“That Background Knowledge”: What Junior and Senior Undergraduate Transfer Students Need from Their Libraries

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**Abstract**

Undergraduate students who transfer from one institution to another do so at wildly variant points in their college careers. The range of stages at which students transfer raises questions for librarians who support these students. This article presents the findings from the second phase of a two-phase, multi-campus research project, examining incoming transfer students’ experiences related to research and information literacy (IL) instruction. Grounded in the dual theories of transfer deficit and transfer student capital, this article uses the results of follow-up interviews with junior and senior transfer students to identify the difficulties these newly arrived students experience with using library resources to conduct research, as well as the research strategies and other strengths these students bring with them from their previous institutions.

**Introduction**

Undergraduate students who transfer from one institution to another do so at wildly variant points in their college careers. At one end of the spectrum, some first-year students transfer in the middle of the year after rough academic experiences in the fall semester. At the other end, some seniors choose to complete their final year at a brand new school in order to be near a significant other. The variety of transfer experiences is a challenge to librarians who want to reach and support this often overlooked student population.

Many researchers work from a model that transfer students are mostly juniors who come from two-year institutions. This focus on community college students is evident in the transfer literature (e.g., Nuñez & Yoshimi, 2017; D’Amico, Dika, Elling, Algozzine & Ginn, 2014; Melguizo, Kienzl, & Alfonso, 2011). C. Kirk-Kuwaye and M. Kirk-Kuwaye (2007) critique this research emphasis on two- to four-year transfer (known as “vertical transfer”) at the expense of studying “lateral transfer” students, those transferring from four-year to four-year institutions. In previous work, the authors found that the plurality (44.2%) of incoming transfer students at three institutions were classified as sophomores, followed by juniors (34.1%), first-years (8.7%), and seniors (7.7%), with the remainder uncertain of their rank (Robison, Fawley, & Marshall, 2018, p. 868). Supporting C. Kirk-Kuwaye and M. Kirk-Kuwaye’s critique, they found that 56.3% of respondents were lateral transfer students, coming from another four-year institution, while 39.1% were vertical transfers.

The range of stages at which students transfer raises questions for librarians who support these students. What previous experiences do incoming transfer students have with conducting research or reading the scholarly literature? What research tools did they use at previous institutions? How can we meaningfully reach out to a population with such a diversity of experiences from so many different types of institutions? Laanan, Starobin, and Eggleston (2010) coined the term “transfer capital” to describe the beneficial experiences and learned lessons that transfer students bring with them to the transfer process. Do previous research experiences form a sort of transfer capital as these students delve into research assignments on their new campuses, and what might be the limits of that capital?

This article presents the findings from the second phase of a two-phase, multi-campus research project, examining incoming transfer students’ experiences related to research and information literacy (IL) instruction. In the first phase (Robison et al., 2018), the authors surveyed all incoming undergraduate transfer students at three institutions. This second article uses the results of follow-up interviews with junior and senior transfer students that focused on their experiences with conducting research. Upper-level students are more likely than other first-year or sophomore transfer students to be enrolled in research-intensive courses during the first semester at their new institutions. This article seeks to identify the difficulties these newly arrived students experience with using library resources to conduct research. With little time to acclimate to campus, it is likely that the students are not fully informed about the library resources and services available to support their upper-level disciplinary research and writing courses. At the same time, acknowledging the reality of transfer student capital (Laanan, Starobin, and Eggleston, 2010), this article also asks what research strategies, practices, and other strengths these students bring with them from their previous institutions. The results of these interviews suggest that incoming junior and senior transfer students are dependent on their course instructors to learn about the resources available to them and have limited contact with subject librarians, at least in their first semester. Results also demonstrate that these upper-level students rely heavily on “tried and true” research habits developed at their previous institutions and also were confident in their ability to conduct research. The interviews reveal that these transfer students’ difficulties with academic integration lie less with IL competencies and more with a lack of knowledge about institutional culture at their new universities.

**Literature Review**

As the authors have argued previously (Robison et al., 2018), transfer students should be a population of interest for library instruction and outreach. Transfer students are a large and mostly invisible undergraduate population, with one study estimating that 17.9% of U.S. undergraduates who started coursework in 2011 had transferred to another institution within three years (NCES, 2016). Other estimates are more illustrative of the complexity of transfer. Shapiro, Dundar, Wakhungu, Yuan and Harrell (2015) found that, among the nearly 2.7 million U.S. undergraduates who started college at any type of institution in the fall of 2008, only 55.03% completed their degrees within six years. Of those who completed, 23.6% did so at institutions different from where they had started.

