Joe Burgess Ben McGrath John Lee Alexandra Lecompte sampl plan /30 sample size /30 questions /40 Total /100

Group G 11.5a

K)

In order to determine a representative sample, we will utilize a list of randomly selected undergraduate students from the student directory in C-Book 2009-2010. The C-Book provides a list of currently enrolled students according to information provided by the HUB (Enrollment Services at CMU). The C-Book has some minor disadvantages, such as varying number of students in each page and the combination of both graduate and undergraduate students. To account for these variations from our defined sampling frame, which includes only currently enrolled undergraduate students in CMU, we will make necessary adjustments to our list of selected students. We will use a computer-based random number generator http://stattrek.com/Tables/Random.aspx to generate 2 numbers, one for the page and one for location of the student on the page (pg.10-119 in C-book) to account for the variation in students in each page. We will compile a list of students from these numbers by eliminating ineligible students and locations. Utilizing the contact information for the selected students we will gather the corresponding emails, and then proceed to use the Carnegie Mellon Student Directory to ensure their validity. We will send an email with the necessary instructions, information and a link to our online survey. If a subject does not respond, we will send a reminder email 10 days later. An online survey is a convenient way for students to respond and also provides sufficient confidentiality as to ensure that our results might not be compromised. Given our limited constraints, such as limited manpower and economic resources, using emails for distribution of the surveys accommodates to our use of SRS. This method of acquiring our SRS



this is interesting. most people ask how many years have you been here, you are asking how many years you got left. how might those two different

questions affect interpretion of respondents' answers about fair use of student fees?

all ok

vide a more representative sample of our target population.

L)

1. What is your expected date of graduation?

2. What college are you in (HSS, MCS, etc)?

- (a) HSS
- (b) MCS
- (c) SCS
- (d) CFA
- (e) Tepper
- (f) SOD gosh I don't know what this is!

3. What gender are you?

- (a) Male
- (b) Female
- 4. Do you live on-campus or off-campus?
 - (a) On-Campus
 - (b) Off-Campus

do you think it will matter to distingish off-campus CMU-related housing from off-campus private housing?

- 5. Are you a member of any student organizations?
 - (a) Yes
 - (b) No
- 6. Are you an international student?
 - (a) Yes
 - (b) No
- 7. Are you aware that you are charged a flat rate per semester to ride the Port Authority public busses for free?



8, 13, 18, 22 are interesting....

- 8. How much do you think you pay per semester to ride the Port Authority busses?
- 9. How often do you use your Carnegie Mellon ID Card to ride a Port Authority public bus?
 - (a) Twice per day, or more
 - (b) About once per day
 - (c) A few times per week
 - (d) Once or twice per week
 - (e) A few times per month
 - (f) A few times per semester
 - (g) Never

do they get to go back and change their answer? is #8 important, given #10?

10. Had you been given the choice at the start of the semester to pay an \$84 at rate for all rides of the Port Authority bus, or to pay \$2.00 per ride, which would you choose and why?

\$2 is a zone 1 ride. malls) must also be common.

- zone 2 rides (28X, (a) \$84 flat rate because I believe that the flat rate saves me money
 - (b) \$84 flat rate because I feel that the flat rate is more convenient

(c) Regular price of \$2 per ride because I do not ride the busses enough to want to pay \$84 Do you want to per semester ask about what kinds of rides

- people take?11. Overall, what are your feelings toward the job that the Port Authority of Alleghany County does regarding bus service?
 - (a) I feel that the busses are generally reliable, and Port Authority does a good job
 - (b) I feel that the busses are unreliable, and Port Authority does not do a good job
 - (c) I do not take the busses enough to have any opinion on them
 - 12. Are you aware that you are charged a Media Fee each semester?
 - (a) Yes
 - (b) No
 - 13. How much do you think you pay per semester for the Media Fee?
 - 14. What local and national newspapers do you recognize as being provided by the Media Fee? Choose all that apply:
 - (a) The Pittsburgh Gazette

