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Serving the Commuter College Student in Urban Academic Libraries

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Abstract

Cities often host many colleges and universities; while the commuter student in suburban or rural areas may drive or be driven to school, students at colleges and universities in dense, urban settings rely predominantly on mass transit for their commute to class. The act of commuting to campus has been found by a number of researchers to define and shape the experiences of commuter students in college, though the literature on college students who commute is not extensive. A qualitative study of the academic culture and scholarly habits of undergraduate students at the City University of New York (CUNY) revealed much about the experiences of urban commuter students, and the impact of the commute on each student's ability to accomplish her academic work. In this article we will share the results of our study, and suggest strategies to help urban academic libraries direct resources, services, and policies to best serve their commuter students.

Keywords: academic libraries, undergraduates, commuter students, commuter institutions, public transportation, mass transit, coursework

Ashley was a twenty-year-old full-time student at Borough of Manhattan Community College (BMCC) majoring in business administration and taking five classes during the semester that we met her for an interview. On the morning of the mapping diary she completed for us, Ashley woke up at 6:30 a.m. to shower and get dressed. She left home at 7:30 a.m., rode a city bus for twenty minutes, then transferred to a subway. Her subway ride took just about an hour, and she arrived at campus at 9:00 a.m. in plenty of time for her 9:30 a.m. philosophy class. After her

class, Ashley went to the library's computer lab to type up an essay she had written. At noon she left the college with friends to buy some lunch and socialize. Ashley spent from 12:45 p.m. to 3:00 p.m. in the library studying before her next class, and returned again to the library to finish studying at 4:40 p.m. when her classes had ended for the day.

Just after 5:00 p.m. Ashley headed out from BMCC to meet friends at a restaurant for dinner. She got back on the subway to return home at 6:50 p.m., transferred to the bus, then walked the rest of the way to her home. Ashley snacked and watched television from about 8:00 to 9:30 p.m., then did some reading and cleaning up; by 11:00 p.m. she was preparing her things for school the next day. Ashley finished this day by speaking on the phone with her cousin, then listened to music until she fell asleep around midnight.

When asked what she did on her commute to and from BMCC, Ashley replied that she typically listened to music while reading the newspaper or studying for her classes. Her commute home in the evenings was a bit less crowded than in the morning, making it easier for her to read while on the subway and bus. Ashley wished she could spend less time commuting, and joked about wishing she could find "a shortcut to get home sometimes."

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Large urban areas typically host many colleges and universities, both those with on-campus residences for students and largely commuter institutions that enroll local residents who commute to their classes. Like Ashley, many U.S. college and university students commute to and from college: they are mobile by default. While the commuter student in suburban or rural areas may drive or be driven to school, students at colleges and universities in dense, urban settings rely predominantly on mass transit for their commute to class. The act of commuting to campus has been found by a number of researchers to define and shape the experiences of commuter students in college.

In this article we share results from our qualitative study of the academic culture and scholarly habits of undergraduate students at six colleges of the City University of New York (CUNY), and consider how academic libraries can best serve these students. We learned much about the central role of the commute in the lives of urban college students. The students we interviewed described the details of their travels to campus, including the strategies they used to optimize their commutes and the challenges they faced. While the ready availability of public transportation certainly facilitated students' attendance at college, subway cars and city buses may not be an ideal location for scholarly work, as we heard when students shared their frustrations and successes in attempting to incorporate their commute with their academic lives.

Literature Review

Despite their large numbers in U.S. higher education – Jacoby and Garland (2004) and Dugan, Garland, Jacoby, and Gasiorski (2008) report that about 85% of U.S. students commute to college – the scholarly literature on students who commute is not extensive. Jacoby defines commuter students as "students who do not live in institution-owned housing on campus" (2000, p. 4), though she also notes that this definition is homogeneous and distinctions within this large population have not been well studied (2014, p. 289). They may live with family members or dependents, with roommates, or alone (Dugan et al., 2008, p. 284). Some commuter students may be prior residents of the location in which they attend college, while some begin their college careers by living in a residence hall and subsequently move to housing off-campus during their college career. Jacoby and Garland assert that while the category of commuter student encompasses much heterogeneity, "they are distinct from resident students in a fundamental way; for them, home and campus are not synonymous" (2004, p. 62).

