better orientation where students can connect with one another right away, and a list of resources, processes and procedures?

Campus Involvement

In a typical week, 60% of graduate students spend zero time attending professional development opportunities while another 35% only spend 1-4 hours enhancing their professional skills. Three percent of graduate students spent 1-4 hours participating in a graduate student organization activities and only 1% of graduate students said they attended campus activities such as sports or campus wide events.

Attending campus activities for most online students is virtually impossible, but students did note that, "Since I am an online student, I do not participate in campus activities, however, there could be more scheduled interaction offered between advisors and online graduate students before and during the quarter." A student suggestion a solution to the above concern: "more video options should be made available to distance studies. For example, Drexel has many fine speakers come to the University. As an out-of-state student I cannot partake of them. If the University offered live RSS feeds I would most certainly partake of them."

For students who live near campus, they also feel that there could be more accessible activities for graduate students. "Most graduate classes seem to be at night or online, so when there are graduate student events, they always seem to fall on the nights I have class. I have yet to go bowling with the Dean." Furthermore, a student said that there should be, "more social events but too many people live pretty far away or have too many other responsibilities. Maybe more events for grad students like myself who live close to campus and do not have children."

Correlations

Throughout the *GSES*, students were asked a variety of demographic questions to help understand the graduate student population of the iSchool. Unfortunately the data did not allow for correlations to be drawn to academic, financial and community sub-areas since the demographic data was not specifically linked to the answers given by each student. If the data had been linked in this manner then Chi Squares would have been useful in detecting these correlations.

5.0 Recommendation: The Improve Phase

Criteria

The aim of this project is to reduce the graduate-level student attrition rate within the iSchool by 5%, bringing the attrition rate to 20%. With that goal in mind, we decided upon four criteria that will enable a potential solution to be found. These four criteria to evaluate possible actions are cost, time, effectiveness of solution and applicability to other schools within the University.

Cost has to be minimal at this point because the solution will only apply to one school. The iSchool will be the sole beneficiary for the immediate future. We have not been provided with any information as to what amount of money could be spent on any given project and so solutions have been considered in light of keeping costs as low as possible.

As with costs, the specific timeframe for implementation of the chosen solution has not been determined. Because of this, we have evaluated possible solutions based on the assumption that, no matter which solution is chosen, it will have to be executed in a quick fashion. Based upon this assumption, the best possible solution should be simple to setup.

As with any Six Sigma project, however, it is the effectiveness of any given solution that is the main criteria for determining the best possible plan of action. Our goal in choosing a final recommendation was to choose the solution which solves as many of the minor areas of concern as possible. In this way, we will be assisting in creating a real change that directly affects numerous students. So, even more than a solution that is inexpensive and time conservative, solutions have been considered based on their ability to create the largest positive impact on graduate-level student retention rates.

Assuming a high rate of success after implementation of the chosen solution, it is our hope that this project will transcend beyond the iSchool and be applied to all of the other schools within the University. The more students positively affected by the chosen solution, the higher the retention rates could be throughout the University graduate population as a whole. Therefore, applicability to other schools and colleges within Drexel is the fourth criteria that will be considered when evaluating possible solutions.

Solutions

Weidman, Twale and Stein (2001) note that a graduate student's academic and professional socialization is a developmental process that relies on knowledge acquisition, as well as, investment and involvement in the campus and local communities. Socialization is, "linked to the development of role identity and commitment." In order for this to take place students need: further interaction with peers, faculty and professionals in their field; access to professional development resources; an ability to create relationships with students, staff and faculty on and off campus; opportunities to link into campus activities via the web; and most importantly, the ability to access financial resources that will allow students to focus on their

academic and professional ventures and not on how they are going to support themselves or their family. The following information will provide solutions to address these very issues.

When online students were asked in which area they had faced their greatest problem as graduate students, the results were as follows:

Academic Issues	15.9%,
Access to Resources	5%
Admissions Issues	3.8%
Financial Issues	38.5%
I have not faced any problems	24.3%
Other	12.6%.

The response clearly showed that Financial Issues and Academic Issues are the topics of greatest conflict. As a result, the solutions that are going to be offered will focus on these issues. A variety of solutions for each of these two major areas of concern will be provided in addition to secondary solutions which address community development.

The table below shows the tallies of the questionnaire responses to the question regarding in which area the student had experienced the most problems. The responses have been broken down according to the major of the respondent. The table demonstrates that Academic and Financial issues are problems for the majority of respondents regardless of major.

Count

	Major				Total
	Dual Degree (IS/LIS)	Information Systems	Library and Information Science	Not Applicable	Dual Degree (IS/LIS)
Most Problems	0	0	2	0	2
Academic Issues	0	6	31	1	38
Access to Resources	1	1	17	0	19
Admissions Issues	0	2	7	0	9
Financial Issues	2	8	67	0	77
I have not faced any problems	0	9	57	0	66
Other (please specify)	0	10	20	0	30
Total	3	36	201	1	241

Table 1: Most problems based upon major in the iSchool

Financial Issues – Alternative Solutions

Although this section will outline some of the possible solutions the group generated to specifically solve these problems, the final solution presented will specially address both the best solution possible for the iSchool. Since no statistical correlation between demographic information and problems faced was present, the solutions presented here are based upon ideas that respondents wrote into the open-ended section of the questionnaire, current literature, and brainstorming of our own.

Financial Resources

In addition to the clear response from students regarding financial concerns, information from professional associations was used to develop solutions in this area. During the National

Association for Student Personnel Administrators and the American College Personnel's joint conference in April 2007, professionals working specifically with graduate and professional students came together at a pre-conference session to discuss the state of affairs of graduate and professional student services. During this discussion, countless professionals discussed the need for financial resources, funding information and communication of University financial policies.

Based on the above information, the first solution suggested for students' financial concerns is to find a way to reduce tuition costs for students. Reducing the tuition for online students in the iSchool is not a viable suggestion for the University; however, the University can look for ways to supplement students' income for school, thereby lowering their tuition. A few ways to do this would be:

1. Advertise the iSchool business partnership programs better
2. Place financial aid guidelines and step-by-step processes on a prime area of the website
3. Work with the University to collaborate with the "School as a Lender Program"
4. Work with students to apply for grants from the NFS
5. List University scholarships and scholarship websites for students to check out
6. Give tips to students on how to best complete a scholarship application
7. Provide scholarships and greater financial aid opportunities to students taking less than 9 credits - *again 64.1% of all IST graduate students who took the GSES are part time*
8. Work with Drexel's Development Office to develop a scholarship endowment for specific student populations, such as online students, students with children, students who are part time, students who are working and are attending school at the same time
9. Provide video-streamed financial workshops on: funding your graduate education, how to buy a home, and investment and budgeting, as well as archiving these presentations on the iSchool website
10. Work with the University to provide health insurance subsidies for graduate students, especially those with assistantships
11. Develop a Research and Teaching Assistant Program that would give students professional opportunities in their field as well as pay for their education

In the *GSES*, students also discussed great dissatisfaction in relation to the Bursar's office, their policies, and not being able to see updated billing statements. Although the iSchool does not have direct control to make corrections to the Bursar's office, it is important to discuss suggestions for improvement in this area to increase student satisfaction at the University, thereby increasing retention.

Academic Issues - Alternative Solutions

The second area of concern for graduate students in the *GSES* is Academic Issues. As noted in the analysis section, course offerings, faculty interaction (a.k.a. other), registration, advising, and curriculum were all areas of concern when students stated they had academic issues.