In recent years, library researchers have begun studying undergraduate transfer students with a new energy. A few scholars have studied transfer students’ previous experiences with IL instruction. Grigg and Dale (2017) found that most incoming transfer students at the University of North Carolina at Greensboro (79.2%) had previously participated in IL instruction. Robison (2017) found that only 43.2% (n = 16) of incoming transfer students at Valparaiso University had received classroom-based IL instruction at their prior institution, but that a greater share (62.2%) had some sort of contact with a library employee about using library resources at their previous institution. Heinbach, Fiedler, Mitola, and Pattni (2019) found that approximately 87% of incoming transfer students at the University of Nevada, Las Vegas had received prior IL instruction.

However, these encouraging findings are not generalizable to all U.S. institutions, as revealed by some research into transfer students’ IL needs and abilities. Tong and Moran (2017) administered the Project SAILS test to undergraduates on two regional campuses to determine whether transfer students performed worse than native students. They found no significant difference between the IL abilities of transfer students and those of native students; disappointingly, most students, even juniors and seniors, had received no prior library instruction and accordingly performed poorly on the SAILS test. In another study, Kearns, Kirsch and Cononie (2017) suggest more complexity in the transfer IL experience and describe the use of an interactive IL game, which incoming transfer students had the option to complete during the admissions process. Through analyzing the results of the game, the authors concluded that incoming transfer students had generally strong IL skills, including knowledge of source types and the ability to evaluate web sources and to distinguish between popular and scholarly sources. Their analysis also found many areas in which transfer students’ understanding was weak, including Boolean search logic, initiating the research process, paraphrasing, and Library of Congress classification.

Another growing research area focuses on case studies of successful library outreach to transfer students. For example, librarians at the University of North Carolina Chapel Hill launched a personal librarian program for transfer students, to ease their integration into campus and expose them to campus resources (MacDonald & Mohanty, 2017). At the University of North Carolina Wilmington, the library created a new Transfer Student Services Librarian position to serve as liaison to transfer students. This liaison librarian teaches IL instruction in a transfer seminar and works with other faculty and staff on campus to support these students’ needs (Coats & Pemberton, 2017). However, examples of successful outreach to this population are still limited. Roberts, Welsh, and Dudek (2019) surveyed academic librarians at two- and four-year institutions across Colorado and found that few were currently targeting transfer students with outreach. Only two respondents (6.9%) indicated offering IL instruction distinctly for transfer students, two offered transfer-specific orientations, one offered transfer-specific handouts, and none offered transfer-specific research guides (pp. 101-102). They conclude that, at least in Colorado, academic libraries generally ignore the needs of transfer students and do not realize the important role libraries could play in students’ success.

**Research Design**

This article examines the research behaviors and IL needs of incoming undergraduate transfer students at the rank of junior or senior. This investigation of upper-level transfer students was dually grounded in the theories of *transfer deficit* and *transfer student capital*. For over 50 years, research has suggested that incoming transfer students face barriers to success. These challenges tend to fall into one of two broad categories, as described by Tinto (1975), of either academic integration or social integration. Academic barriers to successful transfer are well documented, such as the temporary dip in GPA that many transfer students face, known as transfer shock (Hills, 1965). Other barriers to integrating academically include logistical challenges, such as transferring credit hours (Chin-Newman & Shaw, 2013), and understanding the expectations for their degree programs, such as might be learned from an academic advisor (Smith & Allen, 2014). Incoming transfer students also can struggle to acclimate socially. Examples include feeling marginalized by their new universities’ transfer processes (Owens, 2010) and struggling to integrate into new social groups on campus (Utter & DeAngelo, 2015). Collectively, some researchers refer to the disadvantages that transfer students face as *transfer deficit* (McCormick, Sarraf, BrckaLorenz, & Haywood, 2009). Because of the research on transfer deficit, the authors assumed that incoming, upper-level transfer students might face challenges in their coursework, especially if they were enrolled in courses requiring extensive outside research.

