
A Day in the Life: Practical Strategies for Understanding Student Space-Use Practices

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The “A Day in the Life” (ADITL) Project was a collaborative multi-sited ethnographic exploration of students’ space-use practices at eight universities: Indiana University Bloomington (IUB), Indiana University-Purdue University Indianapolis (IUPUI), Gustavus Adolphus College (GAC), University of Colorado, Boulder (UCB), University of North Carolina, Charlotte (UNCC), City University of New York, City Tech (CUNY CT), City University of New York Borough of Manhattan Community College (CUNY BMCC), and City University of New York Brooklyn College (CUNY BC). These universities were chosen to represent a cross-

section of the types of higher education institutions and diversity of the student body in the United States (Table 1). Using a mixed-methods approach to data collection that combined text message surveys delivered via students’ mobile telephones and qualitative interviews, this study examined space use by constructing a detailed map of each student’s day, including the day’s tasks and activities, the spaces and locations in which the student conducted academic research and day-to-day work, and the ways the university library and other campus locations fit within the student’s overall educational experience.

Table 1: Characteristics of ADITL Participating Universities

University	Participants	Student Population	Carnegie Classification	Size & Setting
CUNY BC	18	17,390	Master's Colleges & Universities: Larger Programs	Four-year, large, primarily nonresidential
CUNY BMCC	20	26,606	Associate's Colleges: High Transfer-High Traditional	Two-year, very large, nonresidential
CUNY CT	20	15,579	Baccalaureate Colleges: Larger Programs	Four-year, large, nonresidential
GAC	19	2,457	Baccalaureate Colleges: Arts & Sciences Focus	Four-year, small, highly residential
IUB	56	46,416	Doctoral Universities: Highest Research Activity	Four-year, large, primarily residential
IUPUI	31	30,690	Doctoral Universities: Higher Research Activity	Four-year, large, primarily nonresidential
UCB	23	32,432	Doctoral Universities: Highest Research Activity	Four-year, large, primarily residential
UNCC	18	27,238	Doctoral Universities: Higher Research Activity	Four-year, large, primarily nonresidential

The analyses of these everyday practices enabled the ADITL project team to make comparisons about how student needs vary within different institutional contexts and to uncover differences in experiences associated with demographic variables such as age, economic class, and university environment. In this way, the ADITL project sought to holistically understand how the complexity of students' life contexts are interrelated with the development of university programs, services, and resources intended to effectively address students' needs. By investigating the local expression of "taskscape," or the ensembles of related social activities that take place across space and time,¹ this study helps provide critical information about students' lived experiences, enabling the research team to make recommendations for specific libraries and universities to more effectively respond to students' needs.

Methods

The ADITL project team recruited 205 students (see Table 1) to participate, and asked them to choose one of two days during the workweek to receive

the text message surveys.² Twelve surveys were sent to each participant approximately 75 minutes apart, which asked students to respond to three questions indicating their location, what activity they were participating in, and how they felt at that time (Appendix A).³ The 75-minute interval was chosen to ensure that students received surveys during different parts of the hour throughout the day in order to help avoid potential bias caused by scheduling effects (e.g., most universities schedule courses to begin and end at consistent times in an hour, such as starting on the hour and ending at 10 minutes to the hour). Surveys for all eight participating universities were sent on the same days and at the same times to ensure comparability across the research locations, beginning at 9:10 a.m. and ending at 10:55 p.m. Students were instructed not to interrupt their courses to respond to the messages and not to respond if it was unsafe to do so (e.g., while driving). In these circumstances students were asked to respond once they became available and to provide information about what they were doing when the message arrived. In total, 2,210 responses were collected.

Once the survey was completed, the research team used the responses to create a day map for each student. This map was then used to guide a semi-structured debriefing interview with each student that used open-ended questions to explore students' daily experiences of spaces and places, and the spaces and practices they used to complete their academic assignments, research, and other day-to-day work (Appendix B). These interviews were transcribed and thematically coded by the research team using Dedoose qualitative data analysis (QDA) software.