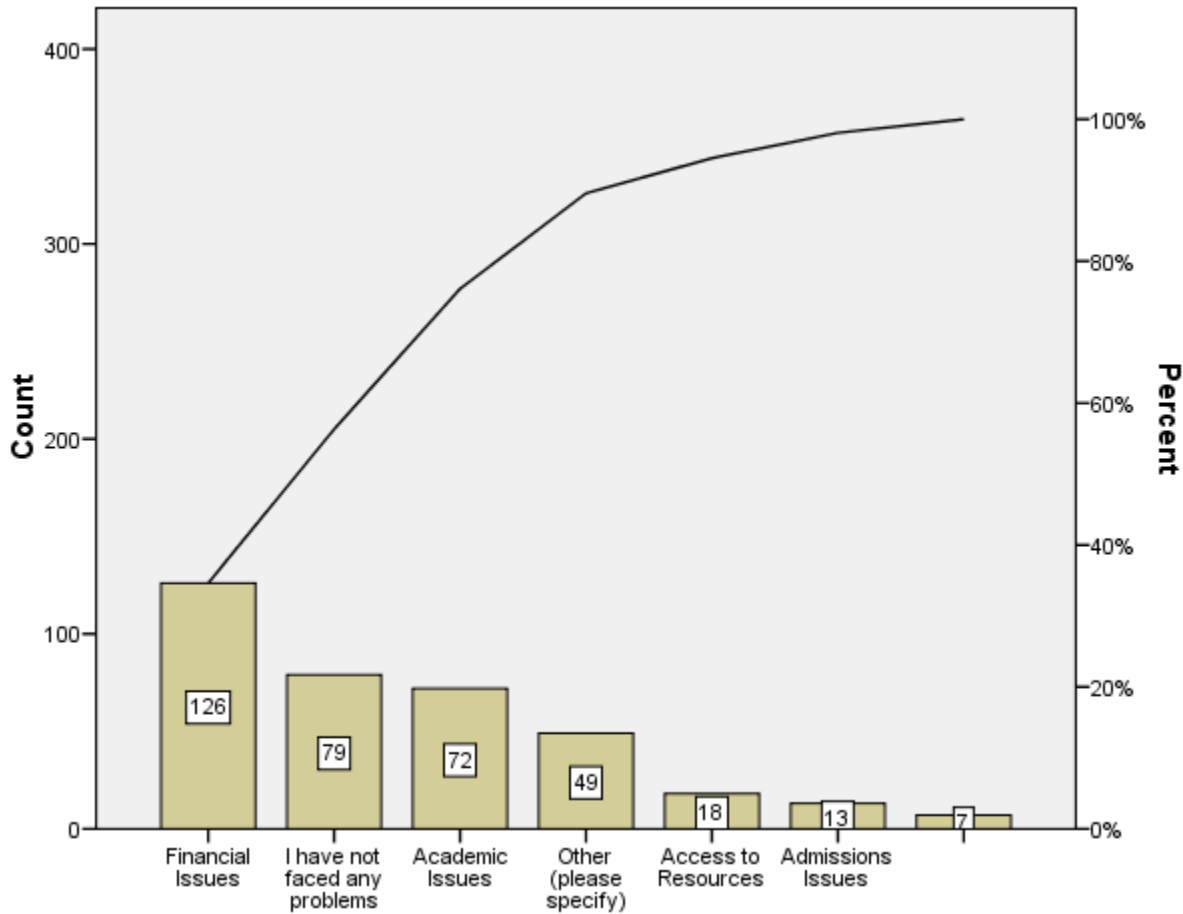


Figure 1: Students' responses to question 14 of the Graduate Student Experience Survey in regards to Academic Concerns

In order to effectively address the academic concerns noted in the analysis section, it is recommended that the iSchool first discuss the answers to these key questions: (1) What is the iSchool's philosophy for graduate online education? (2) What are the College's learning outcomes from these students? (3) How does this program fit into the academic strategic plan for the University, which focuses on providing academic support services, professional development and creating a global leader? (4) What are the American Library Association's standards for online education? Furthermore what are the Association's goals and mission, and how is the iSchool working to achieve those goals in the program?

After discussing these central questions, the iSchool can go on to develop services, resources and programming for online students concerning these students' concerns around the aforementioned areas. Solutions for each academic sub-area are:

Course Offerings and Curriculum

In the open-ended section of the *GSES* and as noted in the Analysis section, many students noted that courses are not offered frequently enough and the caliber of the classes is not up to standards. A majority of the iSchool courses are taught by adjunct faculty, which may be a reason why courses are offered at varying and inconsistent times and terms as well as the different standards professors hold for conducting online education. Thus several solutions present themselves:

1. Limit the number of adjunct professors and increase the number of tenured professors teaching online courses to create consistency and quality

2. Make sure core classes and classes needed for graduation are offered at appropriate times and frequency.
3. Create a set of guidelines and expectations for online education for both faculty and students - this way all parties are on the same page

Advising

The graduate students and advisor relationship is essential to the graduate students, efficient and successful completion of their academic program. The iSchool has two types of advisors, graduate advisors, who educate students on university resources and overall curriculum, and faculty advisors, who educate students on classes to take and professional development. Since the *GSES* focused on graduate student advisors, the solutions will focus on this advising process.

As noted in the Analysis section, students need to be made better aware of who graduate advisors are and who faculty advisors are, as well as, their respective roles within the college. Students also noted that they did not have much connection with their graduate advisor or “meet” with them at all. Creating awareness is only one solution, however, the iSchool could create live chat times on the web for online students to “talk” with their assigned graduate advisor. Furthermore, providing students with a specific email, blog, or wiki to discuss questions and concerns not only with advisors, but with one another, might create greater satisfaction with advising and student interaction. To help with the work load, additional graduate advisors should be hired.

At Florida State University (FSU), a Mentor Personnel Management System was created to supplement the advisors’ work. The Mentor position was created to fill the following support roles:

- Completing online materials
- Initiating and maintaining contact with students
- Responding to students in a timely manner
- Facilitating electronic learning and discussion groups
- Attending to student progress
- Grading Assignments
- Reporting grades
- Communicating with faculty

In essence, this position would serve not only as a student mentor, but a Teaching Assistant as well, strictly for online courses. For FSU, “The need to provide high levels of personally interactive support to students was perceived as critical to the online program’s success” (Thomas, 2006, p. 47). This program would assist both faculty and advisors, create more connection and interaction among students, and create another financial supplement to lower students’ tuition.

Faculty Interaction and Performance

Closely linked to course offerings and the quality of the curriculum was faculty performance and interaction with the online student population. The Analysis section contains several vivid accounts of students’ dissatisfaction in their interactions with faculty and disapproval of the quality of instruction the professors produced. This could be due to the fact that, “social presence, or ‘teach immediacy’ was a strong predictor of participant satisfaction in the virtual environment just as it was in face-to-face instruction.” (Thomas, 2006, p. 45).

Based upon Thomas’s statement and the students concerns, the following solutions are suggested:

1. Conduct trainings for all online tenured and adjunct faculty in order to discuss and educate them on expectations, technology needs, how the iSchool will hold them

- accountable and tips on how to conduct an online class without limiting the faculty's freedom of thought
2. Provide mentoring workshops for faculty advisors to set expectations and procedures
 3. Provide incentives to faculty members who become faculty advisors for both Master's and Doctorate students
 4. Work with faculty members to develop and implement professional development opportunities that can take place online, or in the classroom where it can be video streamed and archived.
 5. Work with faculty, Steinbright Career Development Center and the Alumni Relations Office to create practical experience opportunities for students
 6. Provide support to faculty in handling the increased message traffic usually associated with online education
 7. Develop an online, peer reviewed journal to highlight graduate students' and faculty's research
 8. Create an online evaluation form where students can freely discuss their experiences in the classroom and the iSchool can assess learning outcomes for that course and the entire online program.
 9. Create further awareness to students concerning who their faculty advisor is and what their role is as their advisor

Secondary Factor - Community Development and Involvement

Community development and student involvement is not a key factor in student's satisfaction and retention in the iSchool, however, from the open-ended comments on the *GSES*, graduate students in the iSchool are looking to connect to campus. Ronald Thomas Jr. in the *Educause Quarterly* discussed the importance of communication and interaction with distance learners, "the need to provide high levels of personally interactive support to students was perceived as critical to the online programs success" (p. 47). Dianne Chambers from the University of Melbourne notes in her article that, "Institutions need to address issues of policy and practices and investigate whether students who are remote from campus are disadvantaged in any way. Areas for investigation may include provision of services such as students' counseling...and extracurricular activities" (p. 3). Therefore, the following suggestions discussed below can help create connection and interaction among the online graduate population.