	(b) Pittsburgh Tribune Review		
	(c) New York Times		
	(d) New York Post		
	(e) USA Today		
	(f) Boston Globe		
	(g) Washington Post		
	(h) Other:		
15.	How often do you read the local and nati	onal newspapers provided by the Media Fee?	
	(a) Daily	presumptioin in #14 is that	
	(b) Weekdays only	respondent may not know which papers are provided by	
	(c) Weekends only	media fee.	
	(d) Weekly	so how should we interpret answer to #15, given that we are	
	(e) Monthly	assuming respondent doesn't know what's covered by that	
	(f) Rarely	fee?	
	(g) Never		
16.	Do you think it's worth it to have a Media Fee?		
	(a) Yes		
	(b) no		
	(c) neutral		
17.	Were you aware of the Technology Fee at Carnegie Mellon University?		
	(a) Yes		
	(b) No		
18.	How much do you think you pay per semester for the Technology Fee?		
19.	Do you feel that your major require use of	of the technology fee?	
	(a) yes		
	(b) no		
20.	The following is a list of downloadable licensed software that Carnegie Mellon Students have access to Select all that you have at one point downloaded and used		
	• Utilities	"supported by the tech fee" ??	

- Cisco VPN Client

• Academic

- Allegro Common Lisp
- Analytica
- Maple
- Mathematica for Students
- Matlab
- Minitab
- RobotStudio
- S-PLUS
- SAS
- X-Win32

• Drivers

- Public Printing Installers
- Internet
 - Carnegie Mellon Web Certificates
 - Cisco VPN Client
 - Fetch
 - Fugu SFTP
 - SSH Secure Shell
 - X-Win32
- Productivity
 - Java Runtime Environment (JRE)
 - Oracle Calendar Client
 - Oracle Calendar Client / KFW
 - Oracle Calendar Sync
- Security
 - Carnegie Mellon Web Certificates
 - Cisco VPN Client
 - Identity Finder
 - Kerberos for Macintosh
 - Norton AntiVirus
 - SSH Secure Shell
 - Spybot Search & Destroy
 - Symantec AntiVirus
- Utilities
 - Cisco VPN Client
 - Fetch

 Fugu SFTP Oracle Calendar Sync Public Printing Installers SSH Secure Shell Spybot - Search & Destroy X-Win32 	у
21. Does Carnegie Mellon University ha	ave a Student Activities Fee?
(a) Yes(b) No	
22. How much do you think you pay per	r semester for the Student Activities Fee
 (a) Carnival Committee (b) Actitivies Board (c) Student Senate (d) I Don't Know 	y from the Student Activites Fee?
24. Where do concerts on campus get th	neir funding?
(a) General Tuition/University Rev(b) Student Senate(c) Student Activities Fee(d) Media Fee	venue (e) ticket price (or are you referring to free concerts?) (f) other:
25. Do you feel that the Student Activities Fee is fair?	
(a) Yes(b) No(c) Neutral	
26. Who decides how most of the student(a) Student Senate(b) Activities Board(c) Joint Funding Committee	nt activities fees are allocated
(d) I don't know	

- (a) Movits
- (b) Donora
- (c) aeroErotique
- (d) Aesop Rock
- (e) Art Decade
- (f) Gentlemen Auctionhouse
- (g) Revision
- (h) Battlecake
- (i) The Show
- 28. Who played at Fall Concert 2009?
 - (a) The Decemberists
 - (b) The Black Keys
 - (c) Aesop Rock
 - (d) RJD2
- 29. Did you go to Fall Concert 2009?
 - (a) Yes
 - (b) No
- 30. If you answered no, why did you not go?
 - (a) Didn't have time
 - (b) Didn't know it existed
 - (c) Didn't want to go

this is an interesting set of questions. you may want to edit it for length, as I imagine people will have a hard time getting all the way through it. you will find some of this out from pretesting.

although it is already long, you might want to add a couple of questions about general attitudes toward student fees... for example:

- should there be any at all, or should it all be pay-as-you go for students and direct fundraising by orgs?
- who should decide how much fee is and how it gets apportioned?

M) Our goal was to get a 0.1 Margin of Error. We did the calculation and found that we needed approximately 100 responses. To account for an expected response rate of about 20% we multiple that number by 5 to get 500 people. So, we will emailing 500 people for our survey.

$$SD = \sqrt{p(1-p)} = \sqrt{.25} = .5$$

$$n_0 >= \frac{1.96^2 \times .5^2}{.1^2} = 96.04$$
 ok
$$n >= \frac{Nn_0}{N+n_0} = \frac{(5892)(96.04)}{5892+96.04} = 94.49 \approx 100$$

$$100*5 = 500$$