Quantitative Findings

The quantitative data provided by the text message surveys revealed strong patterns in students' spatial experiences among the universities. These patterns suggested that a university's setting had a strong effect on spatial practices, while the classification of the university mattered very little. Within the eight universities, three patterns emerged: residential campuses (IUB, GAC, UCB), non-residential campuses in semi-urban locations (IUPUI, UNCC), and non-residential campuses in highly urban locations (CUNY BC, CUNY CT, CUNY BMCC). These three groups exhibited very similar total travel distances, commuting times, and average distances between locations among their constituent universities (Table 2, Figures 1 and 2).

Table 2: Reported Distances (in meters) and Commuting Times (in minutes)

University	Median Distance Traveled (m)	Median Reported Commute Time (min)	Average distance between locations (m)
IUB	6,769	10	795
UCB	8,001	10	1,557
GAC	5,959	10	684
IUPUI	10,878	25	2,820
UNCC	24,993	15	4,645
CUNY BC	15,293	35	1,695
CUNY CT	16,407	60	2,424
CUNY BMCC	23,541	50	3,174

Figure 1: Total Distance Traveled (in meters)

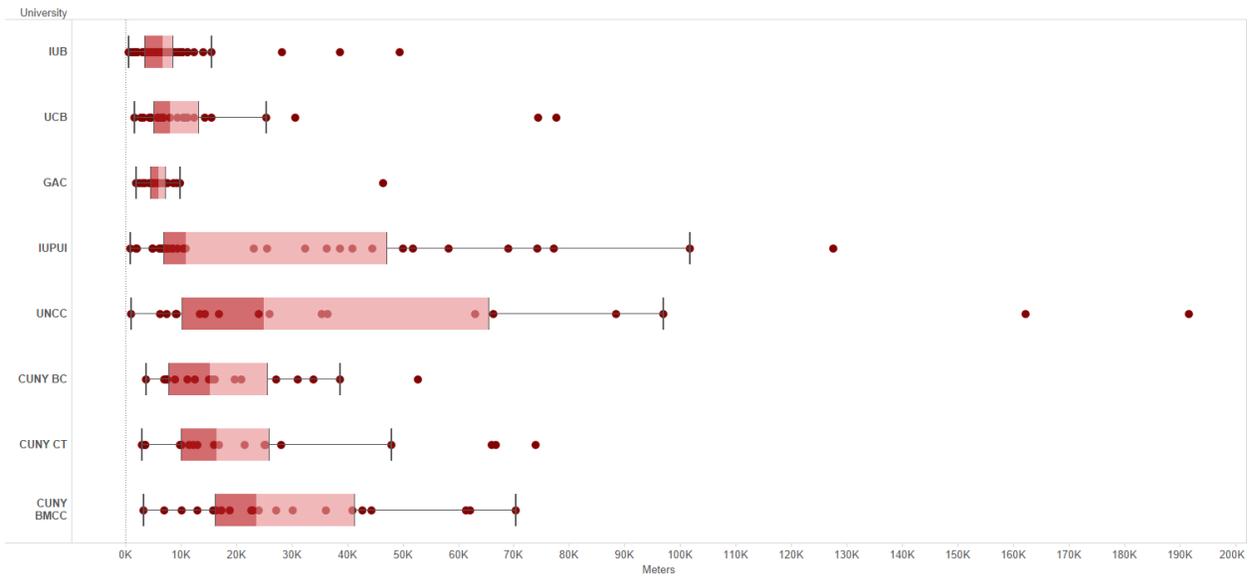
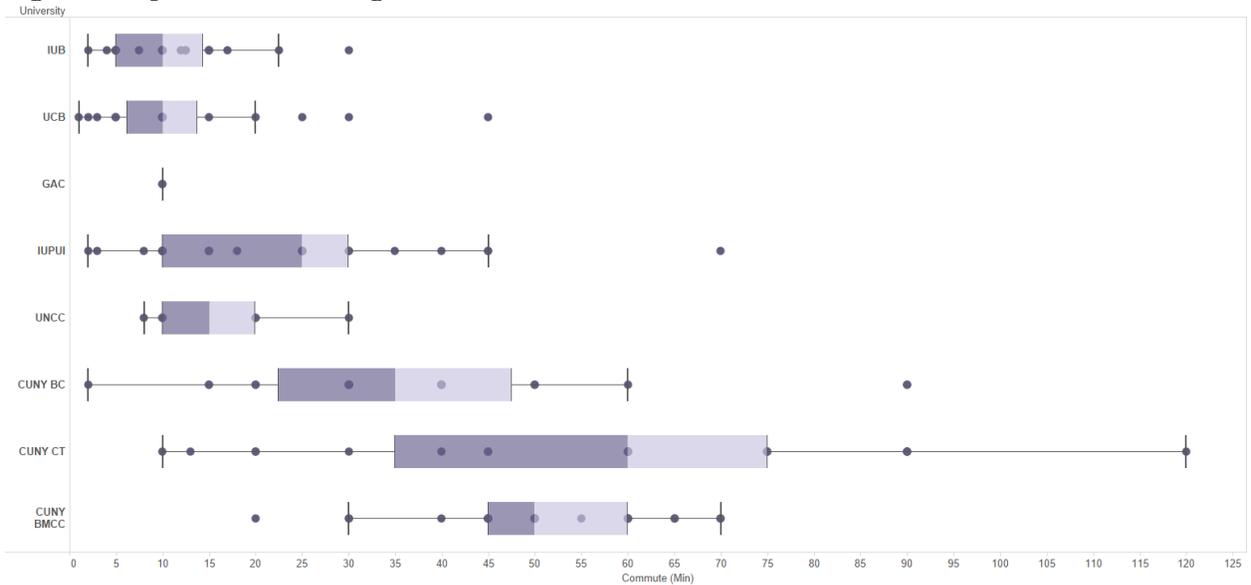


