A National Snapshot

HOW STUDENTS EXPERIENCE AND PERCEIVE TRANSFERRING EARNED CREDIT

In collaboration with

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ABOUT THE AUTHORS

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BACKGROUND

The American higher education system serves a diverse student population through a vast network of colleges and universities with distinct institutional missions and values. The diversity of institutional types that afford learners with choice in the kind of education they receive also means there is variation in how students experience movement from one institution of higher education to another. Simply put, the transfer function in higher education can be complex to navigate and inevitably leads to inefficiencies in the transfer of credit process.

Today’s college student is highly likely to transfer institutions or credits (Taylor and Jain 2017), and transfer students comprise a sizeable number of students enrolled in postsecondary education. In fall 2018, roughly 1.38 million students were enrolled in postsecondary institutions as transfer-in students, according to the U.S. Department of Education’s National Center for Education Statistics. However, in a working paper for the American Council on Education (ACE) on student transfer and award of credit, Bragg (2020) surmises the successful transfer and award of credit remains problematic, notably for students who lose credits during the transfer process.

The present paper is focused specifically on the transfer student experience, the perceived enablers and barriers transfer students face when attempting to transfer credits from one institution of higher education to another, and students’ attitude about any credits that did not transfer in the process. To that end, Taylor and Jain (2017) identified three critical dimensions of inefficient and ineffective transfer pathways: credit loss, inadequate articulation, and structural and institutional barriers.

In this paper, the authors highlight a recent study by ACE and the American Association and Collegiate Registrars and Admissions Officers (AACRAO) on students’ perceptions about how transfer credit was applied towards their academic program of study and the potential accumulation of excess credits at graduation. The study sheds light on transfer students’ opinions about the application and award of their transfer credit, including credit loss, the information that helped or hindered their decision-making in the transfer process, the barriers and enablers to their successful transfer of credit, and how they felt about the credits that did not transfer.

Understanding how students make decisions about the transfer process is vital to ensuring that institutions do not exacerbate existing inequities and inefficiencies in the transfer process when implementing transfer policies and practices (Taylor and Jain 2017). It is essential to know what information and resources transfer students draw upon in their decision-making and how they perceive the information and supports provided to them as enabling or hindering their transfer experience. Similarly, knowing the reasons students cite for losing credits in the transfer process can help institutions anticipate and prepare for the needs of transfer students, reduce friction in the transfer of credit process, and improve the accuracy and transparency of information students need to make transfer decisions.

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1 This is based on 3,489 institutions reporting data to IPEDS for the fall 2018 term.
The research on transfer students generally focuses on the transfer process, including the efficiency of transfer of credit, or the impact of transfer policies on students’ experiences and academic outcomes. However, the research on transfer students’ experience disproportionately focuses on community college practices despite the important role four-year institutions play in transfer students’ ultimate postsecondary success (Bahr et al. 2013).

Questions remain as to how well the Integrated Postsecondary Education Data System (IPEDS) captures transfer patterns and experiences from the institutional perspective—and whether IPEDS is the right vehicle to represent the student experience, given the unit of analysis at the institutional level (Miller, Clery, and Topper 2018). One study by Kadlec and Gupta (2014) takes a qualitative approach to explore the transfer of credit outcomes of nearly 170 transfer students from eight university campuses in Indiana. The results by Kadlec and Gupta (2014) showed that many of the students transferred and expected their credits to apply toward their degree program; however, credits actually transferred as excess elective credits rather than credits applied to a student’s program of study.

Though building the capacity of individuals to navigate the transfer pathway is important, institutions may also want to examine the extent to which their structures, policies, and practices enable or hinder the successful transfer of credit. Some of the known barriers to successful credit transfer include unclear transfer pathways, insufficient transfer advising and support, lack of exploration and concentration into fields of study pre-transfer, unreceptive policies and practices, and campus cultures unreceptive for transfer students (Fink 2020). Early in their academic journey, students who intend to transfer may be misadvised, and front-load general education requirements and lack awareness that they can, and in some cases should, also be taking pre-major coursework that can apply to their program of study at the prospective receiving institution. Still, there is no guarantee that students who successfully transfer will encounter a transfer-friendly culture at the institution to which they transferred.

What We Know About Transfer of Credit

Although there is a moderate level of understanding regarding transfer mobility patterns, less is known about the transfer of credit—explicitly, how credits earned from one institution are accepted and applied toward a student’s program of study at a receiving institution. The limited data on the acceptance and application of transfer comes primarily from only three sources: U.S. Department of Education Beginning Postsecondary Students Longitudinal Study (BPS); Baccalaureate and Beyond Longitudinal Survey (B&B); and institutional case studies by the American Association of Collegiate Registrars and Admissions Officers (AACRAO).

