

Master's Degree Candidates and IT Lab Usage: A User Satisfaction Study

Martin Corrigan, Amanda Dingus, Barbara Hefner, Susan Kirkpatrick, and Andy Reichert

LIS 397.1 – Spring 1999

Introduction

The purpose of this survey is twofold. Initially, the survey was intended to discern the level of satisfaction that was enjoyed by Masters Degree Candidates through their personal experiences with the Information Technology Lab within the Graduate School of Library and Information Science at the University of Texas. Subsequently, the survey was used as an anonymous means of obtaining demographic information regarding the computer usage patterns of Masters Candidates within the GSLIS program, with respect to on-campus computer use, as well as remote computer access.

Eighteen questions were used in conducting this survey, addresses everything from basic demographic information such as age and sex to subjective questions as to computer proficiency and degree of satisfaction. Surveys were placed in the student mailboxes of each student currently enrolled in the Masters program and ninety-seven of the two hundred and fifty surveys distributed were completed and returned. This thirty-nine percent (39%) response rate was better than anticipated. The survey responses were tabulated and the resulting information was transferred into an Excel spreadsheet format with each survey accounting for one record with eighteen possible answers, or fields. The purpose of this was to derive determine the possibility of additional correlations, rather than recording a series of simple tallies. For instance, if ten percent (10%), or 9.7, of the ninety-seven respondents indicated that they did not currently have a

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GSLIS electronic mail account, Information Technology would be interesting to determine what portion of that 10% has a computer at home. By summarizing our survey results in a relational database form, we are able to study the results with an eye toward the possibility of additional correlations within the original data set.

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Home Computer Ownership vs. Information Technology Lab Use

The motivation behind the creation and distribution of the survey was to gather student data for the benefit of the Information Technology Laboratory, in terms of its role as a support system of the Graduate School of Library and Information Science. The services offered by the Information Technology lab range in scope from access to electronic mail to “short course” offerings and one-on-one help sessions. The lab is staffed by teaching assistants, with Information Technology lab programs and services available to students enrolled in both the Masters and PhD programs within the Graduate School of Library and Information Science. Having a basic understanding of the services that the lab makes available to the student body, our group decided to create a survey that could, if successful, offer a better understanding of *how* the students utilize the lab. We discussed the many differing angles that our survey could examine and after much debate, we recognized the need to limit the scope of our research and sought the assistance of the Information Technology lab staff.

To assist us in isolating the information that would be most useful in evaluating the Information Technology lab, we decided to conduct pre-survey interviews with members of the Information Technology lab staff. We spoke to both Luke Rosenberger, a GSLIS Masters Candidate and the Information Technology services supervisor, and his supervisor, Coordinator of Information Technology Services Mary Lynn Rice-Lively. They shared many of the cause concerns and with their assistance; our group isolated the following factors as points of concern:

- Student satisfaction with Information Technology laboratory services
- Information Technology lab computer software applications used by students
- Number of students with GSLIS e-mail accounts
- The ISP used for remote E-Mail and Internet access

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Referencing the points of concern that we had identified, the group was able to narrow the focus of our survey. The survey would focus on two primary variables: the number of students within the Graduate School of Library and Information Science who own a home computer and the frequency with which GSLIS students use the Information Technology lab. We hypothesized that graduate students in the School of Library and Information Science who owned home computers would be less likely to use the computers in the on-campus Information Technology lab.

Hypothesis

The null hypothesis – that graduate students in the School of Library and Information Science who owned home computers would be less likely to use the computers in the on-campus Information Technology lab – was established before the data is collected and is a tentative response to the purpose of the survey. The hypothesis was analyzed using the data collected by the survey – although the viability of the hypothesis was tested, the hypothesis itself was not altered to support the data. The null hypothesis is a method of inferential statistics. The purpose of hypothesis testing is to test the viability of the null hypothesis in relationship to the information gathered by the survey tools.