Figure 2: Reported Commuting Times



While the travel time and distance figures suggest very different spatial experiences, students from all eight universities reported very similar distributions of activities (Table. 3). These results suggest that

the tasks of student life are quite similar among students at all types of universities, but where and how these tasks get accomplished and the qualitative experience of these tasks might vary significantly.

Table 3: Distribution of Reported Activities

University	Attending Class	Commuting	Eating	Family, Social, or Recreational Activities	Other	Studying or other academic work	Working
IUB	16.80%	8.08%	10.94%	21.08%	10.94%	29.48%	2.69%
UCB	19.35%	7.37%	9.68%	17.51%	12.90%	27.65%	5.53%
GAC	18.14%	2.79%	11.63%	21.40%	13.49%	22.79%	9.77%
IUPUI	19.76%	7.19%	11.98%	18.86%	11.68%	20.96%	9.58%
UNCC	15.82%	8.47%	10.17%	20.34%	11.86%	22.60%	10.73%
CUNY BC	20.00%	9.00%	8.50%	17.00%	17.00%	26.50%	2.00%
CUNY CT	22.16%	11.86%	9.28%	12.37%	13.92%	27.32%	3.09%
CUNY BMCC	20.33%	11.54%	8.24%	8.24%	21.43%	24.18%	6.04%

Insights from Residential Campuses

Student movements at the three primarily residential colleges and universities—IUB, UCB, and GAC (located in St. Peter, Minnesota)—centered on the campus itself, as is reflected in the maps created from geocoded data. Students move frequently within a small geographic area, primarily between residence halls and other campus buildings or locations in town near the campus. The University of Colorado Boulder and Indiana University Bloomington are each the flagship campuses of their university system. At IUB, nearly all students live in Bloomington, though it is common for undergraduates to live in residence halls at the beginning of their college careers and move off-campus as they progress through their degree programs. UCB is also primarily residential, though, as the cost of living in Boulder has risen, some students have moved to locations outside the city and must travel longer distances to campus. Gustavus is both the smallest institution in this study and is entirely residential; the movements of Gustavus students were almost completely confined to campus as they traveled between residence halls, classrooms, campus jobs, and meeting rooms.

At UCB, student study preference is dependent on a variety of factors including attributes of home, distance between locations, and balancing academic, employment, and extracurricular commitments. Roommates or family living arrangements played

a strong role in determining preferred study location, with students who lived with more than one person citing the library as a quiet space away from distractions. Additionally, the library signaled to students as a place to do serious academic work because of the quiet and observing peers doing focused work. When tempted to get distracted, students noted that seeing others engaged in studying activities helped them focus on their academic work.