The National Survey of Student Engagement (NSSE) divides commuter students into those who drive to campus and those who walk, a distinction that accommodates some (though not all) of these differences in commuter students. Many commuter colleges are located in suburban or other areas without extensive public transportation availability, and it is likely that the majority of those students drive to their college campuses. However, as Clark suggests, the distinction between driving and walking students is less relevant in an urban setting in which driving may be less likely and public transportation is readily available (2006, p. 3).

Jacoby and Garland (2004) and Clark (2006) find that commuting to campus is significant; indeed, "the act of commuting in itself is a prominent feature of commuter students' college experience" (Clark, 2006, p. 3). Both Newbold, Mehta, and Forbus (2011) and Kuh, Gonyea, and Palmer (2001) report that overall commuter students are more likely than residential students to be in the first generation in their families to attend college, to be older than traditional college-aged students, to work more hours, and to attend college part-time. Clark (2006) and Newbold et al., (2011) concur that students who commute often have multiple life roles, and that the non-academic demands of their lives impact their experiences as college students differently than for residential students. Furthermore, commuter students tend to minimize the amount of time they spend on campus, and are thus less involved in college-related activities (Newbold et al., 2011, p. 144). When they are on campus, many urban commuter students spend much of their time negotiating obstacles, including finding places to create academic and non-academic space.

While the literature on the experiences of commuter college and university students is not extensive, there have been a number of recent quantitative and qualitative studies that consider the role that commuting plays in the student experience, especially in the ways they accomplish their academic work outside of the classroom. Green (2012) interviewed Hispanic students at Northeastern Illinois University in Chicago and identifies their "significant" commute times as part of a suite of challenges these students face in successfully engaging with college. In a similarly urban setting, Clark (2005) finds that successful freshmen at a college in the CUNY system learned to strategize study time into their commutes. Student commuting behavior reported to Clark (2005) corresponds well with the wide variety of passenger behaviors Lopatovksa et al. (2011) observed on New York City subway cars and buses: reading and writing, though also listening to music and playing games.

Molteni, Goldman, and Oulc'hen (2013) examine student use of King Library in San José, California that serves both the City of San José and San José State University (SJSU), a predominantly commuter institution. Results of their survey allow them to compare commute times with frequency of library use, and reveal that students "with shorter commutes spend more time in the library" (p. 247). Their analysis also finds that students were specifically "making time in their commuter schedule to spend time in the library" (p. 241), though they did not probe further into the other spaces students may use for their academic work.

Delcore, Mullooly, and Scroggins (2009) look in-depth at how students use the library at Fresno State, a predominantly commuter institution in a suburban setting. They find that students' academic lives were intermingled in space and time with other aspects of their lives on and off campus, and that students did their academic work in many locations. Fresno students largely commute to campus by car and thus cannot use their commute for their academic work, as might students who use public transportation, though one student interviewed specifically mentioned studying in his car while parked in a lot on campus.

A number of studies have also examined student use of mobile technology, which is highly relevant for commuter students. Results from the EDUCAUSE Center for Analysis and Research (ECAR) studies of undergraduates and information technology reveal high rates of ownership of laptops as well as smartphones (Smith and Borreson Caruso, 2010; Dahlstrom, de Boor, Grunwald, & Vockley, 2011). ECAR results also show students have a "clear preference for small, mobile devices that fit in a pocket or backpack and go with them everywhere" (Dahlstrom et al., 2011, p. 7). In one study that looked specifically at mobile technology used by commuter students at a campus in the CUNY system, librarians Becker, Bonadie-Joseph, and Cain note that three quarters of respondents reported using mobile devices while commuting and while "out" and many reported accessing library research resources via their mobile devices (2013, pp. 693-694).

Research Procedures and Student Context

In this study we interviewed undergraduates at six colleges within the CUNY system, three that grant baccalaureate and masters degrees: Brooklyn College, City College, and Hunter College; one that offers associate and baccalaureate degrees: New York City College of Technology (City Tech); and two that offer associate degrees only: Borough of Manhattan Community College (BMCC) and Bronx Community College. These schools were selected to represent a range of institutions and locations across the CUNY system.