In discussing connection to campus, many students mentioned that appropriate communications just for online students from the University would be helpful to them. In addition, accessible web information concerning course guides, orientation materials, financial resources and contact information to various departments. Furthermore, students commented that they would like to see wiki's, podcasts, web blogs, video streaming, and live online feedback from advisors, faculty and classmates. The University of South Carolina's (USC) Division of Student Affairs has already done research in the area to provide students with the technological resources they need to be successful.

Concerning wiki's, USC has listed Case Western Reserve, Ohio University and Northwestern Universities as excellent resources for how to create wiki's for college students. They define a *wiki* as "a website that allows users to quickly and easily add, remove or edit content." These sites can be quickly updated and easily accessed by students. Articles, professional development information, and resource information are ideal for wiki's.

Podcasts and video streaming are also tools that can help connect students to campus. Workshops, classroom lectures, speakers, and group discussions could all be enhanced by incorporating this technology. Online students would then be able to interact with all of Drexel and not just the web portal system.

Blogs are another form of technology that would allow students to connect to one another, express their ideas, have their questions answered and share successes and challenges with

other students. For a more personal interaction, the iSchool could collaborate with the Alumni Association to create events in areas where online students are living. Current students will then have an opportunity to connect with one another as well as network with Drexel alumni.

Another area where students feel that there needs to be more connection is through the web. Throughout the open-end answer section of the *GSES*, students commented that access to information from staff, faculty and the University was difficult, "Policy changes are not effectively communicated to the student. Surfing the website is time consuming an often times ambiguous." To aid in developing a website that provides easily accessible information about policy changes, curriculum, registration, academic advising, administrative needs, professional development, etc.... Dianne Chambers from the University of Melbourne in Australia developed the Melbourne Model for website development for online students and recommends that institutions should put support procedures in place for recruitment, enrollment, orientation, participation, and graduation and beyond, "[in this way] online students have high quality experience that are characterized by easy access to information, high quality learning experience, and prompt, accurate and friendly responses to all enquiries" (Chambers, 2004).

Recommended Solution

In addition to the solutions for each specific issue within the financial and academic realms, we also came up with one solution that addresses both areas of concern and the secondary initiatives at the same time. The overall solution derived to help alleviate problems within the iSchool would be to create a single department within the College where questions about financial, academic, and community issues can be answered on an ongoing basis - the Office of Graduate Student Affairs. New staff to oversee these responsibilities would need to be hired. However, this department's creation will not solve some of the more specific issues such as tuition or the apathy of adjunct professors, but will solve the larger issue of lack of availability of information.

5.1 Alternative Solutions Examined

The following is a chart that summarizes the solutions that have been presented as possible remedies to the problems identified in the study:

Financial	
1. Tuition	-Reduce overall tuition rates -Increase grants and scholarships
2. Billing	-Increase billing updates & communication
Academic	
1. Course Offering/Curriculum	-More consistent approach and better quality
2. Adjunct Processors	-Provide more tenured, dedicated faculty
3. Advising	- Promote of existing services and mentoring program
4. Faculty interaction and Performance	- Train initiatives and professional development
Recommended Solution	
1. Create a central student affairs office within the iSchool	

Financial Solutions

The alternative solutions to the problems identified in the area of financial issues are not the most efficient and effective solutions for a variety of reasons. First, we are going to focus on the problem of tuition prices. Tuition is currently around \$40,000 to receive a Master's Degree. This cost does not include other factors involved such as housing, food, books and

health insurance. The expense of tuition is an obvious area of concern for students, but not one in which we can see change occurring. Universities set tuition based on a number of factors including, but not limited to: the rising cost of student financial aid, infrastructure, maintenance, and information technology. A proposed reduction in tuition rates would not be feasible due to the need for funds to help Drexel sustain its infrastructure and grow in the future.

Of all of the proposed solutions, increasing grants and scholarships could be one of the hardest solutions to implement. Many universities can generally only assist their students in finding external scholarships and grants. There are typically few scholarships and grants, especially at the graduate level that each University directly invests in, and they are limited. Although expanding the amount of aid available for Drexel to disperse to graduate students would most likely have a big impact on retention rates, the Federal Government's guidelines for aid are very strict and out of the control of the iSchool. Grants alone can not serve many students and make a large enough impact with out other financial assistance.

The final alternative solution in the financial area deals with the billing process. Based on this study, students felt that they were not provided with enough information about their bill. The general consensus was that too many errors occurred, there was too much red tape encountered when trying to resolve problems, and, in the end, not many students received the help they needed. This solution is not viable due to the fact that the billing process is not directly overseen by the iSchool.

Academic Concerns

The alternative solutions provided to address the academic issues are also not sufficient on their own to affect a great amount of change in the iSchool graduate student retention rates.

Creating better course offerings and a curriculum would provide better intellectual experiences for students, but they are also craving faculty interaction, professional development, and experiential learning to add to their graduate program. Furthermore, promoting advising services through better communication and creating a peer-peer mentoring program can also greatly impact a student's experience, but again, this solution can not stand alone in impacting graduate student retention.

Trainings for online education may also be an issue for faculty. Professors may not have the training needed, but Union agreements, costs, and the ability of the iSchool to train the staff, may prevent trainings from being a viable solution. In addition, the current staffing structure may not allow for the time and human resources to conduct the trainings.

Concerning the issue of Adjunct faculty, tenured professors tend to teach the same set of courses over the life of their tenure, and would provide more consistency. However, adjunct faculty do prove to be viable solutions to many problems that universities face. Adjunct faculty are commonly favored by a university for the following reasons:

1. Adjunct faculty are able to teach specialized courses based upon their educational and professional background.
2. Adjunct faculty are hired on a contractual basis.
3. Adjunct faculty cost less as they are hired on a part-time basis with little or no benefits.
4. Adjunct faculty provide flexibility, allowing coursework to be offered , the subject matter of which is outside the realm of tenured faculty specialization.
5. Adjunct faculty can be hired to teach the large lectures and general introduction courses that tenured faculty typically do not care to teach.

In essence, adjunct faculty provide a university with a low-cost, versatile alternative to traditional tenure track positions. For this reason, we feel that these solutions may not be the most favorable approach to increasing retention rates at this time

5.2 Recommended Solution

While an impact would most definitely be seen with the implementation of any of the alternative solutions that have been proposed, each one focuses too narrowly on a single issue or area of concern to cause the larger impact that is the goal of this project. Thus, our recommended solution aims to address concerns in many identified problem areas, dealing directly with the financial, academic and community issues at Drexel University. As can be seen in the chart below, respondents felt that financial and academic issues were their two main areas of concern. In addition to addressing concerns in these areas, our solution will also address issues related to access to resources, and community connections, which are the third and fourth major areas of concern according to the questionnaire results shown below.