The decision to primarily study at home or in a residence hall was driven by several factors, including having a dedicated work space, either a desk or large table, access to food and supplies, and peers or roommates with related academic interests. One student noted that studying at home meant “I have a desk set up and I have like my highlighters and my markers and everything in this little mini file drawer” and that she knew she would have space to spread out. Lack of available seating and table space at the main library was one of the main reasons that some students chose to study in alternative locations. Access to parking and related safety concerns was another barrier to students choosing to study in the library. The UCB libraries are primarily situated in a part of campus where parking is limited, and the parking that is available is expensive. Students who primarily study later in the evening chose alternate study lounges in residence halls or other parts of campus where ample parking is available

or it is a shorter distance to walk home or to public transportation.

Though students at GAC did not travel far, they traveled constantly: among classroom buildings, labs, music ensembles, athletic practice, on-campus and off-campus jobs, and myriad extracurricular and volunteer activities. All of the students had at least one job, several had two, and one had three. Their days were a patchwork of activities, with the selection of study spaces partly determined by whether—at that point in their daily schedule—they needed quiet or stimulation. The word they used most often in describing their preferred study space was “quiet,” which was mentioned almost twice as often as the desire to have surrounding activity. Specific furnishings (whiteboards, computers, comfortable seating) were also mentioned, as was the value of having everything you need within reach, as a benefit of studying in one’s residence.

In the past, the library at GAC was *the* study site on campus. As residence halls have been improved, with many students living in apartments with kitchens and private rooms, students are more likely to “nest” in them than in the past when dorms were more noisy and social. Of four study sites mentioned by the 19 students interviewed, their dorm or apartment was most often mentioned, usually with some discussion of negotiating levels of distraction and noise with roommates. The library was the next most frequently-mentioned study choice, though students named different areas. Some preferred isolating themselves in single carrels, while others preferred more social spaces or saw the library as the meeting place for groups to work together. A campus cafe was popular among students who liked a social buzz around them as they studied, feeling comforted that they were not alone, but students who wanted both space and privacy often chose to study in vacant classrooms in a new academic building. In contrast, several students mentioned that they found the quiet floor in the library intimidating and even prison-like.

GAC students, like all of the students we interviewed, were very clear about why they studied in different places. Several favored the large whiteboards in the new academic building. Others felt they needed the ambient noise and movement of the café for stimulation. Some preferred their dorm because it was their private space where everything was just where they wanted it to be. One said she would go to the library “when I really have to pound

something out” but others disliked the serious atmosphere: “sometimes when I come to the library, everyone is like so focused and it stresses me out to be more focused.”

Insights from Mainly Non-Residential Campuses

IUPUI is an urban campus with a largely commuter student body. This may be slowly changing as more dorms are built on campus. In 2014, 36% of first-time beginner students lived on campus.⁴ Students report a lot of movement between campus, home, work, and other locations. Parking was mentioned frequently by students as the worst thing about the campus.

University of North Carolina, Charlotte, is a suburban university, and the clusters of places that students use are not limited to the campus, which is north and east of the city center, but include the suburban places where students live and occasionally work. Our statistics make it clear that Charlotte students drive the greatest distance of all of the studied locations, though they do not necessarily spend the most time overall traveling. Their complaints about the commute are more often about finding a place to park their car than about the traffic (although sometimes they encounter that). But even students who live relatively close to campus, technically within walking distance, spoke about driving, in part because they would not just need to get to campus but would then need to drive from campus elsewhere, in particular to work. Students who lived close by also drove because of safety concerns—the UNC Charlotte campus is not in a terrifically walkable part of Charlotte, and it is easier to navigate by car than on foot.

Perhaps not surprisingly, the non-residential campuses had the highest range of distance travelled of all the campuses, although not median distance traveled. They fell well below the urban commuter campuses in time spent commuting. Based on text messages, students at the non-residential campuses spent more time working and less time studying than other campuses. Many of the themes for the urban commuter campuses (see next section below) were echoed by non-residential students.

Centrality of libraries

For non-residential students, this distribution across the city also results in many of the students clustering their time on campus, so as to cut down on the days per week they have to travel. When students

are on campus, they speak about staying all day and when they plan to come to the library they intend to spend many hours, in part because they have to go to the effort to drive and find a place to park and do not want to make several back-and-forth trips (and risk losing their parking space). Students who valued quiet as a part of their productive study spaces would choose the library if it was a contrast to a lively noisy (shared) home, but would choose studying at home over the library if they had a private room or lived alone. When driving to and parking on campus is perceived to be an inconvenience, students will make the decision to stay home, even if it is not the “perfect” place to study.