Data was collected using three ethnographic research methods: photo surveys, mapping diaries, and research process interviews.[1] For the photo surveys we gave each student a list of 20 prompts related to their lives as students – for example, "all the things you take to class" and "your favorite place to study" and asked them to take photos using a disposable camera or their own camera (often a phone camera). For the mapping diaries we asked each student to record her activities, including time and location, for one typical school day, and also to draw those activities over the course of the day. Students were interviewed after completing their photo survey or mapping diary to explain and add detail to the photos and maps. For the research process interviews we asked each student to tell us how she completed a research project from when she first received the assignment to when she turned it in, and to draw the process as she described it.

Each interview with students was recorded and transcribed and we used the ATLAS.ti qualitative analysis software to analyze the data. For each method we interviewed 9-10 students on each campus, and a total of 178 students participated in interviews. All student participants completed consent forms; the project was approved by the Institutional Review Board at our own institutions and by the administration on each campus.

CUNY is an overwhelmingly commuter institution. There are residence halls available for students at six of the four-year colleges, though they have very limited space and thus house only a small number of students: on average, less than five percent of each college's enrolled students. Further, dormitories are not necessarily similar to those at primarily residential colleges – indeed, some are located at a distance from the college that requires students to commute to campus via mass transit, while others may house students from several different colleges in the same building.

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[1] Full protocols for all three research methods are available on our project website (http://ushep.commons.gc.cuny.edu), and are also discussed in: Smale, M. A. & Regalado, M. (2014). Commuter students using technology. *EDUCAUSE Review Online.* http://www.educause.edu/ero/article/commuter-students-using-technology.

Mass transit is easily accessible – subways and buses travel throughout the city, and all CUNY campuses are accessible via public transportation. Furthermore, the system is relatively inexpensive, at the time of this study $2.25 per ride including a free transfer between routes.

Data from CUNY student surveys reveals that the majority of students commute between thirty and sixty minutes each way (CUNY Office of Institutional Research and Assessment 2012b). Note that, depending on the number of days per week students must come to campus, this may be considerably more than the average length reported by NSSE of five hours per week for full-time college seniors who commute (2011, p. 15). While the majority of CUNY students commute to college locally, just over 7% of students live outside of the city, mostly in the surrounding suburbs; our interview data suggest that these students are on the upper end of the time required for travel to campus.

Commuting Practicalities: Modes of Transport, Length of Time

The majority of students who shared information about their commutes with us traveled to and from campus using the subway and bus system. We met just five students who walked to campus and one who drove regularly; an additional two drove to college occasionally and took public transportation otherwise. Five students we met lived in the City College residence hall located on the southern edge of campus, and those students either walked, rode a bike, or took the college shuttle bus to travel to their classes in the northern part of campus. The two students we met who lived in the Hunter dorm took the subway to campus.

The importance of public transportation to CUNY students' lives was evident across our student interviews. During our research we offered students a choice of incentives to participate in our study: a modest sum as either an iTunes giftcard, or a Metrocard, the primary means of fare payment on subways and buses. Most chose the Metrocard; a few students said that while they would like to take the iTunes giftcard, the practicality of the Metrocard outweighed their desire for the leisure items that an iTunes card could provide.

The students we spoke with at the six colleges in this study closely matched CUNY survey data for their total commuting time with an average length of just under an hour. However, students' commute times varied widely, from a quick thirty-minute ride on one subway or bus route up to the ninety minutes or more required to travel from the end of one borough to another, often using multiple subways, buses, or other modes of transit. Their long commutes often meant long school days for students, a reality that many found frustrating. A Hunter student with evening classes who commuted from Staten Island via the ferry and the subway bemoaned the length of her commute at the end of a day that she experienced as "so long."

Students with lengthy commutes or who used multiple modes of transit spoke to us in detail about their commutes. The need to switch trains or buses one or more times to travel to campus added both time and complexity; students strove to maximize the efficiency of their commute and minimize their transit time. Students who relied on buses told us they sometimes walked when a bus did not adhere to its posted schedule. Other students traveled different routes on the way to campus and back home, which were sometimes dependent on the time of day (in general, mass transit runs more often during rush hours). Others varied their commute strategy on an ad hoc basis to take whichever bus or train arrived first if their subway or bus stop was served by multiple route lines, as this City College student describes.