The hypothesis relating to the correlation between Information Technology Lab use and the student population of the Graduate School of Library and Information Science is a numerical quantity measuring different areas of the population. The areas of our survey measurements were:

- Home computer ownership
- GSLIS e-mail account ownership and use
- Internet Service Provider (ISP) account ownership and use

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- Short Course Enrollment
- Computer application usage

The survey was distributed to Masters Degree Candidates within the Graduate School of Library and Information Science requesting their participation in evaluating the level of Information Technology Lab use, as well as student satisfaction with the Information Technology Services available to them.

Null Hypothesis

Masters Candidates in the Graduate School of Library and Information Science who own a home computer use the Information Technology Lab less frequently than do students who only have a GSLIS account at the lab.

Alternative Hypothesis

Masters Candidates who own a home computer use the Information Technology Lab frequently.

The data collected and the viability of the null hypothesis will be determined from the data gathered through a written survey. The null hypothesis will be rejected or accepted according to a 5% level of significance.

Type I error (α), which is the more serious error, occurs when a true null hypothesis is rejected.

Type II error (β), which is the less serious error, occurs when a false null hypothesis is accepted.

After conducting our survey and tabulating the results, we found that ninety-seven percent (97%) of the respondents surveyed owned a computer at home; of this group, eighty-seven percent (87%) of the respondents said they use the Information Technology Lab consistently. The data does not support the null hypothesis; therefore, the null hypothesis is rejected.

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The high percentages reflected in both computer ownership (97%) and Information Technology Lab usage (87%) indicate that the two factors are not related because many GSLIS students said they have computers at home, but they also indicated that they use the Information Technology Lab.

After reviewing the survey results, we realized that there are several other variables to consider, including the fact that students may use the Information Technology Lab for services other than electronic mail access. For instance, sixty percent (60%) of our survey respondents indicated that they have taken a short course in the Information Technology Lab. Additionally, considering that many GSLIS students commute from areas outside Austin, it makes sense that many students may use the Information Technology Lab between classes to check their e-mail or work on class assignments before returning home. The survey results also indicate that students use the Information Technology Lab to access certain software packages that are only licensed and available on the Information Technology Lab computers, such as the Microsoft Office Suite, Dreamweaver, or Microsoft FrontPage.

Information Technology Lab Short Courses

Every semester the Information Technology Lab offers short courses on various topics, such as how to use various databases or software. Three of the questions in our survey concerned these short courses.

The first question was "Have you taken a short course in the Information Technology Lab?" Of the sample population, sixty percent (60%) responded "YES," thirty percent (30%) responded "NO," and ten percent (10%) had no response. Those who answered "yes" to this first question were asked to answer the two follow-up questions; fifty-nine respondents out of the total sample population answered "yes" to this question.

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The second question was “How many short courses have you taken in the Information Technology Lab?” Of the fifty-nine initial respondents, thirty-eight students – or sixty-four percent (64%) – stated that they had taken between one and three short courses in the Information Technology. Sixteen, or twenty-seven percent (27%), of the respondents stated that they had taken between three and six short courses; and five, or eight percent (8%), of respondents stated that they had taken six or more short courses from the Information Technology lab.

The third question was “Would you take another short course in the Information Technology Lab?” Fifty-six – or ninety-five percent (95%) – of those respondents who had indicated that they had taken a short course stated that they would take another one, while three respondents (5%) stated that they would not. Of the three respondents who stated that they would not take another short course, two had already taken between one and three short courses and one had already taken three to six classes. It is conceivable that these respondents felt that the short courses they had already taken were enough to satisfy their needs, which is why they did not plan to take any more. Five respondents (8%) stated that they had not yet taken any short courses in the Information Technology Lab, but that they planned to do so in the future.

Conclusion

Although the results of our survey served to reject our hypothesis, the information that was gathered will still be of value to members of the Information Technology Lab staff. Additionally, for a more complete picture of both student Information Technology lab usage and student satisfaction with the services offered by the Information Technology lab, a larger population sample would have to be surveyed. One means of conducting such a survey would be to program a “pop-up” survey to appear on the IT lab computers upon the successful login of each student ID.