Commuting time and the relationship of residency to campus life

This study brings up questions of what libraries can do to help students, especially regarding commute time (which is often driving—not allowing for study time as public transportation commuting might), and associated issues such as finding parking. Commuter students are in an odd limbo between distance students (who never come to campus) and residential students (who live on campus). This might point to a particular need to have effective digital places and services, as circumstances well beyond the library’s control might determine a student’s decision to stay home instead of braving traffic, and not have to worry about or pay for parking.

Insights from Urban Commuter Campuses

CUNY is a highly urban commuter institution with campuses across New York City. An important demographic to keep in mind is that 39% of CUNY students have household incomes of less than \$20,000/year; in the community colleges, this figure is close to 50%.⁵ Financial constraints can mean that CUNY students are often forced to make difficult trade-offs. The trade-off could be time for money: spending a couple of hours in the library scanning pages because you cannot afford to buy the textbook. Or it could be having no personal, private living space because you have to share your apartment with several other people.

Implications of living at home

Most of the urban students in this study live with family, some with roommates. It is not unusual to hear of five family members in a one-bedroom apartment, or two related families living in a two-bedroom apartment. This means all spaces at

home are common spaces, even bedrooms, where multiple family members sleep. For example, one student shared a bedroom with her brother and grandmother. Given this, it is not surprising that these urban students spoke more about family and relationships than did participants from the other colleges.

While some students managed to do some studying at home, many more cited the distractions caused by siblings, parents, or children of their own, and lack of space as deterrents. If studying did happen at home, it occurred in a common space, such as a kitchen or living room, as well as in bedrooms shared with other family members. Lacking a private space for studying, students talked about knowing or feeling they should study while they are at home, but in the small space of their apartments, they could not avoid distractions such as TV, video games, or interacting with family members.

Living with family also meant sleep patterns were disrupted—going to bed late, getting up early to get time in the shared bathroom, preparing breakfast for other family members, or getting a child ready for their day. Urban students are often tired and stressed.

Centrality of libraries

For these students, libraries can be a refuge. The majority of students preferred libraries over other locations for studying (and sometimes sleeping), most often citing quiet and calm. Many of our libraries have quiet areas and not-so-quiet areas. Most of the urban students sought out the quiet areas in the libraries. One student preferred the library “because everybody else is so studious and studying, it puts me in the mood to also study and, um, focus.” This is in contrast, of course, to home environments where everyone else is not studying and often engaged in other distracting activities.

Students also have a marked preference for cubicles or carrels over tables in the libraries. Contrasting with the lack of their own space at home, library carrels provided that space: a carrel of one’s own. Students stated about the carrels: “I just have my own space” and “I have like my own little room. I can put my things around.” For some students, open tables for studying were yet another space they had to share. Describing studying at tables, one student commented, “I don’t feel like I have my own space to study. It feels like too many disruptions.” This

is reminiscent of how students talked about their home spaces.

While enrollment has increased at CUNY, the size of our libraries has most often not seen a concurrent increase, and students mentioned overcrowding in the library as a problem. Even when that was the case, the library was still a central workspace for students.

Making the best of use of commuting time

Another workspace for urban students is their commute. The urban students in this study traveled by bus, express bus, subway, suburban rail, and car (usually a family member picking them up from a subway or train station). Commuting often involves transfers—bus to subway, subway to subway, train to subway. Students expressed frustration with the time spent commuting, as well as crowds on the commute. In fact, one participant took the subway a few stops in the opposite direction of her home in order to get on at a station where she could get a seat.

Urban students try to study on the commute to recoup the time if they can. The most common activity for students was reading; they also reviewed their notes. From other studies, we know some are also typing their assignments on their phones while commuting. As one student said, “First time in college, I didn’t realize how difficult it would be for a college student to study, so like, I figured instead of listening to music and having my headphones plugged in, I’d rather study on the subway. I noticed how my grades improved since I’ve been doing that... I study, like, whenever, because I’m working also, and it’s just very hard to study.”

Even with the problems of commuting, some students will intentionally commute to campus including when they do not have classes in order to find an appropriate study space, often in the library, because home is not conducive for their academic work.