I actually take a bus and two trains[2] plus the shuttle bus to get [to City College . . .] [. . .] You know, it was going so well, until the B train turned local. So now, there's no B or Q that's express. So I had to change my route because I was getting late for class all the time. So now I take the 44 bus to the 2 or the 5, whichever one comes first. [. . .] And then I'll take the 2 train . . . If I'm on the 2 train, I'll take the 2 to Franklin to get on the 4 or the 5. Get off at Fulton to take the A train to here. Because when I took the 4 or the 5 to 125th and Lexington . . . That was HORRIBLE. It's so many people there. [. . .] And I can never read. I can never read.

Commuting Practicalities: What Students Carry

The CUNY students we spoke with carried much more than just their school materials on the days that they came to campus. Since they typically did not return home during the day, many told us they brought supplies to last them the entire day: lunch or other food, water or other beverages, perhaps outerwear, umbrellas, or additional clothing depending on the weather, gym supplies for students who participated in sports or went to the gym for a workout, etc. While information and communications technologies stood out as important components of the academic lives of our students, we observed that in many ways the humble backpack was the ultimate useful technology for urban commuter students. Indeed, a number of students photographed their backpacks in response to a number of prompts, including "something you can't live without."

To learn about what students brought with them as they traveled to and from the college campus, we asked students to photograph "all the stuff you take to class." As might be expected, students took many pictures of backpacks and bags that include folders, notebooks, books (textbooks and others), writing implements, and other academic accoutrements. We heard many students express their frustration at the weight of their school bag, and especially the size and weight of their textbooks.

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[2] In New York City the subway is often colloquially called "the train."

While some students tried not to bring textbooks to campus, professors sometimes required students to have textbooks in class. Additionally, students who sought to use their commute to read or study found they brought their books each day.

I commute two hours. [. . .] Sometimes more in coming to school because there's so many people and sometimes I can't fit on the train. But I carry my books, my bio books and my English books, every day. Because I have a lot of reading to do.

While many of our student informants owned laptops, most told us they rarely brought them to campus since laptops are heavy. We did note occasional mentions of other technologies that students brought with them to school such as a graphing calculator or an ereader. One City Tech student from a graphic design program sometimes brought an extra hard drive for large media files, though she noted that on those days she needed to carry two bags with her to accommodate the extra weight. Many brought USB drives (commonly called flash drives or memory sticks), with them to campus for transporting computer files. This lightweight piece of technology allowed students to transport their files to campus efficiently, but then required them to seek out campus computer labs to access the files.

We met six students – from Brooklyn College, Hunter, and City Tech – who each had access to a locker on campus. Hunter provided students with the opportunity to use a small daily locker, which just one student we interviewed used regularly and who spoke appreciatively of the opportunity to store her belongings in a secure location during the day. Two students at other schools participated in college athletics and had access to a gym locker, while another was a Music major who needed a locker to store his instrument. All these students felt fortunate to have these lockers, a rare commodity on CUNY campuses. A hospitality management major at City Tech reflected the utility of her program's lockers for uniforms when she recorded her locker in response to the photo prompt "something you can't live without."

What CUNY Students Do on the Commute

During the commute to and from the college campus the students we spoke with engaged in essentially the same range of activities as the mass transit riders observed by Lopatovksa et al. (2011): reading (both academic and leisure materials), studying or other schoolwork, listening to music, playing games, sleeping, or just people-watching or "spacing out;" sometimes they engaged in multiple activities simultaneously. Of interest to this study is the extent to which students incorporated their academic lives into their commutes. Students revealed that particular qualities of the commute had significant impact on their ability to successfully accomplish scholarly work while commuting. The length of time the commute required, whether it was necessary to switch routes or modes of transit

one or more times, the level of crowding on the train or bus, and whether students were able to secure a seat all affected each student's capacity to create an academic space for herself.

When asked to tell us a "favorite place to study or do academic work," we were frankly surprised that nine of the students we interviewed cited the subway or bus during their commute. A Brooklyn College student who commuted for forty-five to sixty minutes each way preferred to do her schoolwork on the one subway she took to and from campus. She was lucky enough to travel to the college at times when the train was not crowded and thus could always secure a seat.

A City College student told us that she preferred to do her academic work on the subway.

Most of my work I would think is done on the train. I do my readings on the train, I do the papers. Because by the time I get home I'm really, really tired. So it's not always guaranteed that I'm going to do more homework at home.

