

### First year Deaf student transitions into Gallaudet University

Our research team will be investigating the attitudes of Deaf freshman students as they transition into an all deaf college, Gallaudet University. (As a brief note, "capital D" Deaf is used to denote deafness as a cultural phenomenon and will be used as such in the paper and I will use "small d" deaf when the word is meant aculturally.) Gallaudet is designed to accommodate Deaf and hard of hearing students and is officially regarded as a bilingual university because it uses both American Sign Language (ASL) and English in its instruction. Because members of the Deaf community have their own language, there has been a growing acceptance of the view that linguistic barriers result in cultural differences, thus the idea was born that deafness is a cultural difference (or a difference in human experience) and not a disability (Ladd, 2003; Lane, et al., 2011).

In this respect, Galluadet offers Deaf students a unique opportunity to study in an environment where Deafness is the majority culture. We are interested in understanding what it means for students to transition into such a university environment, depending on the students' experiences. In particular, we are interested in knowing whether students 1) have come from primarily Deaf families or families that primarily use ASL to communicate 2) students' educational history (has he or she attended Deaf-only educational institutions prior to Galluadet?) and 3) how these factors may have influenced the students' transition into their freshman year at Galluadet academically and socially.

## **Research Question**

Because Galluadet is the only higher education institution of its kind, the questions we are posing are unique. In our review of survey literature directed at Deaf populations, we found surveys approaching the Deaf as the minority population. Such surveys will inform our understanding of survey consideration for Deaf populations, but we will also need to think about the implications for constructing a survey in a situation where deaf students may be entering a predominantly Deaf environment for the first time. In addition to surveys exploring general educational issues that might

apply to deaf students, we will also consider surveys and questionnaires distributed to first year college students. These surveys, while meant for a general population, will inform our group as we think about the types of issues and concerns all students face during their first year in college. In total, we have selected four surveys to analyze: two of the surveys are specific to Deaf students, two surveys are targeted at new college students. In what follows, I will describe four surveys through the lens of Dillman, Smith, and Christian's (2009) recommendations for survey design. I will synthesize these descriptions into an analysis of strengths and weaknesses found in the surveys and how I see these items informing our ultimate survey instrument design.

### **Survey Analysis**

# **Community College Student Report**

The first survey for analysis is the Community College Student Report (CCSR). According to the survey authors, the purpose of this survey is to ask students about their college experiences. The survey seeks insight into how students spend their time, what students perceive to have gained from coursework, how relationships and interactions from school staff and classmates have interacted with their academic goals, how the college supports learning, and how students have met their academic challenges.

The overall look to the survey is very nice and clean, and for the most part, the instructions are unambiguous. Questions are presented on alternating color backgrounds, making it a very easy survey to follow. The one minor concern I would raise is that the colors alternate blue and white, and at the bottom of each page there is a blue bar where students are not supposed to enter responses. To make this area seems less a part of the survey, the designers might have considered making this a slightly different color.

#### Possible sources of error

There are a few serious flaws in the overall survey construction, however, that could lead to a

variety of errors. One of the first questions asks students whether they have encountered the survey in another class, with a "Yes" and "No" options. There are no further instructions, however, for students that may have already completed the survey. This implies (at least, to me) that there is no method in place to make sure the students only receive the survey once, which would be preferable. For instance, the survey doesn't tell students who have already taken the survey that they do not need to proceed (the survey has the option of being anonymous) so I assume that it is at the analytic level that data collected from students who have answered "Yes" to this question is disregarded. I can only speculate that the reason the survey designers did not tell "Yes" responders to skip the question is because they didn't want students falsely responding "Yes" in order to avoid doing the rest of the survey, but at any rate, it seems to me that the best option to avoid coverage error would be to control for this at the distribution level. This questionnaire is relatively long, and it does ask a lot out of its participants, and therefore warrants greater attention to distribution to ensure that the required population receives equal access and opportunity to participating in the survey.

Dozens of questions in the survey pertain to the frequency in which students encounter various academic opportunities or challenges. These questions ask the students to evaluate the overall college ("During the current school year, how much has your college...") about issues that pertain to the class level ("Memories facts or ideas", "Worked with instructors on activities other than coursework"). This seems to introduce the potential for a host of measurement error because it calls into question what students might mean by the "sometimes" response. For example, a student might feel that a certain question applies to his or her college experience "sometimes" as a global descriptor for all courses he or she is enrolled in for that school year. On the other hand, the student might pencil in the "sometimes" response as representing a median of classes that are at the extremes for a particular item. Furthermore, I'm confused as to why the questionnaire interrogates the "current school year", when student schedules and instructors can change drastically from quarter-to-quarter and certainly semester-

to-semester. A majority of this survey uses this convention, leaving me to wonder how reliable student response are for most of this survey.