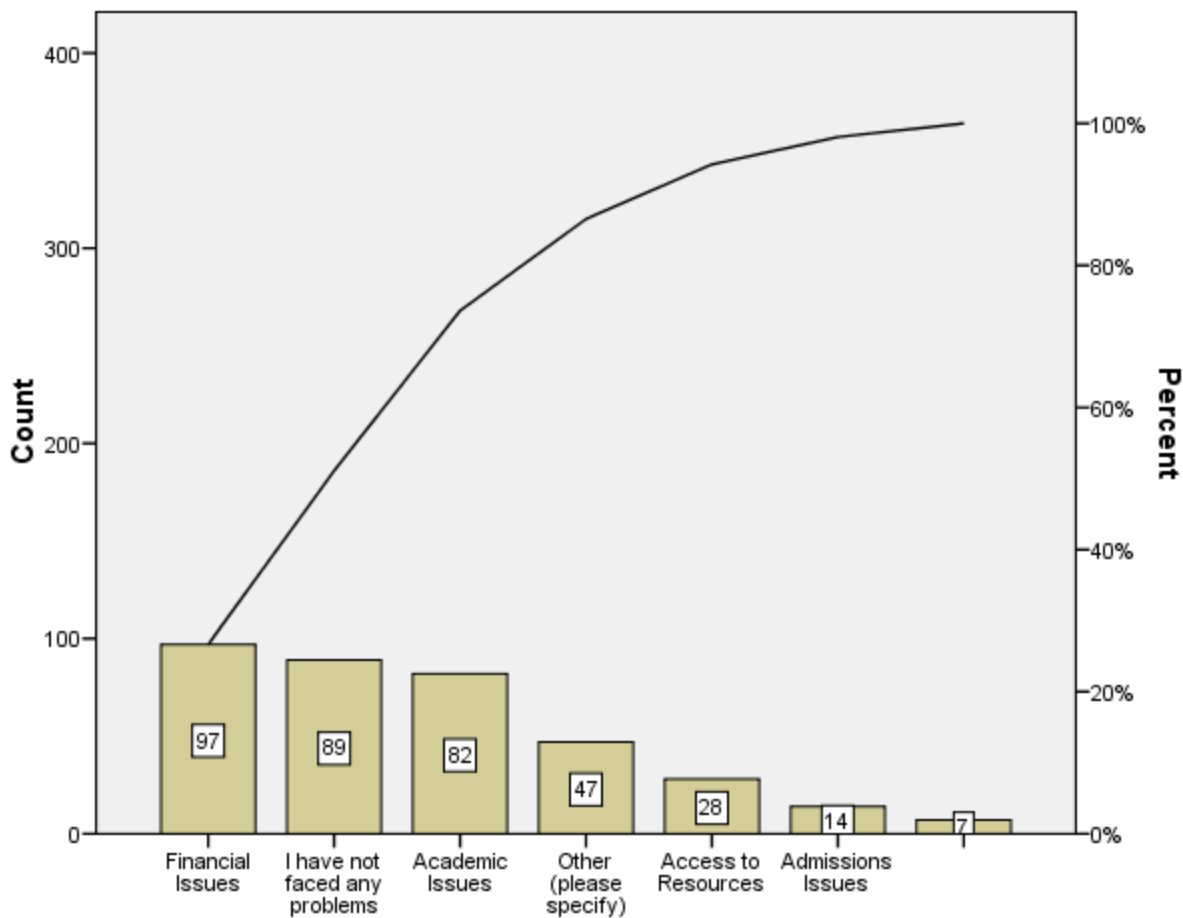


Figure 2: Students’ responses to question 13 of the Graduate Student Experience Survey in regards to what problems they have faced most on campus.

We propose that a single department, The Office of Graduate Student Affairs, be created, and housed within the iSchool. This Office would consist of staff hired specifically to oversee the implementation of student services, financial information, communication about existing services, web development, community initiatives, online faculty trainings and the peer mentoring program. This office would also act as an advocate for iSchool graduate students to the University as well as outside vendors and agencies.

Too often graduate students feel that they are not given the attention they need. This sentiment can be due to a variety of reasons such as the time frame when graduate students are on campus, priority being given to undergraduate students, and a lack of access to resources outside of class interaction. These negative experiences can translate into lost revenue and program reputation as graduate students pass along stories of their experiences to each other and to prospective graduate students. In addition, future revenue could be lost as students who do not complete the program will not become donating alumni.

This final solution could cause additional starting and long term costs for the iSchool. Office space, computers, salaries plus benefits, money for web development, and the creation of programming and resources all have to be considered. A typical starting salary for a Student Affairs Professional entry level position at Drexel is \$35,000 plus benefits and a Director's salary is between \$50,000 - 55,000 plus benefits. One Director and two Coordinators for the Office of Graduate Student Affairs would be necessary to oversee the strategic plan of the Office.

The two Coordinators would oversee the programming, web development, and communication with the students. One Coordinator's position could purely focus on web development such as overseeing student blogs, wiki's, video streaming of campus events, online chat rooms and all online academic, financial and community resources. The second Coordinator would be in charge of recruiting, hiring, training and supervising the students in the peer mentoring program, be available for online live chat questions and answer sessions, and develop all community development initiatives. The Director would supervise both Coordinators, and work closely with the Advising Office to develop faculty trainings, online education guidelines, assist faculty advisors concerning information and resources, and act as the Office's advocate for students across the University and organizations outside of Drexel.

With an office that could address the financial, academic and community concerns of graduate students, the group feels that the iSchool would see the 5% increase in retention or even beyond.

6.0 Verification

As with the data collection that was done for the measurement phase of this project, data must be collected about both retention rates and about student satisfaction. It is suggested that a study that tracks graduate student retention rates, similar to the one that was provided by the College of Information Science and Technology, be compiled and updated at the end of each quarter. This survey should encompass all entering cohorts, beginning with the AY 2003. Monitoring of these numbers on a quarterly basis will provide a good indicator of the effects that the implemented solution has on the attrition rates. It is suggested that, similar to the previous survey, data about retention be collected for each entering cohort separately. This separation will allow for an easier distinction to be drawn between the retention rates of those students who started the program before the implemented solution and the retention rates of those students that began after the solution was implemented. Similarly, distinction should also be made during this study between those students who are completing their degree in the online format and those who are completing their degree in the face-to-face format, allowing for monitoring and comparison of these two groups.

The second area about which data needs to be collected is student satisfaction. It is suggested that a standardized questionnaire be developed that covers all the areas that were covered in the original survey that was used during the measurement phase of this project. This questionnaire should gather data about as many areas that affect the graduate student experience as possible. A survey using this questionnaire should be performed on a yearly basis, starting one year from the date that the suggested solution is implemented. Yearly comparison of the data collected by these surveys with the baseline data provided by this project and with the previous year's data will indicate whether the suggested solution is

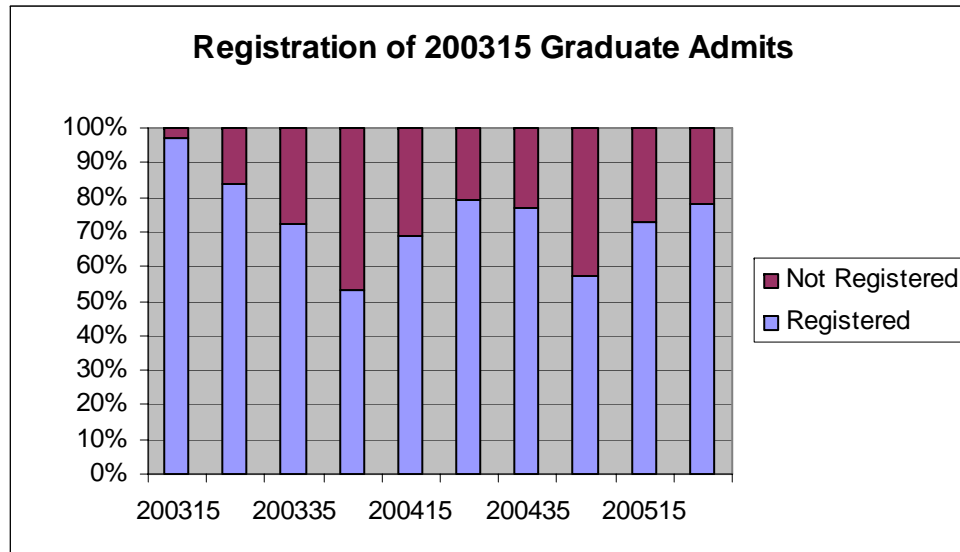
having the intended affect. It will easily show whether the suggested solution has had any affect on the two major areas of concern: financial issues and academic issues.