However, the research was also informed by a counter-argument provided by Laanan, Starobin, and Eggleston’s (2010) model of transfer student capital. This theory holds that transfer students use their accumulated knowledge from their previous institutions to navigate the transfer process more successfully. In short, there is value to “learning the ropes” at another university, and this experience is a form of personal capital. Such an approach is advocated by Heinbach and colleagues (2019), who found that most transfer students bring emotional maturity and resilience, as well as transferable experiences with conducting research and using library resources, when they enter a new university. Drawing on the theory of transfer student capital, the authors assumed that, when faced with a barrier in their coursework, upper-level transfer students would draw on previous strategies for addressing, coping with, or getting around the barrier.

Through an analysis of interviews with junior and senior transfer students, this article addresses two research questions:

1. What difficulties do upper-level transfer students experience with research-intensive courses, especially related to IL instruction?
2. What strategies do upper-level transfer students employ to overcome barriers to the research process in their research-intensive courses?

**Background**

The present study involved conducting interviews of upper-level undergraduate transfer students (ranked as either juniors or seniors) at three universities: Valparaiso University, the University of Vermont (UVM), and Purdue University Fort Wayne (PFW). Valparaiso University is a private, comprehensive, master’s degree-granting university in northwest Indiana with approximately 3,900 full-time equivalent students. In fall 2017, it received 229 new transfer students. UVM is the state’s land grant institution. It has about 10,500 undergraduates and 2,000 graduate students along with a medical school. There were 446 new transfer students in fall 2017. PFW is a public, metropolitan university and, with over 8,300 students, is northeast Indiana’s largest university. In fall of 2017, 334 students were new transfer students. These three universities are different from one another in terms of enrollment, status as either public or private, programs of study, and geography. While not constituting a representative sample, these institutions differ enough to offer useful insights into the experiences, abilities, and challenges of undergraduate transfer students.

**Methods and Analysis**

Interviewing upper-level transfer students offered the opportunity for a more in-depth and nuanced picture of transfer student experience as a supplement to the initial survey (Robison et al., 2018). All students interviewed in this second phase of the study participated in the initial survey conducted in the fall of 2017. The last question on the survey invited respondents to participate in an optional follow-up interview. From those who expressed interest in being interviewed, 15 individual follow-up interviews were conducted with upper-class transfer students, including six from Valparaiso University, five from UVM, and four from PFW. The authors developed a common, semi-structured interview protocol, and each author used this protocol to conduct one-on-one interviews on their own respective campuses. Interviews were conducted in person and lasted from approximately 15 to 45 minutes. To thank participants for their time, a coffee shop gift card for five dollars (UVM and PFW) or 10 dollars (Valparaiso University) was offered to interview participants.

During each interview, the authors asked four core questions about the students’ experiences with research assignments that semester, including course requirements, use of outside sources, and contact with librarians. The authors also asked six questions about challenges that the students faced when conducting research, including how well their previous schools prepared them for upper-level coursework, how they overcame challenges, and how they compared themselves to their native classmates, with related follow-up questions. The interviews were conducted based upon the principles of qualitative methodologies, such that the interviewers focused on actively listening during the interviews and also sought to create an environment where students were encouraged to share stories deeply rooted in their own experience and perspective (Sandelowski, 2004). In addition, the semistructured format of the interviews gave students the latitude to develop their answers with as little restraint as possible and gave the interviewers an opportunity to ask follow-up questions, including on topics they might not have initially considered (Merriam & Tisdell, 2016; Taylor, Bogdan & DeVault, 2016).

Each interview was audio recorded and transcribed, with each author taking responsibility for transcribing the interviews that she/he conducted. The three authors then coded the interview transcripts. Each transcript was coded by two authors, such that the authors coded both their own interviews and others’ from the study team. The authors chose not to measure inter-rater reliability as part of this coding. Due to the study’s qualitative methodology and the inductive nature of this project, the authors had two individuals code each transcript, not in order to ensure scientific precision in the coding, but rather to have greater confidence that they had not overlooked an important quote related to the transfer student research experience (Armstrong, Gosling, Weinman & Marteau, 1997).

The coding method was based upon grounded theory (Charmaz, 2004), wherein themes were allowed to emerge during the reading and analysis of the transcripts. The authors began with an initial list of codes derived from the theories of transfer deficit (McCormick et al., 2009) and transfer student capital (Laanan et al., 2010), and then added others to the list as the coding progressed. Codes were grouped together as themes emerged. Ultimately, the authors identified nine themes: how students conduct research; reliance on tried-and-true research methods; faculty’s role in giving research advice; work-life balance; logistics surrounding transfer; circumstances of transfer; transfer capital; transfer deficit; and academic integration and social integration. The coding also revealed recurring elements from the interviewees’ stories. To allow for authentic yet anonymous representation of the upper-level transfer student experience, the authors combined many of these common elements to construct a composite narrative of an upper-level transfer student (Taber, 2013).