If necessary, she spent time on campus downloading assignments from her phone that she had worked on during the commute, or printing out papers in one of the computer labs. Other students also mentioned using their smartphones (or, occasionally, ereaders) to download coursework to access on the subway.

While most of the students we spoke with did not cite the commute as their favorite space for their academic work, usually preferring to study on campus or at home, many expressed a strong desire to take advantage of the time they spent commuting to accomplish schoolwork. Again, those students who seemed most successful at incorporating scholarly activities into their commute were, more likely than not, able to secure a seat or travel on a subway or bus route that was not very crowded, and did not need to switch trains or buses multiple times.

Though we were struck by how many students told us they worked on writing assignments on their smartphones while commuting, some students found that reading was the only type of schoolwork they could accomplish on their commute. Crowding, the inability to get a seat, and the noise of other commuters were all cited as distractions for students who found it difficult to do all types of academic work on the commute. A City College student majoring in mathematics who commuted for about an hour each way told us that he was able to read for his courses while on the subway, as well as to use the time to think through certain kinds of math problems.

Student: Sometimes I'll . . . like, if there's some math problem that's in the back of my mind, I'll work it out on the train. But I, regular homework I can't do.

Interviewer: How come?
Student: Can't concentrate. But if, if there's like a riddle or something that I'm working on, so, I don't know, it's easier to do on the train.

Like many commuters, especially those of traditional college age (Lopatovska et al., 2011, p. 18), many of the students we spoke with listened to music during their commute, often in combination with studying. With the near-ubiquity of portable digital music devices – both MP3 players and cellphones or smartphones that also play music – this is not a surprise. Wearing headphones makes the activity of listening to music visible to all, and can create a layer of privacy in a crowded public space like mass transit. Further, students might find the overlapping activities of their fellow commuters to be less distracting while listening to music, which may have minimized external noise from their surroundings.

Not all of the students we spoke with used their commute time for academic work. Leisure reading, playing games, listening to music, people-watching, and sleeping were all mentioned at least a few times by the students we spoke with as activities they engaged in during the commute. Some of these activities – most notably, sleeping – were only possible if students secured a seat during their commutes, which was also a prerequisite for engaging in many types of academic work on the subway or bus. A City College student who commuted for seventy-five minutes each way preferred to listen to music and sleep on the subway, though she would occasionally do her academic reading.

When we asked the students who completed the mapping diaries to tell us about the most frustrating part of their day, some noted their commutes. They often wanted to use their travel time to engage in their scholarly work, but were unable to successfully do so because of the overlapping and conflicting activities of other passengers on the subway or bus. A Hunter student with a ninety to 120 minute commute described her entire process of commuting as a frustration, from the crowds to not getting a seat to waiting for and transferring between two trains and a bus. A Bronx CC student summed up the critical place of the commute in the day for many CUNY students in his response to our question "what was your favorite part of this day?"

My favorite part of the day: catching the bus! [. . .] Because when I catch it I have a good day. When I don't catch it, I have a bad day.

Conclusions: Academic Libraries for Students On the Go

Our research with CUNY undergraduates found a deep connection between the commute and the student experience. As CUNY students' commutes can be of substantial length – an average of 45-60 minutes each way – it is not surprising that the commute directly influenced students' decisions about how to spend their

time both on and off campus. Some students minimized their time on campus to avoid commuting whenever possible, while others chose to leave potentially important tools for their academic work such as laptops and textbooks at home because they were to heavy to carry on long commutes with multiple transfers between subways and buses.

Many of the students we met actively worked to create an academic space for themselves during the commute on the subway or bus and used that time to study, read course materials, even write papers. While creating academic space on mass transit can be seen as a powerful strategy for time-strapped students, a subway car or city bus could not usually provide the optimal conditions for schoolwork, and the multiply-occupied places of the commute made it difficult for students to accomplish meaningful academic work. Many students articulated the challenges they faced in doing coursework on public transportation: too loud, too crowded, nowhere to sit, etc. Some keenly felt the loss of this time, while other students we spoke with were more resigned and filled their commute time with leisure activities like listening to music, reading, or playing video games, and a few took the opportunity to relax or do "nothing." Most clearly wanted to make their travel time into useful time rather than lost time, but found it challenging to do so with so many factors beyond their control.