Constant monitoring of both retention rates and graduate student satisfaction are vital to determine the level of success that implementation of the suggested solution has on the attrition rates of graduate students within the College of Information Science and Technology. The solution that has been proposed to boost retention rates has as its focus correction of issues identified within the two major areas of concern that have currently presented themselves. Additionally, questionnaires similar to those provided to students should be developed and distributed to the iSchool's graduate and faculty advisors. This type of data can help provide a different, and sometimes, more in-depth perspective on issues that are affecting student morale and, ultimately, retention rates. The type of data collected during the monitor phase of this project, however, can also be used to identify subsequent areas of concern to be addressed by future improvement projects. Hopefully this type of close monitoring will allow issues that could have a major detrimental impact on the graduate student retention rates to be discovered earlier than they have been previously as well as allow them to be addressed in a timelier and more effective manner.

7.0 Conclusion

This Six Sigma project was developed to highlight the concerns, suggestions and the graduate student experience of Master's level online students in the iSchool at Drexel. Despite little information on current retention rates in the iSchool and reasons for attrition, this project was able to identify two main areas of concern, financial and academic, which can be now be addressed by the iSchool. The creation of a Graduate Student Affairs Office, will allow the iSchool to address students concerns, promote current services and information, and encourage student interaction among faculty and classmates through more sophisticated online discussions and curriculum. In the future, satisfaction and retention assessments given to students and faculty will hopefully show a 5% increase in retention numbers and an overall increase in student and faculty satisfaction with the graduate programs within the iSchool. In addition, it is the hope of this Six Sigma group that this type of assessment will be conducted in each academic College at Drexel, thereby increasing student productivity, student satisfaction, program notoriety, and monetary funds for the University

Appendix A: College of Information Science and Technology retention rate study results



	200315	200325	200335	200345	200415	200425	200435	200445	200515	200525
Registered	97% (185/191)	84% (159/190)	72% (136/189)	53% (99/187)	69% (129/188)	79% (125/158)	77% (98/127)	57% (57/100)	73% (64/88)	78% (62/79)
Not Registered	3% (6/191)	16% (31/190)	28% (53/189)	47% (88/187)	31% (59/188)	21% (33/158)	23% (29/127)	43% (43/100)	27% (24/88)	22% (17/79)

Graduation of 200315 Cohort (drawing data from all of the graduate students admitted in 200315)

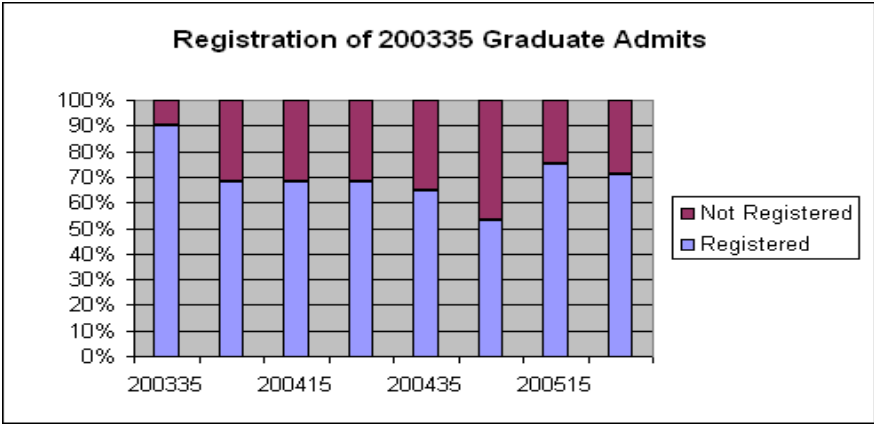
Sum of HC	Term Code Grad									Grand Total
	200415	200425	200435	200445	200515	200525	200535	(blank)		
Total	8	15	20	11	11	4	4	118	191	

Graduation of 200315 Cohort (drawing data only from graduate students still enrolled in 200415, a year after entry)

Sum of HC	Term Code Grad									Grand Total
	200415	200425	200435	200445	200515	200525	200535	(blank)		
Total	7	15	20	11	10	3	4	59	129	

Graduate Admits 200335

	200335	200345	200415	200425	200435	200445	200515	200525
Registered	90% (98/109)	68% (73/108)	68% (73/108)	68% (73/108)	65% (70/107)	53% (45/85)	75% (51/68)	71% (47/66)
Not Registered	10% (11/109)	32% (35/108)	32% (35/108)	32% (35/108)	35% (37/107)	47% (40/85)	25% (17/68)	29% (19/66)



Graduation of 200335 Cohort (drawing data from all graduate students admitted in 200335)

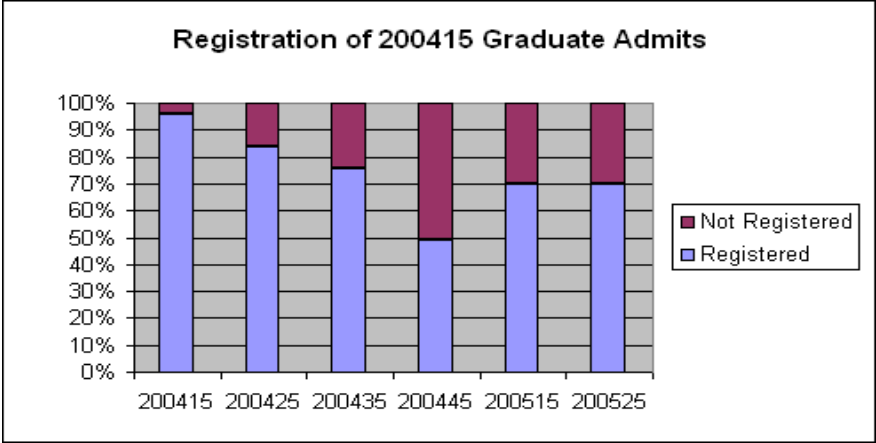
Sum of HC	Term Code Grad							Grand Total
	200435	200445	200515	200525	200535	(blank)		
Total	5	11	1	1	5	86	109	

Graduation of 200335 Cohort (drawing data only from graduate students still enrolled in 200435, a year after entry)

Sum of HC	Term Code Grad					Grand Total
	200435	200445	200515	200535	(blank)	
Total	5	11	2	4	48	70

Graduate Admits 200415

	200415	200425	200435	200445	200515	200525
Registered	96% (208/217)	84% (182/216)	76% (162/214)	49% (105/213)	70% (149/213)	70% (148/211)
Not Registered	4% (9/217)	16% (34/216)	24% (52/214)	51% (108/213)	30% (64/213)	30% (63/211)



Graduation of 200415 Cohort (drawing data from all graduate students admitted in 200415)