Task layering

We have a tendency to look at our students *only* as students. But they are not just students. This research helps us see the whole person, a person who is a friend, employee, daughter, grandson, parent, sister, cousin, as well as a student. Commuter students, both urban and non-residential, are frequently negotiating and navigating these identities throughout their day.

The complexity of these identities means they are constantly layering tasks. They are studying on the way to work or on the way to pick up their little sister from school. They are completing an assignment as they help their child do his homework at the kitchen table. They are posting to a discussion on the learning management system while working at their job. They are responding to a text message from their child’s daycare while in class.

Next Steps and Recommendations

The Day in the Life Project has produced a large and rich dataset, and considering all of this leaves us with questions, of course. What are we doing to support the whole person before us? When we look holistically at students’ lives, what can we do or change to support all of their identities? What does the information we learn about their lives tell us about the services they need?

We are continuing to explore the data collected during this research, both individually at our own campuses and together as a project team. Our focus in this paper has been students’ movements and activities throughout a typical school day; there is much more to learn from our coded student interview transcripts and from the data on students’ affect that was recorded by the SMS messaging survey. Our future plans include identifying additional themes and comparing them between all campuses. We are also working to implement changes in our libraries and on our campuses based on what we learned in this research. When planning improvements to library spaces and services we often turn to other libraries for ideas about what is desirable; this project emphasizes the importance of research with our own students, to learn about what our students distinctively need.

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Endnotes

1. Henry D. Delcore, James Mullooly, and Michael Scroggins, *The Library Study at Fresno State* (Fresno, CA: Institute of Public Anthropology, California State University, Fresno), 14.
2. All ADITL Protocols were approved by the IRBs of the participating universities, with IUB acting as the lead university (Protocol #1506148767, Principal Investigator, Andrew Asher).

3. Sending and receiving survey responses was automated using the SMS functionality of the Qualtrics online survey software platform. irds.iupui.edu/Portals/SDAE/Files/Documents/IUPUI%202014%20Students%20INDY.pdf.
4. Michele J. Hansen, "Understanding IUPUI Students" (IUPUI, Institutional Research and Decision Support, November 19, 2014), http://www2.cuny.edu/wp-content/uploads/sites/4/media-assets/ug_student_profile_f15.pdf.
5. CUNY Office of Institutional Research, "Fall 2015 Profile of CUNY Undergraduates," http://www2.cuny.edu/wp-content/uploads/sites/4/media-assets/ug_student_profile_f15.pdf.

Appendix A

ADITL Text Message Survey Questions

Where are you? Please be specific.

[Open Response]

What are you doing?

- Attending Class
- Studying or other academic work
- Working
- Family, Social, or Recreational Activities
- Commuting
- Eating
- Other _____

How are you feeling?

- Very Happy
- Happy
- Neither Happy nor Unhappy
- Unhappy
- Very Unhappy

Appendix B

ADITL Debriefing Interview Guide

The ADITL debriefing interviews are designed to be semi-structured and open-ended, and the interviewer may add additional questions or follow-up questions as necessary. These questions should therefore be understood as a framework rather than a script.

1. [Show student the map of their day] Please walk me through your day from beginning to end. [Follow up as needed for specifics about each location and why the student traveled there.]
 - a. Why did you go to [location]?
 - b. How long were you there?
 - c. What were you trying to do or accomplish while you were there?
2. What time does your day start?
3. What time do you go to campus?
4. How do you get to campus?
5. How long does it take you to get to campus?
6. Where do you study?

7. Why do you like studying there?
8. On this day you studied at [location]. Why did you choose to study there?
9. How much time do you spend studying on a typical day?
10. How many classes do you have?
11. How many hours per day do you spend in class?
12. Do you work in addition to attending the university?
13. Where do you work?
14. How far is it from campus?
15. How do you travel to work?
16. How much total time do you spend commuting on a typical day?
17. What kinds of extracurricular activities do you participate in?
18. Do you live on campus or off campus?
19. What time does your day usually end?
20. You indicated that you felt [happy/unhappy] at [location]. Why did you feel that way?
21. What was the most frustrating part of this day for you?
22. What was the best part of this day for you?
23. What do you like the best about [student's campus]? What do you like least?
24. What are the most difficult things about studying at [university]?
25. How did you choose to attend [university]?
26. What is your major? How did you decide to study [major]? [If undeclared: How will you decide on a major]?
27. Is anything missing from the map? What?