**Results and Discussion**

This section presents the fictitious narrative of a composite transfer student, followed by a discussion of the themes that emerged from the coding of the interview transcripts. The nine themes that emerged are grouped into three overarching categories of conducting research, transfer-related challenges, and transfer capital and deficit (see Table 1).

Table 1. Nine themes from grounded coding, grouped into three categories

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| --- | --- | --- |
| **Conducting Research** | **Transfer-Related Challenges** | **Transfer Capital and Deficit** |
| How Students Conduct Research | Work-Life Balance | Transfer Capital (e.g., Preparation, Maturity) |
| Reliance on Tried-and-True Methods | Logistics Surrounding Transfer Process  | Transfer Deficits (e.g., Lack of Institutional Knowledge) |
| Faculty’s Role in Giving Research Advice | Circumstances of Transfer | Academic Integration and Social Integration |

*Composite Upper-Level Transfer Student*

“Alma S. Dunne” attended two institutions prior to settling at her current institution. She is excited to be at her new school, but the logistics have been frustrating. There was little communication from the university prior to her setting foot on campus, and she is still not clear about her academic standing: is she a junior or technically only a second-semester sophomore? More importantly, when can she graduate? Every semester her student loans increase. She attended one orientation event, but with a part-time job, she could not squeeze the others into her schedule. Besides, they were so overwhelming that they just made her anxious. Some orientation programs were geared more toward recent high school graduates and did not address her unique needs as a transfer student.

At a previous institution, Alma was introduced to college-level research in her first-year writing course, and she continues to rely on the same resources and search techniques. She uses the ERIC database for research, regardless of whether it is the most appropriate resource for the assignment. At a previous institution, she had a few interactions with librarians in an IL session and at the reference desk, but most of the time her professors supplied her class with the sources needed to write their papers. Some of her professors at her new university do the same thing, and she has yet to interact with a librarian. Nonetheless, she is confident in her ability to conduct college-level research and thinks she is much better prepared than her native peers.

Where Alma feels most unprepared is in her lack of institutional knowledge or “insider information” that the other students all seem to know. Her native peers know who the great professors are. They also know who is an easy grader and who is a stickler for on-time attendance. While she is confident in her ability to do college-level research, she feels that she is at a disadvantage by not knowing in advance what her professors’ unspoken expectations are.

*Conducting Research*

Students’ depictions of their experiences with library research were noteworthy in several ways. First, while many transfer students were introduced to college-level research at their previous institutions, they often seemed to take the path of least resistance. One student stated, “I just Google. And whatever comes up I pretty much use those.” Another said she used a library database but that it was “pretty minimal,” and another explained that she will bypass an article if it is not easily downloadable and “stick with the online stuff 'cause it's less work.”

Although many students expressed regret for unavoidable time conflicts, they seemed to get by with the least investment in their research as possible. One student described the research process as “pretty straightforward,” and a second interestingly said that they “had luck with finding articles.” In each of these examples, there is a sense that students are doing just enough to get by, without the type of intellectual engagement that librarians might consider ideal. While this study did not seek to compare transfer and non-transfer students, the examples of students using previously learned skills to take shortcuts on the research process was similar to the tactic Warwick, Rimmer, Blandford, Gow, and Buchanan (2009) identified in their study of undergraduate information seeking behavior and labeled “strategic satisficing.” As another student admitted, “I already learned how to do this part, so I can kind of skip and save some time.”

Other students relied on so-called “tried and true” methods learned at their previous institutions, whether or not these were the most appropriate approaches for the assignment at hand. “I went to JSTOR, it’s the one I usually use,” said one student when asked about the resources he used to complete a research assignment. Another student stated, “I just used ERIC, I kind of liked it, it was easy.” These findings echo those of Project Information Literacy, which found that students used the same set of information resources for multiple assignments (Head & Eisenberg, 2010).