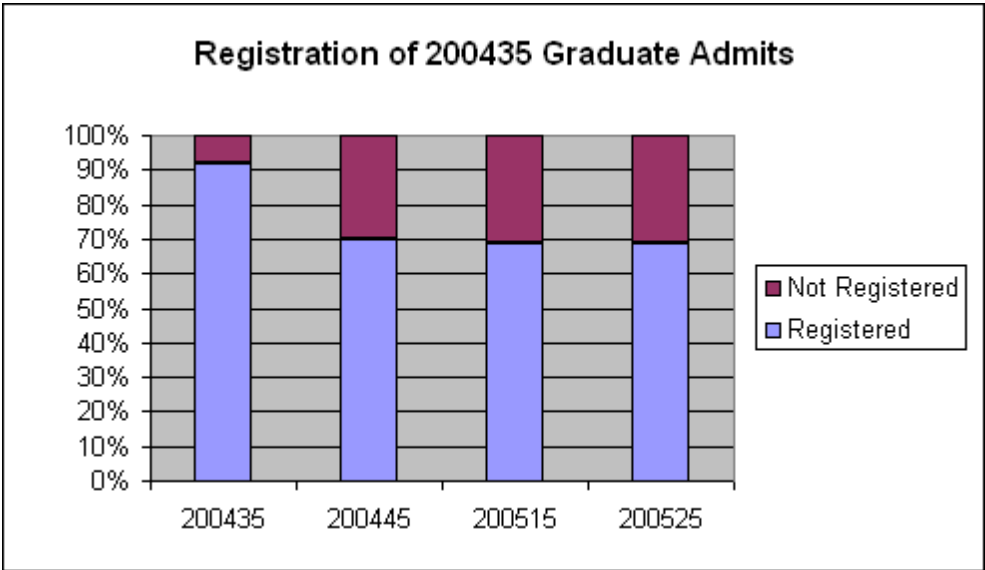
Sum of HC	Term Code Grad					Grand Total
	200435	200515	200525	200535	(blank)	
Total	1	2	11	11	192	217

Graduation of 200415 Cohort (drawing data only from graduate students still enrolled in 200515, a year after entry)

Sum of HC	Term Code Grad				Grand Total
	200515	200525	200535	(blank)	
Total	2	11	11	125	149

Graduate Admits 200435

	200435	200445	200515	200525
Registered	92% (99/108)	70% (76/108)	69% (74/108)	69% (74/108)
Not Registered	8% (9/108)	30% (32/108)	31% (34/108)	31% (34/108)

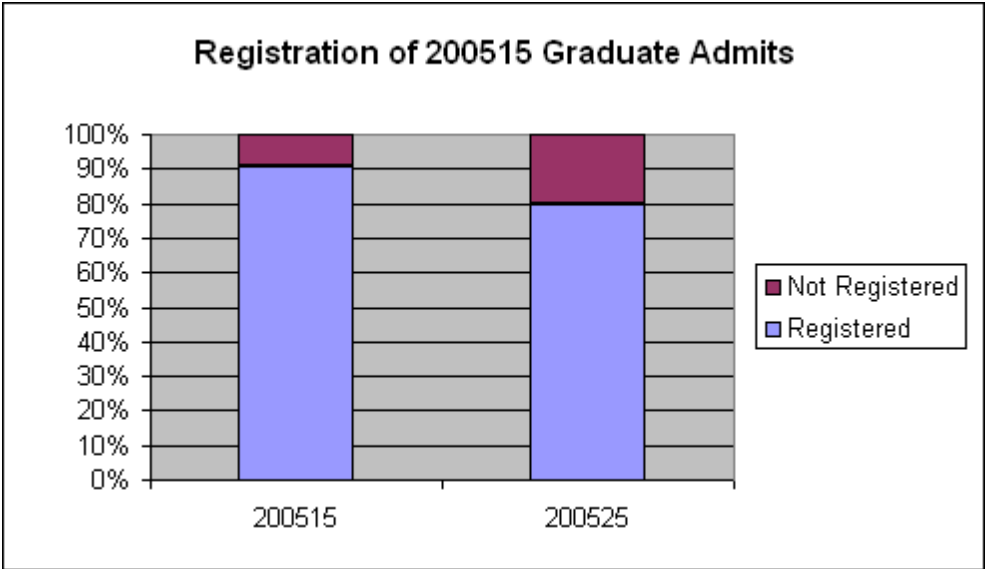


Graduation of 200435 Cohort (drawing data from all of the graduate students admitted in 200435)

Sum of HC	Term Code		
	Grad		
	200525	(blank)	Grand Total
Total	1	107	108

Graduate Admits 200515

	200515	200525
Registered	91% (220/243)	80% (195/243)
Not Registered	9% (23/243)	20% (48/243)



Appendix B: Questionnaire with tabulated results

1. Are you currently in the MS or PhD program?			
		Response Percent	Response Total
MS		99.6%	240
PhD		0.4%	1
Total Respondents			241
(filtered out)			157
(skipped this question)			0

2. If you are in the MS program, what is the major that you are pursuing?			
		Response Percent	Response Total
Information Systems		14.9%	36
Library and Information Science		83.4%	201
Software Engineering		0%	0
Dual Degree (IS/LIS)		1.2%	3
Not Applicable		0.4%	1

Total Respondents	241
(filtered out)	157
(skipped this question)	0

3. What term did you start your current program of study?			
		Response Percent	Response Total
Fall		68.5%	165
Winter		1.2%	3
Spring		29.5%	71
Summer		0.8%	2
Total Respondents		241	
(filtered out)		157	
(skipped this question)		0	

4. What year did you start your program of study?	
Total Respondents	241
(filtered out)	157
(skipped this question)	0

5. How many classes have you taken towards completion of your current program of study?

Total Respondents	239
(filtered out)	157
(skipped this question)	2

6. Are you pursuing your degree:			
		Response Percent	Response Total
Full Time		19.1%	46
Part Time		69.3%	167
Some variation of both full-time and part-time		11.6%	28
Total Respondents			241
(filtered out)			157
(skipped this question)			0

7. Do you take your classes:			
		Response Percent	Response Total

Online		100%	241
Face to Face		0%	0
Both		0%	0
Total Respondents			241
(filtered out)			157
(skipped this question)			0

8. Are you currently a Research Assistant (RA)?			
		Response Percent	Response Total
Yes		0%	0
No		100%	241
Total Respondents			241
(filtered out)			157
(skipped this question)			0

9. How many times during an academic quarter do you meet with your graduate advisor?			
		Response Percent	Response Total
0		84.2%	203

1		11.2%	27
2		2.1%	5
3+		2.5%	6
Total Respondents			241
(filtered out)			157
(skipped this question)			0

10. Has your graduate advisor ever contacted you?			
		Response Percent	Response Total
Yes		68.5%	165
No		31.5%	76
Total Respondents			241
(filtered out)			157
(skipped this question)			0

11. How many times during an academic quarter do you meet with your faculty advisor?			
		Response Percent	Response Total
0		94.2%	227
1		4.6%	11

2	0.4%	1
3+	0.8%	2
Total Respondents		241
(filtered out)		157
(skipped this question)		0

12. During your time as a graduate student at Drexel University, in which one of the following areas have you faced your biggest problem?

	Response Percent	Response Total
Academic Issues	15.9%	38
Access to Resources	5%	12
Admissions Issues	3.8%	9
Financial Issues	38.5%	92
I have not faced any problems	24.3%	58
Other (please specify)	12.6%	30
Total Respondents		239

(filtered out)	152
(skipped this question)	7

13. During your time as a graduate student at Drexel University, in which one of the following areas have you faced the most problems?			
		Response Percent	Response Total
Academic Issues		15.9%	38
Access to Resources		7.9%	19
Admissions Issues		3.8%	9
Financial Issues		32.2%	77
I have not faced any problems		27.6%	66
Other (please specify)		12.6%	30
Total Respondents			239
(filtered out)			152
(skipped this question)			7

14. If you have dealt with academic issues during your time as a graduate student at Drexel University, what specific issue caused the biggest problem or the most frequent problems?			
		Response Percent	Response Total
Advising		5%	12
Course Offerings		16.3%	39
Curriculum		4.2%	10
Registration		9.6%	23
I have not experienced any problems in this area		53.1%	127
Other (please specify)		11.7%	28
Total Respondents			239
(filtered out)			152
(skipped this question)			7

15. If you have dealt with issues concerning access to resources during your time as a graduate student at Drexel University, access to what specific resource caused the biggest problem or the most frequent problems?			
		Response Percent	Response Total