A similar measurement error is introduced in the series of questions falling under question eleven. Here, the survey asks students to rate the quality of their interactions with various people on campus. The question asks for students overall attitude towards these interactions, but it does not allow for a "Not Applicable" option, which may be required for staff that is more peripheral to the day-to-day interactions with staff (such as counselors or administrators). A similar measurement error is introduced in the question 13 series. These questions ask students about which services they use and the response options for "Don't know" and "Not applicable" are the same. These questions include services such as financial aid and counseling services, where the difference between "Don't know" and "Not applicable" could be very important.

Another area of concern that is shared by a few of my teammates is the decision to move to the convention of using "Very much" and "Quite a bit" in question five, rather than the "Very Often" and "Often" (respectively) convention used in question four. "Very often" and "Very much" align in the surveys, so for all intents and purposes, the meaning of "Very often" and "Very much" is the same, so it isn't clear to me why the survey designers changed the wording here. While there is always a risk in using a Likert scale that measurement error is introduced because one persons "Very Often" is another persons "Often" (especially if survey designers do not spell out their idea of what these terms mean, which is the case here) but the terms "Very much" and "Quite a bit" actually strike me as being congruous at face value. It isn't clear to me what the survey designers gained by introducing this ambiguous language into the survey.

The ambiguity of the response options and the general thrust of the questions (do they apply to a single course? How does a student respond about many, very different courses he or she might be enrolled in) are the greatest drawback of this survey. At the individual prompt level, the questions are

generally clear save for one glaring instance with question seven. This question asked to what extent the college has challenged students to do "their best work". The response option prompt scale on the question ranges from "extremely challenging" to extremely "easy". One critique I have for this question is the same as my problem with question four where the question asks about the college in general when this is something that would really be better served by examining the issue in a course-by-course basis. On top of that, the response option does not seem to match the question: being challenged to do your best does not necessarily intersect with an exam being challenging or easy. Most students have had the awful experience of taking an extremely challenging exam in which their performance was most certainly not their "best work". Conversely, students might have had a very easy time with an exam and at the same time done wonderful work. It seems to me that the question writers wanted to know how "hard" students thought exams where, but some sort of "death by committee" process pressured the question writers to spin this issue as something positive, and in the end they had a nonsensical question.

## Survey Two: Classroom Participation Questionnaire: Deaf/ Hard-of-hearing Version

This survey was sent to us directly from a study author who was examining general issues of classroom participation among elementary students. In her study, she had a component that looked directly at deaf/ hard of hearing students. It appears that this survey was read to students, although it contained an interesting visual component using dots insides of circles to visually depict "sometimes, often, and never". This was a compelling and novel survey element that I can't really comment on because I have not seen a lot written about modifications for surveys for children or developmentally delayed adults. Otherwise, there isn't much to comment on in terms of the visual design of the survey as all that was available for review was the "read-aloud" portion of the survey.

In addition to this visual component, the survey included thorough examples for students as to what researchers meant by the terms "sometimes, often, and never" using the concrete example of

making one's bed. The questions here are straightforward and I am looking towards these questions as a model for how I'd like to phrase questions for our ultimate survey (as per Dillman et al.,'s Guideline 4.4: Use simple and familiar words as well as Guideline 4.7: Use complete sentences with simple sentence structures). I did wonder whether some of the adjectives used here were too complex for their intended audience (e.g. "frustrated", "relaxed", "lonely") but for our intended audience, these are perfect. I would probably need to know more about the distribution of this survey and the comprehension levels of the intended audience to better understand potential sources of error.

### Vocational/ Post-Secondary Transition Questionnaire for Hard-of-Hearing Youth

This is a comprehensive paper-and-pencil survey that asks students about their hearing loss.

This survey is not a web forum, nor is it a scan sheet, so the overall visual composition of the survey does not look as "neat" as something like the Community College Student Report, but it still seems relatively straightforward. The questions and their responses avoid the pitfalls of not allowing enough response differentiation (what we saw in the Community College Student Report). For example, question 15 asks students how their teachers communicate in class (English, signed English, ASL, interpreters) and asks students how well they understand their teachers. The question then breaks down every subject and asks students to mark what percentage of the time students understand their teachers in that particular class, and asks if the teacher is hearing or hard-of-hearing. While I think it might be hard for students on the younger end of this survey's audience (13), this approach seems to be preferable to that of the Community College Student report's approach of lumping all courses into one general experience.