A number of the interviewees clearly gained some level of library experience at their previous institutions. “I feel like I got this good foundation of how everything works and how to write your papers well,” said one student. Another talked of being “walked through” library databases, adding, “I guess that was the only exposure I had to it really.” These students expressed a level of confidence in their abilities, such as the student who said, “You can just teach yourself how to use it.” One student said she had written “gazillions of papers,” and another said she had a “pretty solid grasp on that.” Yet, this knowledge of conducting research was often at the level of being familiar with research tools or strategies, leaving unresolved the question of how prepared some the interviewees really were for upper-level, disciplinary research assignments. On the one hand, studies find that students’ self-confidence is not a reliable indicator of their IL abilities (Jackson, 2013; Molteni & Chan, 2015; Paterson & Gamtso, 2017). Gross and Latham (2009) also found that students are unaware that their information seeking skills could be improved. On the other hand, these students’ confidence, especially exhibited so late in the first semester at their new universities, is an indicator of successful academic integration and acclimation to their new academic expectations.

Although many students took the path of least resistance to completing assignments, others discussed research in a relatively sophisticated manner. One student majoring in biology said, “I started to recognize authors who wrote papers because they tended to do a lot of research in the same [field].” Another student admitted the work she did seemed taxing, stating, “I did find some good articles ... but it was very time-consuming.” Some students chose the easiest approach to completing an assignment, while others were excited about the research process and their development as student scholars. These findings complicate traditional narratives about undergraduate students’ satisficing behavior when it comes to finding information sources (Connaway, Dickey & Radford, 2011), perhaps reflecting the maturity that some transfer students bring to their coursework. These results also support those of Head and Eisenberg (2010), who found that, although students care about passing courses and getting good grades, most students they surveyed (78%) also valued conducting research and learning something new from it. The upper-level transfer students’ more sophisticated approaches to research, however, might also support Warwick and colleagues’ findings about strategic satisficing and students’ reliance on information sources from within their comfort zone (Warwick et al., 2009). It could be that some upper-level transfer students simply have a sizable comfort zone of information seeking, developed from research practices at their previous institutions.

While some students did mention librarians or library instruction, many students instead spoke of faculty members as the ones who taught students how to use library tools. This instruction from faculty took a variety of forms. One student said her professor spends “at least one class period every semester going through the online databases.” In other instances, a faculty member might link to a library tool in the syllabus, provide students with the needed materials in class, discuss citation methods, or demonstrate a database as a part of class instruction. This faculty instruction often happened without any librarian involvement. However, it seemed that faculty were motivated by their own passion for research, not by antipathy toward the library. Some faculty clearly exuded enthusiasm, urging students to “use the library” and to take advantage of its “awesome” resources. Nonetheless, excluding librarians from the course has potential negative implications for students’ learning of self-guided research. These findings echo those of Weiner (2014), who found that subject faculty often teach IL concepts to undergraduates without collaborating with librarians.

*Transfer-Related Challenges*

The authors’ transfer survey, conducted during phase one, as well as supporting literature (Duggan & Pickering, 2008; Schreiner, Louis & Nelson, 2012) indicate that transfer students are likely to have multiple responsibilities beyond their school work, especially in terms of hours spent at a job. The interviews suggest that students might want to be engaged in their research papers, but that their time commitments make this difficult. One student who worked full time and also commuted to campus said, “I’m always thinking about my papers” and yet “finding the energy to sit down and write a paper” was very challenging. Another student talked about how difficult it was to find time to complete group assignments, and still another had trouble getting his work schedule in sync with available lab time needed for a project.

These time pressures affected transfer students in a number of ways. For one student, spending time in the library helped her maintain balance: “My schedule is pretty crazy this semester,” she shared. “I just had this mental box of ‘I’ll be at the library.’” Yet, it was also clear that time commitments affected the quality of students’ work. A student who also worked full time said, “I just feel like sometimes I do my papers just to get them done.” Another student described attending freshman orientation after working a 12-hour shift, saying with frustration, “Well, I'm gonna go home now, cause I'm not playing in the bouncy castle, because I have to go home and sleep." The challenges faced outside the classroom could also take a variety of forms, such as an employer who did not offer flexible scheduling, long commute times, and even the lack of Wi-Fi at home. As one student explained, while she wished she had free time, her schedule allowed for paid work and school work and nothing else.