Administrative Staff		2.5%	6
Computer Laboratories		2.1%	5
Faculty		5%	12
Library		6.7%	16
I have not experienced any problems in this area		74.9%	179
Other (please specify)		8.8%	21
Total Respondents			239
(filtered out)			152
(skipped this question)			7

16. If you have dealt with admissions issues during your time as a graduate student at Drexel University, what specific issue caused the biggest problem or the most frequent problems?			
		Response Percent	Response Total
Access to staff members		0.4%	1
Incorrect or unclear instructions		7.9%	19

Lack of follow-up to questions		4.2%	10
Timeliness of admission decision		2.1%	5
I have not experienced any problems in this area		79.5%	190
Other (please specify)		5.9%	14
Total Respondents			239
(filtered out)			152
(skipped this question)			7

17. If you have dealt with financial issues during your time as a graduate student at Drexel University, what specific issue caused the biggest problem or the most frequent problems?			
		Response Percent	Response Total
Billing		15.5%	37
Department Funding		0%	0
Financial		12.6%	30

Aid			
Tuition prices		31%	74
I have not experienced any problems in this area		35.1%	84
Other (please specify)		5.9%	14
Total Respondents			239
(filtered out)			152
(skipped this question)			7

18. During a typical week in the academic quarter, how many hours on average do you spend doing the following activities															
	0	1 - 4	5 - 8	9 - 12	13 - 16	17 - 20	21 - 24	25 - 28	29 - 32	33 - 36	37 - 40	41 - 44	45 - 48	49+	Response Average
Class Time	3% (7)	11% (25)	17% (40)	24% (57)	17% (39)	11% (25)	5% (12)	3% (7)	4% (10)	2% (4)	2% (5)	1% (2)	0% (0)	0% (1)	4.76
Employment as part of RA	100% (217)	0% (0)	0% (0)	0% (0)	0% (0)	0% (0)	0% (0)	0% (0)	0% (0)	0% (0)	0% (0)	0% (1)	0% (0)	0% (0)	1.05
Employment outside of an assistantship	19% (43)	0% (0)	1% (3)	1% (2)	3% (7)	4% (9)	4% (10)	1% (2)	3% (7)	5% (12)	29% (67)	14% (32)	8% (18)	8% (18)	8.80

Discount	(140)	(29)	(56)	(1)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	
Drexel funded tuition remission (employee)	97% (215)	1% (3)	0% (0)	0% (0)	0% (1)	0% (0)	0% (0)	0% (0)	0% (0)	0% (1)	1% (2)	1.16
Non-Drexel funded tuition remission/reimbursement	73% (162)	7% (15)	4% (9)	1% (2)	0% (1)	2% (5)	1% (2)	0% (0)	3% (6)	1% (3)	8% (17)	2.46
Non-Drexel employment	41% (93)	12% (27)	5% (12)	2% (4)	3% (6)	4% (9)	4% (9)	4% (8)	8% (17)	5% (11)	13% (30)	4.44
Loans or credit cards	42% (93)	9% (20)	6% (14)	4% (8)	2% (4)	5% (12)	2% (5)	4% (9)	6% (13)	8% (18)	11% (23)	4.37
Parent/spouse, other family member	69% (151)	8% (18)	2% (5)	2% (4)	3% (7)	3% (6)	2% (4)	2% (4)	4% (8)	3% (7)	3% (6)	2.53
Total Respondents												237
(filtered out)												150
(skipped this question)												11

20. Please indicate your level of satisfaction with the following:

	Very Satisfied	Satisfied	Neutral	Unsatisfied	Very Unsatisfied	No basis for evaluation	Response Average
Your academic program	48% (110)	42% (95)	6% (13)	4% (10)	0% (0)	0% (0)	1.66
Your graduate advisor	26% (59)	30% (68)	17% (39)	8% (18)	4% (9)	15% (34)	2.79

Your relationships and interaction with faculty	22% (50)	54% (122)	15% (34)	5% (11)	3% (7)	1% (3)	2.17
Your relationships and interaction with other graduate students	23% (53)	50% (113)	20% (45)	6% (14)	0% (1)	1% (2)	2.14
The intellectual environment in your program	37% (84)	47% (108)	10% (23)	5% (11)	0% (1)	0% (1)	1.86
Your program's reputation	47% (106)	44% (100)	5% (12)	1% (3)	0% (0)	3% (6)	1.72
Total Respondents							228
(filtered out)							149
(skipped this question)							21

21. Please rate the overall quality of the following as they relate to your program of study:

	Very Good	Good	Acceptable	Poor	Very Poor	No Basis for evaluation	Response Average
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Rapport between faculty and graduate students	33% (76)	44% (100)	16% (37)	2% (5)	1% (2)	4% (8)	2.04
Rapport among faculty member	10% (22)	15% (33)	7% (16)	1% (2)	0% (0)	68% (154)	4.70
Rapport among graduate students	27% (62)	48% (108)	18% (40)	2% (4)	0% (1)	5% (12)	2.16
The intellectual caliber of the faculty	47% (107)	37% (84)	14% (32)	0% (1)	0% (0)	1% (3)	1.73
The intellectual caliber of the graduate students	27% (62)	46% (106)	19% (44)	4% (8)	0% (1)	3% (7)	2.13
Willingness of faculty members to work with you	38% (86)	40% (91)	16% (36)	3% (6)	1% (2)	2% (5)	1.95
Total Respondents							228

(filtered out)	149
(skipped this question)	21

22. Please rate the availability and quality of the following university services or resources. Please be sure to evaluate both your usage of each resource as well as the quality of the resource.				
Usage				
	Frequent	Rare	Never	Response Total
Campus Housing	0% (0)	0% (1)	100% (215)	216
Student Resource Center Services (Registrar/Financial Aid)	29% (64)	47% (104)	23% (51)	219
University Recreational Sports	0% (0)	1% (2)	99% (214)	216
Registration System	61% (134)	36% (80)	3% (6)	220
DrexelOne Portal	89% (201)	10% (23)	0% (1)	225
Campus Computing Services	12% (26)	29% (62)	59% (129)	217
Campus Library Services	69% (151)	8% (17)	23% (51)	219
Creese Student Union	0% (0)	4% (9)	96% (207)	216
Office of Campus	1% (2)	2% (5)	97% (209)	216

Activities				
Graduate Studies Office	2% (4)	33% (71)	65% (142)	217
Drexel Shuttle Services	0% (1)	0% (1)	99% (214)	216
Parking	0% (1)	6% (13)	94% (202)	216
Public Transportation Information	0% (1)	4% (8)	96% (207)	216
Student Health Center	0% (0)	1% (3)	99% (213)	216
Counseling Center	0% (0)	2% (5)	98% (211)	216
Steinbright Career Development Center	0% (0)	10% (21)	90% (195)	216
University Health Insurance	1% (3)	4% (9)	94% (204)	216
Dining Services	0% (0)	1% (3)	99% (213)	216
University Bookstore	8% (17)	57% (123)	35% (77)	217
Drexel Learning Center	2% (4)	5% (11)	93% (200)	215
Bursar's (Billing) Office Services	24% (53)	67% (147)	9% (20)	220
Disability Services	0% (0)	2% (5)	98% (210)	215

Quality					
	Excellent	Average	Poor	No basis for evaluation	Response Total
Campus Housing	1% (1)	0% (0)	1% (1)	98% (128)	130
Student Resource Center Services (Registrar/Financial Aid)	24% (43)	51% (92)	10% (19)	15% (28)	182
University Recreational Sports	1% (1)	1% (1)	0% (0)	98% (129)	131
Registration System	47% (97)	45% (93)	6% (12)	2% (4)	206
DrexelOne Portal	49% (106)	44% (96)	7% (15)	0% (0)	217
Campus Computing Services	26% (41)	24% (38)	1% (1)	50% (80)	160
Campus Library Services	67% (127)	16% (31)	1% (1)	16% (31)	190
Creese Student Union	1% (1)	4% (5)	0% (0)	95% (124)	130
Office of Campus Activities	1% (1)	2% (2)	0% (0)	98% (127)	130
Graduate Studies Office	16% (23)	26% (37)	1% (2)	57% (83)	145
Drexel Shuttle Services	1% (1)	0% (0)	0% (0)	99% (128)	129