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The data collected through this survey serves to reject our hypothesis, while demonstrating an estimate of the Information Technology lab usage. Additionally, the relational spreadsheet design may be used to develop, and study, further correlations between the individual data types.

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Appendix 1- Questionnaire

This survey is being used as the basis for a group paper being written for Dr. Wyllys' LIS 397.1 class. Please take a moment to complete this survey and place it in the GSLIS mailbox of any of the following students: MARTIN CORRIGAN, AMANDA DINGUS, BARBARA HEFNER, SUSAN KIRKPATRICK, OR ANDY REICHERT.

Thank you very much for taking the time to assist our group – we appreciate it and will make both our group paper and the results of the survey available in the IT lab after May 6, 1999.

Please feel free to "annotate" the survey as needed.

1. Do you currently have a GSLIS account? (If no skip to question 2)

- Yes
 No

1.a. How often do you check your mail using your GSLIS account?

- More than once a day
 Once a day
 Once a week
 Once a month
 Other (please specify)

2. Do you own a home computer?

- Yes
 No (if no, skip to question 4)

3. Do you have Internet service from home?

- Yes
 No

3a. If you have a home ISP connection, what type do you have?

- UT Connect (Telesys)
 Commercial provider
Please list commercial provider : _____

4. Do you use the IT lab?

- Yes
 No (if no, skip to question 8)

5. What specific applications do you use in the IT lab? (Check all that apply)

- E-Mail
 WEB Browser (Internet Explorer or Netscape Navigator)
 MS Office Suite (MS Word, Excel, PowerPoint, Access)
 Other

6. Have you taken a short course in the IT lab?

- Yes
 No (if no, skip to question 8)

6a. How many short courses have you taken in the IT lab?

- 0
 1-3
 3-6
 6-over

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6b. Would you take another short course in the IT lab?

- Yes
 No

7. Are you satisfied with the technology available in the IT lab?

- Very satisfied
 Satisfied
 Neutral
 Unsatisfied
 Very unsatisfied

8. Do you find the staff in the IT lab to be helpful?

- Strongly agree
 Agree
 Neutral
 Disagree
 Strongly disagree

9. How many semester hours do you have entering spring 1999 semester?

- 0
 3-9
 10-15
 16-21
 22-30
 31-39
 39 +

10. How are you classified?

- Masters Candidate
 Ph.D. Candidate

11. Are you...?

- Male
 Female

12. What is your age group?

- 20-25
 26-30
 31-35
 36-40
 41-45
 46 +

13. When did you receive your undergraduate degree?

_____ (Please specify)

14. How would you classify your computer skills?

- Very Strong
 Strong
 Okay
 Could be better
 Help!

THANKS! ☺

SURVEY
GSLIS IT LAB

*Appendix Two:
Rough
Percentages*

This survey is being used as the basis for a group paper being written for Dr. Wyllys' LIS 397.1 class. Please take a moment to complete this survey and place it in the GSLIS mailbox of any of the following students: MARTIN CORRIGAN, AMANDA DINGUS, BARBARA HEFNER, SUSAN KIRKPATRICK, OR ANDY REICHERT.

Thank you very much for taking the time to assist our group - we appreciate it and will make both our group paper and the results of the survey available in the IT lab after May 6, 1999.

Please feel free to "annotate" the survey as needed.

1. Do you currently have a GSLIS account? (If no skip to question 2)

Yes 90%
 No 9%
 no resp 1%

1.a. How often do you check your mail using your GSLIS account?

More than once a day 39%
 Once a day 15%
 Once a week 5%
 Once a month 5%
 Other (please specify) 23%
 no response 10%

2. Do you own a home computer?

Yes 97%
 No (if no, skip to question 4) 3%

3. Do you have Internet service from home?

Yes 94%
 No 3%
 no response 3%

3a. If you have a home ISP connection, what type do you have?