Furthermore, transfer students did not want to be treated like freshmen but felt that their new universities lumped transfer students in with other first-year students. One student expressed her dissatisfaction with her new university’s summer orientation this way: “I was like ‘I've been out of high school for about four years, we're good.’ I know I'm not in high school anymore.” It is possible that transfer students’ needs are unique even among other transfer students; as one student said, “I was amazed by how little I could relate to the other transfer students.” One student did not have any formalized orientation, but instead had friends already enrolled at her new school give her a tour of the campus and show her the buildings where her classes would be held. The students’ dissatisfaction with their universities’ standard orientations echo Townsend’s (2008) findings about transfer students’ desire to be recognized as distinct from other first-year students.

*Transfer Capital and Transfer Deficit*

One of the unanswered questions from the authors’ phase-one survey was how previous IL instruction might benefit incoming transfer students and serve as a form of transfer capital. Although post-transfer IL instruction was found to have immediate affective benefits to incoming transfer students in terms of their confidence and sense of connectedness, the survey revealed no significant benefit from the students’ pre-transfer IL experiences (Robison et al., 2018). Those findings were inconsistent with transfer capital theory and deserved further investigation. The follow-up interviews in this second phase provided a useful means of investigating the complexities of how certain skills did carry over (transfer capital), while in other instances important gaps (transfer deficit) in students’ knowledge remained. On the one hand, the interviews provided evidence that prior experiences (including experience with IL) did provide a boost to incoming transfer students. In addition, students expressed a clear awareness of the expertise they brought with them. Remarkably, one third of the students interviewed had transferred at least twice, bringing experiences from not one but at least two institutions with them.

Regardless of how students were engaging in research, they were confident in their ability to do so and thought they were just as prepared or more so than their peers. One student, a political science major, stated, “I had been to two colleges prior so I learned stuff there, and I kind of had that background knowledge that maybe if someone who had only been here for four years just at one university would [not] have known. I had the more diversity in learning. Different types of teachings.” The student saw her transfer experience as a strength, that she may graduate with a greater breadth of knowledge than someone who had been at the same institution for their entire college experience. A second student began her college experience at a small institution, which she felt was invaluable preparation for when she transitioned to a larger university. The student explained, “Especially coming from that small classroom, I feel like I got this good foundation of how everything works and how to write your papers well.” Some students perceive that they have accumulated capital from the transfer experience. These statements align with Laanan and colleagues’ (2010) discussion of transfer student capital and how the community college environment can help prepare transfer students for success at a four-year institution. However, notably, the students in this study came from a mixture of both two-year and four-year institutions, suggesting that the accumulation of transfer student capital is not limited only to the community college environment.

The interviews revealed examples of the ways transfer capital might manifest, such as knowing how the financial aid system worked. But importantly, transfer capital also took the form of confidence and a level of savviness with library research. One student who expressed confidence in his college-level abilities also extended this confidence to library research, saying, “I’m pretty good at finding [sources]. I’ve done lots of different papers and stuff over the course of the years, so I think I have a pretty solid grasp on that.” Another student compared her research skills to those of other students in the class, stating, “I felt like I could find sources faster than they could.” An economics major spoke in strikingly similar ways about his perceived advantage as a transfer student: “Every school has different requirements, so I get a little bit of that, and a little bit here and ... if I put these two together ... like maybe I have an advantage for knowing different perspectives and different ideas.” These findings indicate that previous experience with research and with library resources can constitute a form of transfer capital. This is perhaps the most important insight from the present study.

Nevertheless, the interviews also revealed examples of transfer deficit, instances where the transfer experience presented gaps or missteps, which in some cases also profoundly impacted the students’ experiences. These gaps were sometimes in the form of bureaucratic or institutional idiosyncrasies, which left students feeling uninformed and abandoned to navigate the transfer process on their own. As one student explained, “I felt not a lot of information was presented at first with, ‘Hey, this is how things are run. This is how to find your way around this.’” Other students faced logistical hurdles with registering for courses they needed and transferring credits from their previous institution. One student explained, “I was freaking out because I would’ve had to stay an extra semester” if the error was not remedied. Similarly, another student said, “transferring was a little bit rough at first ... trying to figure out where I was entering in and what I needed to do.”

In other instances, transfer deficits manifested in ways that directly impacted academic or social integration, as is central to Tinto’s (1975) research. Many interviewees felt disadvantaged when it came to knowing campus culture. When asked whether she was at a disadvantage compared to native students, one student responded, “I would say yeah, they [native students] knew what the professor wanted. They already had the professor, and they knew how he or she grades, that kind of thing.”