Parking	0% (0)	5% (7)	3% (4)	92% (123)	134
Public Transportation Information	2% (2)	2% (3)	0% (0)	96% (125)	130
Student Health Center	1% (1)	1% (1)	1% (1)	98% (125)	128
Counseling Center	2% (2)	0% (0)	0% (0)	98% (127)	129
Steinbright Career Development Center	2% (3)	5% (7)	4% (6)	88% (120)	136
University Health Insurance	2% (3)	4% (5)	0% (0)	94% (124)	132
Dining Services	0% (0)	2% (2)	0% (0)	98% (127)	129
University Bookstore	10% (17)	45% (73)	24% (40)	21% (34)	164
Drexel Learning Center	2% (3)	4% (5)	0% (0)	94% (124)	132
Bursar's (Billing) Office Services	21% (41)	57% (113)	17% (33)	6% (11)	198
Disability Services	0% (0)	1% (1)	0% (0)	99% (129)	130
Total Respondents					226
(filtered out)					146
(skipped this question)					26

23. For graduate students with a learning disability: Disability services on campus are satisfactory

		Response Percent	Response Total
Yes		0%	0
No		0%	0
Not Applicable		100%	222
Total Respondents			222
(filtered out)			148
(skipped this question)			28

24. For graduate students with a learning disability: The climate on campus is positive toward disabled students

		Response Percent	Response Total
Yes		0%	0
No		0%	0
Not Applicable		100%	223
Total Respondents			223
(filtered out)			146
(skipped this question)			29

25. For graduate students with a physical disability: Disability services on campus are satisfactory

		Response Percent	Response Total
Yes		0%	0
No		0%	0
Not Applicable		100%	222
Total Respondents			222
(filtered out)			147
(skipped this question)			29

26. For graduate student with a physical disability: The climate on campus is positive toward disabled students

		Response Percent	Response Total
Yes		0%	0
No		0%	0
Not applicable		100%	221
Total Respondents			221
(filtered out)			147
(skipped this question)			30

27. At Drexel University, do you feel that you have experienced discrimination based on any of the following? Please select all that apply.

		Response Percent	Response Total
Disability		5.3%	1
Gender		0%	0
Nationality		5.3%	1
Ethnicity		5.3%	1
Religion		0%	0
Sexual Orientation		0%	0
Other		89.5%	17
Total Respondents			19
(filtered out)			14
(skipped this question)			365

28. Have you ever had a conflict with any of the following that could have a serious impact on you as a student? Please select all that apply.

		Response Percent	Response Total
Graduate Advisor		11.8%	4
Academic department		0%	0
College of		0%	0

school			
Faculty Member		52.9%	18
Graduate program		0%	0
Graduate Studies Office		2.9%	1
Student		8.8%	3
Other		32.4%	11
Total Respondents			34
(filtered out)			26
(skipped this question)			338

29. Do you feel or have you felt exploited by any of the following during your time as a graduate student at Drexel University? Please select all that apply.

		Response Percent	Response Total
Graduate Advisor		5.6%	1
Graduate Studies Office		0%	0
Faculty		16.7%	3
University Administrator		0%	0
Other Drexel		5.6%	1

Student(s)			
Other		72.2%	13
Total Respondents			18
(filtered out)			16
(skipped this question)			364

30. If you answered 'Yes' to any of the choices in question 28, please use the space provided to submit a brief description of the nature of the exploitation.			
Total Respondents			23
(filtered out)			17
(skipped this question)			358

31. Please answer 'yes' or 'no' to the following questions or statements.			
	Yes	No	Response Total
Do you feel safe on campus during the day?	89% (80)	11% (10)	90
Do you feel safe on campus at night?	64% (54)	36% (31)	85
When faced	22% (37)	78% (133)	170

with a problem at Drexel University, do you feel helpless?			
Do you feel you are given the same priority as undergraduate students?	86% (132)	14% (21)	153
Would it be helpful to have a single department that could answer all of your questions or direct you to the appropriate office or resource?	84% (158)	16% (29)	187
Would you recommend Drexel University's graduate programs to	91% (189)	9% (18)	207

others?			
Is it questionable whether you will complete your degree program due to the cost of graduate education at Drexel University?	37% (77)	63% (132)	209
I should have entered a different program at Drexel University.	4% (9)	96% (193)	202
I should have attended another institution for graduate school.	16% (31)	84% (161)	192
I should not have attended graduate school.	2% (3)	98% (191)	194
Total Respondents			216

	(filtered out)	148
	(skipped this question)	34

32. Your age on your last birthday:			
		Response Percent	Response Total
18 - 25		14.8%	33
26 - 35		38.6%	86
36 - 45		25.1%	56
46+		21.5%	48
Total Respondents			223
		(filtered out)	145
		(skipped this question)	30

33. Gender:			
		Response Percent	Response Total
Female		80.7%	180
Male		19.3%	43
Other		0%	0

Total Respondents	223
(filtered out)	144
(skipped this question)	31

34. Ethnicity:			
		Response Percent	Response Total
Asian or Pacific Islander		1.4%	3
Black (non-Hispanic)		6.4%	14
Cuban American		0%	0
Mexican American		0.5%	1
Native American		0.5%	1
Puerto Rican American (Commonwealth)		0.5%	1
Puerto Rican American (Mainland)		0%	0
White (non-Hispanic)		87.6%	191
Other Hispanic		1.8%	4
Other (please		1.4%	3

specify)		
Total Respondents		218
(filtered out)		140
(skipped this question)		40

35. Are you a United States Citizen or Permanent Resident?			
		Response Percent	Response Total
Yes		99.1%	217
No		0.9%	2
Total Respondents			219
(filtered out)			144
(skipped this question)			35

36. Is English your native language?			
		Response Percent	Response Total
Yes		96.8%	214
No		3.2%	7
Total Respondents			221
(filtered out)			144

(skipped this question)	33
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37. Are you?			
		Response Percent	Response Total
Divorced		4.1%	9
In a domestic partnership		6.4%	14
Married		59.2%	129
Never Married		29.8%	65
Widowed		0.5%	1
Total Respondents			218
(filtered out)			142
(skipped this question)			38

38. Number of dependant children?			
		Response Percent	Response Total
0		61.6%	135
1		17.8%	39
2		11.9%	26

3+	8.7%	19
Total Respondents		219
(filtered out)		140
(skipped this question)		39

39. Are there any other challenges, problems or issues that you have faced during your time as a graduate student at Drexel University of which we should be aware? If yes, please provide a brief description.

Total Respondents		82
(filtered out)		65
(skipped this question)		251

40. What, if any, do you feel have been major impediments to completing your degree?

Total Respondents		103
(filtered out)		65
(skipped this question)		230

41. Do you feel valued as a graduate student at Drexel University? Please explain why you have chosen your answer.

Total Respondents		115
(filtered out)		80
(skipped this question)		203

42. Please provide any suggestions you might have for improving the atmosphere of graduate education or the services available to graduate students at Drexel University.

Total Respondents	76
(filtered out)	51
(skipped this question)	271

43. General Comments

Total Respondents	58
(filtered out)	33
(skipped this question)	307

44. Full Name:

Total Respondents	198
(filtered out)	120
(skipped this question)	80

45. Drexel Email:

Total Respondents	199
(filtered out)	120
(skipped this question)	79

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