The greatest draw-back and potential for measurement error in this particular survey seems to me to be the occasional question that comes up within the survey that requires survey takers to enter a custom code. For instance: most questions ask the survey taker to put an "X" or check next to their response. However, occasional questions, such as 19, ask survey takers to put a mark next to every

response options and use codes like (H) for hearing, (HH) for hard-of-hearing, and (D) for deaf. This type of custom code appear sporadically throughout the survey and there is no warning or top-level instruction to alert respondents to this change in convention. The questions do technically follow Guideline 4.9 (Be sure the question specifies the response task), but I'm curious as to how frequently these anomalous and idiosyncratic instructions are overlooked. One possible way to improve this might be to add a visual cue to draw attention to these kinds of questions, or to make the space where the response goes appear slightly different.

### The 2009 Cooperative Institutional Research Program (CIRP) Freshman Survey Instrument

This survey is administered by the Higher Education Research Institution at UCLA to all freshman annually in order to capture "national norms". This is a very comprehensive survey, and does not explicitly address issues of transitioning into higher education, but there is enough of an overlap with this survey and our intended area of study to warrant examination. The first thing that struck me about this survey is that it asks a great deal of personal information (student name, ID, birth-date, and home address) and it asks a great deal of potentially sensitive information (for instance "Was this college your first choice?"). There is no indication that this personal information is optional (as it is in the CCRS). This is a very long survey with a rather comprehensive set of questions. With that said, the survey questions are stated quite simply. The questions are very direct and deliberate and the answer options are comprehensive save for one in particular that could lead to measurement error. I noticed that the exhaustive list of "current religious preferences" described the unlisted religions were "Other Christian," "Other Religion," and "None," with no opportunity for students to differentiate or identify as atheist or agnostic. That seems to me to be an important distinction, and I don't know why that wasn't included. Likewise, for agnostic students, I'm curious as to whether they would identify with their parent's religion or as atheists or "Other Religion/ Other Christian". The survey is taken by the entire freshman class at UCLA, so there doesn't seem to be much of an issue of sampling error as the

survey doesn't purport to generalize beyond its own population. In terms of informing our survey design, the straightforwardness of the questions and some of the questions regarding freshman life will be very useful. However, the survey is very long and cognitively demanding, as well as somewhat invasive in asking such potentially sensitive questions and asking for substantive personally identifiable information. We would avoid these design elements in our survey.

#### Conclusion

The four surveys we found do a nice job of walking around the edges of our research topic. While we were unable to locate a questionnaire that looked directly at the experience of first year Deaf students transitioning into an all Deaf institution of higher learning, we were able to analyze and learn from surveys that examined issues important to first-year higher education students. Likewise, we were able to examine questions pertaining specifically to the Deaf experience in schools. For the most part, the surveys we used were academically vetted (either through some sort of peer-review or academic administrative departments) and were constructed to answer well-bounded questions. For this reason, the potential for coverage and sampling error are somewhat difficult for me to comment on. This is an area that my team still needs to discuss in great detail prior to our survey. What does stand out in these surveys are issues of confusing wording, answer responses that are not flexible enough, intrusive questions, and great demands on the respondents time. Such issues point to concerns in measurement error and potentially non-response error.

The strengths of the survey I hope to take into our final project include the straightforward language and simple sentence structures, questions structured to reflect the reality of what it means to be a student (i.e. it is hard to generalize among classes, each course may have unique features), as well as the clean and even spacing, and good, clear topic titles.

#### References

- Community College Leadership Program at University of Texas-Austin (2011). *Community College Student Report*. Accessed at: <a href="http://www.ccsse.org/aboutsurvey/aboutsurvey.cfm">http://www.ccsse.org/aboutsurvey/aboutsurvey.cfm</a>, October 10, 2011.
- Cooperative Institutional research Program (2009). *The American Freshman: National Norms Fall* 2009. Los Angeles, CA: Higher Education research Institute at UCLA.
- Dillman, S, and Christian (2009). *Internet, Mail, and Mixed-Mode Surveys: The Tailored Design Method*. Hoboken, NJ: John Wiley & Sons, Inc:
- <u>Ladd, P.</u> (2003). *Understanding Deaf Culture: In Search of Deafhood*. Multilingual Matters.
- Lane, H. L.; Pillard, R. and Hedberg U. (2011). *The People of the Eye: Deaf Ethnicity and Ancestry*.

  Oxford, England: Oxford University Press.
- Rikard, J. C. (2000). *Hard of Hearing Youth in Transition: Personal Expectations for the Future*. (Doctoral dissertation). Retrieved from UMI (Microform No. [9962178]).
- Shirin, A.D., Stinston, M.S., Gaustad, M.G. (2002) Developing membership in the education of deaf and hard of hearing students in inclusive settings. *Journal of Deaf Studies and Deaf Education*, 7(3), 215-229.