Another expressed a similar sentiment: “[My classmates] had already had the professors before so they already knew what they were expecting ... whereas I wasn’t too sure.” Other students spoke in similar terms. One told of a faculty member who referenced a book that she had never heard of, but which her peers knew well from the university’s first-year seminar. Another student said candidly, “It is not about knowledge, it’s about the language.” In some cases, being a transfer student meant dealing with additional uncertainties, such as how prepared they might be for their new coursework. As one student explained, “I knew I would be taking an English class, but I didn’t really know how it would compare to the past ones I’d taken.” Another student similarly explained, “It definitely seemed daunting in the beginning” when her class was told, “you will need to have 30 pages of polished writing.” In addition, transferring sometimes coincided with a change in major or with an increase in workload, both of which could feel challenging to new transfer students.

Transfer deficits sometimes manifested in ways that were relevant to the library and library instruction. One student was unfamiliar with a library tool that most other juniors would have known about, asking, “What do you mean by a course guide?” Another said, “I don’t know where I’m going to study ... I have no idea where study things are.” Deficits related to knowing the range of the library’s resources, services and spaces reveal the challenges that librarians face in reaching this population, particularly with transfer students who enter as juniors or seniors.

**Implications for Practice**

The interview results demonstrate that transfer students are a diverse group with varied experiences, and that a “one-size-fits-all” approach for library outreach to transfer students is likely to fail. Nonetheless, libraries and librarians are an important part of the academic and social fabric of the institution and, as such, are integral to the success of transfer students. Due to organizational and time constraints, holding separate, transfer-specific orientations or instruction sessions may not be an option, and one cannot expect transfer students to self-identify their needs to librarians. Instead, when teaching or designing lesson plans, librarians need to recognize that some students in the class might not have taken the same path as their native peers. Particularly in IL sessions for upper-level research courses, new transfer students might be present who have already formed tried-and-true research approaches that have worked in the past. Librarians can benefit from using a constructivist approach in their instructional design, designing activities that encourage students to draw upon existing knowledge and then adding onto that knowledge with new resources and techniques (Markless, 2009; Johnson, 2008).

While library outreach during orientation may reach some students, many interviewees reported that orientation events were stressful and difficult to fit into their schedules. An asynchronous outreach approach, such as a library introduction tutorial or a handout in orientation packets, could give transfer students the information they need on their own time and at their point of need. Librarians should keep in mind that transfer students are not recent high school graduates new to the college experience and do not want to be treated as such. They are also juggling jobs, commutes, and other commitments that can make it difficult to balance with attending college full-time.

In their previous study, the authors found that students who received information about the library during their transfer process reported increased confidence in doing research (Robison et al., 2018). In the follow-up interviews, upper-level transfer students exhibited a great deal of confidence in their research abilities. It is possible that, for this group of students, previous research experiences served as a form of skill-based transfer capital, in addition to delivering an affective benefit in the form of a confidence boost. It is also possible, however, that this confidence could be preventing these students from seeking help with the research process from librarians. Librarians engaged in instruction and outreach with this population should anticipate these students’ confidence and self-sufficiency and be prepared to explain how librarians can add value to the research process.

Transfer students are often no different from their native peers in their approach to research: some take the easiest path to complete an assignment while others carve out time, do a deep dive, and enjoy the research process. Many rely on tried-and-true methods learned at previous institutions, regardless of whether these constitute the best approach for a given assignment. Transfer students stand to benefit from targeted IL instruction, but this instruction is difficult to implement if the university does not have a required course for transfer students. Furthermore, many students test out of the first-year seminars and writing courses where many libraries have embedded instruction programs. Depending on which credits transferred from their previous institutions, students may be taking courses out of order or might have taken the prerequisite at their former school. If an email list of incoming transfer students exists, a targeted message about the role of subject librarians and information on research consultations would be one tactic for reaching these students.