Given what we have learned, how can urban academic librarians direct resources, services, and policies to best serve their commuter students? College and university librarians might consider strategies for lightening students' loads, literally. Many libraries already offer course texts and laptops for students to borrow, and we heard much appreciation for these possibilities from the students we interviewed at the CUNY colleges that offer these services. Students at three commuter colleges in Denver that share a single library also expressed a desire for "the ability to check out technology they may not own or don't want to bring to campus" (Brown-Sica, 2012, pp. 227-228). It is also worth considering loans of other mobile devices such as tablet computers for students to use on (or off) campus, especially at community colleges where students are less likely to own mobile devices than their counterparts at baccalaureate institutions (Dahlstrom et al., 2011, p. 9). Lockers or other kinds of storage solutions could relieve students of some of their daily burden during long days on campus.

For students who do have access to mobile devices, academic librarians can facilitate use of these technologies for schoolwork by students who commute using public transportation. A few of the students we met were proficient in using ereaders and other mobile devices to access course materials, as we have reported elsewhere (Smale & Regalado, 2014), and the ability to use library resources while off-campus should be of real value to commuter students, as a study of student technology use at Hunter College suggests (Becker, Bonadie-Joseph, & Cain, 2013, p. 694). Replacement of course textbooks with online materials – or, ideally, open

educational resources available at no cost to students – would also relieve commuter students of the burden of carrying textbooks. Usability of these systems is important; librarians should insist that vendors create usable, convenient mobile interfaces for these products. Additionally, librarians may consider incorporating strategies for mobile access to library resources into information literacy and library instruction, as have librarians at Lehman College, CUNY (Havelka and Verbovetskaya, 2012). Finally, charging stations for laptops and mobile devices are a convenience that many students could take advantage of (Delcore, Tenient-Matson, & Mullooly, 2014; Dahlstrom, Walker, & Dziuban, 2013).

Reliable wireless access to the internet in the library and on campus more generally is of certain value to all students, not just commuters (Dalhstrom et al., 2011). However, for commuter students wifi access in the library may be especially important, as they may be borrowing laptops or other devices at a higher rate than non-commuters. Wifi availability can also help mitigate the possibility that students may not have access to the internet in their homes or elsewhere outside of the college campus. The ability to download course materials and research resources to be used on a device when an internet connection is not available would also benefit commuter students, and the opportunity to ask librarians for assistance while doing so requires solid access to wifi in the library.

It is also worthwhile for academic librarians at institutions with commuter students to consider undertaking research on their own commuter student population. While our study revealed many commonalities between the experiences of CUNY students and results from research at other colleges and universities, the particular ways that commuter students may be defined suggests variation within the commuter student experience. Attention to the unique needs of our undergraduates who commute to college can inform strategies that academic librarians can implement to boost commuter student engagement and success in their college careers.

References

Becker, D. A., Bonadie-Joseph, I., & Cain, J. (2013). Developing and completing a library mobile technology survey to create a user-centered mobile presence. *Library Hi Tech, 31*(4), 688-99. doi:10.1108/LHT-03-2013-0032

Brown-Sica, M. S. (2012). Library spaces for urban, diverse commuter students: A participatory action research project. *College & Research Libraries, 73*(3), 217–31. doi:10.5860/crl-221

Clark, M. R. (2005). Negotiating the freshman year: Challenges and strategies among first-year college students. *Journal of College Student Development, 46*(3), 296-316. doi:10.1353/csd.2005.0022

Clark, M. R. (2006). Succeeding in the city: Challenges and best practices on urban commuter campuses. *About Campus, 11*(3), 2-8. doi:10.1002/abc.166

CUNY Office of Institutional Research and Assessment. (2012a).*Total Enrollment by Undergraduate and Graduate Level, Full-time/Part-Time Attendance, and College Fall 2011.* Retrieved from http://owl.cuny.edu:7778/ENRL_0019_UGGR_FTPT_HIST.rpt.pdf

CUNY Office of Institutional Research and Assessment. (2012b). *2012 Student Experience Survey.* Retrieved from http://www.cuny.edu/about/administration/offices/ira/ir/surveys/student/SES2012FinalReport.pdf