UT Connect (Telesys) 66%
 Commercial provider 26%
 Please list commercial provider 8% SEE EXCEL SPREADSHEET

4. Do you use the IT lab?

Yes 87%
 No (if no, skip to question 8) 13%

5. What specific applications do you use in the IT lab? (Check all that apply)

E-Mail
 WEB Browser (Internet Explorer or Netscape Navigator)
 MS Office Suite (MS Word, Excel, PowerPoint, Access)
 Other
(SEE EXCEL SPREADSHEET)

6. Have you taken a short course in the IT lab?

Yes 60%
 No (if no, skip to question 8) 30%
 no response 10%

6a. How many short courses have you taken in the IT lab?

0 13%
 1-3 40%
 3-6 16%
 6-over 5%
 no response 25%

6b. Would you take another short course in the IT lab?

Yes 62%
 No 7%
 no response 31%

PLEASE COMPLETE BOTH SIDES OF THE SURVEY!
OVER

SURVEY
GSLIS IT LAB

7. Are you satisfied with the technology available in the IT lab?
_____ Very satisfied 23%
_____ Satisfied 51%
_____ Neutral 9%
_____ Unsatisfied 0%
_____ Very unsatisfied 0%
_____ NO RESPONSE 18%
8. Do you find the staff in the IT lab to be helpful?
_____ Strongly agree 30%
_____ Agree 51%
_____ Neutral 15%
_____ Disagree 3%
_____ Strongly disagree 0%
9. How many semester hours do you have entering spring 1999 semester?
_____ 0 5%
___ 3-9 25%
___ 10-15 18%
___ 16-21 11%
___ 22-30 29%
___ 31-39 9%
_____ 39+ 3%
10. How are you classified?
_____ Masters Candidate 100%
_____ Ph.D. Candidate
11. Are you...?
_____ Male 28%
_____ Female 72%
12. What is your age group?
_____ 20-25 14%
_____ 26-30 41%
_____ 31-35 20%
_____ 36-40 1%
_____ 41-45 6%
_____ 46 + 11%
13. When did you receive your undergraduate degree?
_____ (Please specify) SEE excel spreadsheet
14. How would you classify your computer skills?
_____ Very Strong 15%
_____ Strong 44%
_____ Okay 34%
_____ Could be better 4%
_____ Help! 1%
_____ no response 1%

THANKS! ☺

<u>Summary Statistics</u>	<u>1</u>	<u>%</u>	<u>1a</u>	<u>%</u>	<u>2</u>	<u>%</u>	<u>3</u>	<u>%</u>	<u>3a</u>	<u>%</u>	<u>4</u>	<u>%</u>	<u>5</u>	<u>%</u>	<u>6</u>	<u>%</u>	<u>6a</u>	<u>%</u>
No response	1	1%	10	10%	0	0%	3	3%	7	8%	0	0%	N/A		7	7%	24	25%
1	a7	90%	39	40%	94	97%	91	94%	58	66%	a4	87%			60	62%	13	13%
2	9	9%	15	15%	3	3%	3	3%	23	26%	13	13%			30	31%	39	40%
3			5	5%													16	16%
4			5	5%													5	5%
5			23	24%														
6																		
Totals/Percentages	97	100%	97	100%	97	100%	97	100%	88	100%	97	100%	0	0%	97	100%	97	100%

Appendix Three
EXCEL
Spreadsheet

6b	%	7	%	8	%	9	%	10	%	11	%	12	%	13	%	14	%
30	31%	17	18%	1	1%	0	0%	0	0%	0	0%	0	0%	no analysis		1	1%
60	62%	22	23%	29	30%	5	5%	96	99%	27	28%	14	14%			15	15%
7	7%	49	51%	49	51%	24	25%	0	0%	70	72%	40	41%			43	44%
		9	9%	15	15%	17	18%	1	1%			19	20%			33	34%
				3	3%	11	11%					7	7%			4	4%
						28	29%					6	6%			1	1%
						9	9%					11	11%				
						3	3%										
97	100%	97	100%	97	100%	97	100%	97	100%	97	100%	97	100%	0	0%	97	100%