**Conclusion and Future Research**

This second part of a two-phase study investigated the experiences of upper-level transfer students in courses involving outside research. Specifically, it asked what difficulties upper-level, incoming transfer students experience with research-intensive courses, especially as might relate to the library. It also sought to uncover these students’ strategies for overcoming barriers in the research process. Time management, the temptation to satisfice in information seeking, and a relative lack of librarian contact emerged as the main barriers these students faced in conducting research. To overcome difficulties, these students overwhelming described employing one primary strategy: use the same research tools that they used at previous institutions. Whether JSTOR, Academic Search Premier, ERIC, a web-scale discovery layer, or another tool, students frequently mentioned relying on resources already familiar to them. Another strategy was to seek research advice from their course instructors, some of whom might spend time in class talking about library resources. Few students, however, mentioned direct librarian involvement in their classes.

This study finds that some of the most substantial barriers upper-level transfer students face are related not to the library or research, but to institutional culture and the logistics of transfer. Students told horror stories about the process of transferring into their new universities, including poor communication about orientation, bad advising regarding degree requirements, difficulties transferring credit hours, and their inability to register for necessary courses. They also complained of a lack of institutional knowledge, such as knowing who the “good” professors are or understanding their professors’ unspoken expectations. These barriers are beyond the scope of the library and are important findings for admissions counselors, academic advisors, and student life administrators.

In some important ways, this study suggests that upper-level transfer students might not be so different from upper-level native students. These students described their research experiences in terms that are likely familiar to most librarians: taking the path of least resistance, using familiar databases, struggling with keywords, easily giving up when accessing an article’s full text seems complicated, and using Google. Some do the minimum that is required to get a decent grade and graduate, while others immerse themselves in the research process.

As a qualitative investigation, this study raises more questions than it answers. First, while the semi-structured interviews with just fifteen students revealed nuances not evident in the authors’ survey-based study, future quantitative studies are needed to probe more deeply into students’ experiences with both transfer student deficit and transfer student capital. Second, while this study suggests that incoming, upper-level transfer students rely on tried-and-true research methods learned at previous institutions, further research is needed to conclude whether transfer students eventually add new tools and approaches to their repertoires by the time they graduate. Third, as noted above, this study suggests that upper-level transfer students have a great deal of confidence in their abilities as researchers. Further research is needed to compare their confidence levels and their IL abilities with those of upper-level native students, to determine whether the transfer experience might impact confidence levels significantly and whether such confidence is in fact the result of better preparation. Finally, beyond the realm of library science, further research is needed to determine how universities might help incoming transfer students better learn institutional culture, that is, the subtle aspects of student and academic life that native students pick up during their first years on campus. Particularly for upper-level students who are thrust immediately into research-intensive courses in their majors, the lack of institutional cultural knowledge can be frustrating as they attempt to navigate so many new expectations all at once.

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**Appendix A: Core Questions for Semi-Structured Interviews**

**Introduction**: We're conducting these interviews because we'd like to learn a bit more about what it is like to be a transfer student and what your experience with research assignments has been like.

**Background Questions**: To get us started, I'd be interested in hearing where you are in your academic program and where you transferred from.

* Are you a junior or a senior?
* What is/are your major(s)?
* Did you transfer from a community college, another 4-year school, or an international university?

**Experience with Research Assignments**: Next, I'm curious what your experience with research assignments has been like this semester.

* What courses are you enrolled in this semester?
* In any of your current courses, did you have to write a research paper or do some other research project?
	+ If so, can you tell me more about the paper(s) or project(s)? Have you already started working on them?
* For this research paper(s) or project(s), were you expected to find and use outside sources (i.e., sources other than just the ones your professor had you read for class)?
* If so, can you tell me about your research process? Have you been finding good sources? Where have you searched for sources? How have you decided which sources to use?

**Experience with Library Instruction**: Did a librarian speak with your class about how to do this research?

* If so, what sorts of advice did they give you? Has this advice been helpful to you in your research process?
* If not, did you use any other library resources, like meeting with a librarian or using the library website in working on this project?

**Challenges Encountered**: What kinds of challenges have you faced as you went about doing your research?

* Do you feel that you struggled with this research paper(s) or project(s) more than your classmates who weren’t transfer students? Why or why not?
* Do you think your previous college/university did a good job of preparing you to do research in these types of upper-level classes? Why or why not?
* If you had learned more about doing research at your previous college/university, do you think you would have had an easier time with your research paper(s) or project(s) here at [Valpo/PFW/UVM]?
* What have you done to overcome those challenges?
* What do you wish you would have done differently on your research paper(s) or project(s) this semester?

**Overall Reflection**: As you look back on your experience, what advice would you have for other incoming transfer students who are taking upper-level classes that involve a lot of research and writing?