Dahlstrom, E., de Boor, T., Grunwald, P., & Vockley, M. (2011). *The ECAR National Study of Undergraduate Students and Information Technology* 2011. Boulder, CO: EDUCAUSE Center for Applied Research. Retrieved from http://net.educause.edu/ir/library/pdf/ers1103/ers1103w.pdf

Dahlstrom, E., Walker, J.D., & Dziuban, C. (2013). *ECAR Study of Undergraduate Students and Information Technology 2013* (Research Report). Louisville, CO: EDUCAUSE Center for Applied Research. Retrieved from http://net.educause.edu/ir/library/pdf/ERS1302/ERS1302.pdf

Delcore, H. D., Mullooly, J. & Scroggins, M. (2009). *The Library Study at Fresno State*. Fresno, CA: Institute of Public Anthropology, California State University. Retrieved from http://www.csufresno.edu/anthropology/ipa/thelibrarystudy.html

Delcore, H. D., Teniente-Matson, C., & Mullooly, J. (2014). The continuum of student IT use in campus spaces: A qualitative study. *EDUCAUSE Review Online.* Retrieved from http://www.educause.edu/ero

Dugan, J. P., Garland, J. L., Jacoby, B., & Gasiorski, A. (2008). Understanding commuter student self-efficacy for leadership: A within-group analysis. *Journal of Student Affairs Research and Practice, 45*(2), 454-482. doi:10.2202/1949-6605.1951

Green, D. (2012). Supporting the academic success of Hispanic students. In L. M. Duke & A. D. Asher (Eds.), *College Libraries and Student Culture: What We Now Know* (pp. 87-108) Chicago: American Library Association.

Havelka, S., and Verbovetskaya, A. (2012). Mobile information literacy: Let's use an app for that! *College & Research Libraries News, 73*(1): 22-23. Retrieved from http://crln.acrl.org/

Jacoby, B. (Ed.). (2000). *Involving Commuter Students in Learning*. New Directions for Higher Education no. 109. San Francisco: Jossey-Bass.

Jacoby, B. (2014). Engaging commuter and part-time students. In S. J. Quaye & S. R. Harper (Eds.), *Student Engagement in Higher Education: Theoretical Perspectives and Practical Approaches for Diverse Populations* (pp. 289-306) New York: Routledge.

Jacoby, B. & Garland, J. (2004). Strategies for enhancing commuter student success. *Journal of College Student Retention: Research, Theory and Practice, 6*(1), 61-79. doi:10.2190/567C-5TME-Q8F4-8FRG

Kuh, G. D., Gonyea, R. M., & Palmer, M. (2001). The disengaged commuter student: Fact or fiction? *Commuter Perspectives, 27*(1): 2–5. Retrieved from http://www.wiu.edu/qc/nccp/publications.php

Lopatovska, I., Basen, A. S., Duneja, A. D., Kwong, H., Pasquinelli, D. L., Sopab, S., Stokes, B. M., & Weller, C. (2011). Information behaviour of New York City subway commuters. *Information Research, 16*(4). Retrieved from http://www.informationr.net/ir/

Molteni, V. E., Goldman, C. & Oulc'hen, E. (2013). Experiences of the student population at an urban university: How do they use a joint library? *portal: Libraries and the Academy, 13*(3), 233-256. doi:10.1353/pla.2013.0020

National Survey of Student Engagement. (2011). *Fostering Student Engagement Campuswide: Annual Results 2011.* Bloomington, IN: Indiana University Center for Postsecondary Research. Retrieved from http://nsse.iub.edu/NSSE_2011_Results/pdf/NSSE_2011_AnnualResults.pdf

Newbold, J. J., Mehta, S. S., & Forbus, P. (2011). Commuter students: Involvement

and identification with an institution of higher education. *Academy of Educational Leadership Journal, 15*(2): 141–53. Retrieved from http://www.alliedacademies.org/Public/Journals/JournalDetails.aspx?jid=5

Smale, M. A., & Regalado, M. (2014). Commuter students using technology. *EDUCAUSE Review Online.* Retrieved from http://www.educause.edu/ero

Smith, S. D., & Borreson Caruso, J. (2010). *ECAR Study of Undergraduate Students and Information Technology*. Boulder, CO: EDUCAUSE. Retrieved from https://net.educause.edu/ir/library/pdf/ERS1006/RS/ERS1006W.pdf