Indeed, it must first be emphasized that both of the national longitudinal studies—BPS and B&B—depict a portrait of student transfer that may be out of date given their retroactive nature. The BPS study retroactively followed a cohort of students for six years (2004–2009) from the time they first start college to track their progress through postsecondary institutions. The B&B study, on the other hand, surveyed college graduates to collect self-reported information about their previous transfer experiences retroactively; the students in this study graduated college between 2016 and 2017. The U.S. Department of Education releases updated data for both studies every eight years, so the retroactive nature of the studies and lapse in time between survey administration is problematic for understanding the current state of transfer of credit success.
Regardless, the four observations that are currently known about successful transfer of credit are (1) there is a disconnect between students’ perception of credit acceptance and the reality of what and how credits actually transfer, (2) the percentage of credit loss varies by transfer path, (3) credit loss could be due to a variety of reasons, and (4) the type of institutional accreditation plays a major role.

The disconnect around students’ perceived credit acceptance versus actual transfer credit applied is evident by comparing data from two national student studies. In the self-reported portion of the 2016-17 B&B study, 95 percent of baccalaureate recipients who attended more than one institution reported having attempted to transfer credits, with nearly all of them reported having success in transferring “some” or “all” of their credits. Only less than 1 percent reported having “none” of their credits transfer. Conversely, the most recent transcript data from a BPS study (2004-09 cohort) showed that less than half of the time (37–41 percent) “all” credits transferred, and 20–30 percent of the time, “none” had transferred.

Regarding how transfer credit is actually applied to students’ transcripts, evidence shows that credit loss varies by transfer pathway. In 2017, the U.S. Government Accountability Office (GAO) published a report based on 2004–09 BPS limited-access transcript-level data citing that, on average, students lose 43 percent of their credits when transferring, with much variation by the direction of transfer. A considerable caveat of the widely-cited GAO report is that it did not control for certain factors, such as whether the transferring student had informed the receiving institution of having any credits to transfer, how credits that were accepted applied towards students’ program of study, or the reasons the institution did not award transfer credit.

In 2018, an AACRAO study of roughly 1,000 transfer students at a large, selective public university in the southwest led researchers to identify several reasons transfer students cited as the rationale for why their credits did not transfer (Kilgore, Crabtree, and Sharp 2019). According to the study, the most commonly cited reasons, in descending order, that credits did not transfer are:

1. Grade earned made course ineligible for transfer
2. A change of major
3. Too many credits were earned
4. “Other reasons” not listed in the survey
5. Remedial courses
6. Student took personal interest courses, knowing they would not transfer
7. Student felt they were misadvised
8. Student chose to take courses to explore majors

Accreditation also matters in how institutions make decisions about the acceptance of transfer credit. The BPS study (2004–09 cohort) shows the accreditation of the sending institution—regional or national—correlates with a vast difference in the percentage of credits that were accepted by the receiving institution. When the sending institution is regionally accredited, 57 percent of credits on average are accepted for transfer credit, whereas, when the sending institution is nationally accredited, the receiving institution accepts only 12 percent of transfer credits.
Similar to the impact of regional or national accreditation, the taxpaying status of an institution, i.e., public, nonprofit, or for-profit, has an impact on the transferability of credits. According to BPS data (2004–09 cohort), students transferring from a for-profit institution have a harder time successfully transferring credits to another institution. Even when a for-profit sending institution is regionally accredited, only 7 percent of credits successfully transfer to regionally accredited public or nonprofit institutions. Though colleges and universities routinely exercise autonomy when making transfer credit decisions, data suggests there is a reluctance on the part of regionally accredited public and nonprofit colleges and universities to accept transfer credit from for-profit institutions, which in turn negatively impacts students who may accumulate excess credits, and increase the time to completion and student debt levels.
THE TRANSFER CREDIT STORY DATA GAP

There is limited data on the perceived experience of transfer students to explain how institutional supports or barriers impact if and how a student’s transfer credits are accepted. Current data available through IPEDS offers some basic data to help explain transfer of credit, as the measures originate from institutionally reported data based on enrollment statistics and outcome measures (Miller et al. 2018). Access to more nuanced data about the transfer student experience and students’ transfer of credit is limited; this type of limited-access data is available from institutional or state-level internal data that can be disaggregated and analyzed (Miller et al. 2018). This underscores the need for national-level data about the transfer student experience that examines aspects known to enable or inhibit successful transfer from both the sending and receiving institution perspective.

There is minimal data on students’ attitudes about credits lost in transfer. Much of the data in this arena is anecdotal rather than quantitative. Thus, it makes it challenging to say the extent to which students are concerned about losing credits upon transfer or to know if students are expecting to lose some credit in the transfer process. As mentioned, in 2018–19, AACRAO partnered with a large public university in the southwestern United States to examine a multi-year data set (2012–2017) of the university’s students. AACRAO administered a survey to current students and conducted focus groups and individual interviews with students enrolled at that time. Through the study, AACRAO hoped to gain insights into student decision-making variables that contributed to excess credit accumulation at graduation for both direct-entry students and transfer students (Kilgore, Crabtree, and Sharp 2019).2

Pertinent findings from the data include:

- Most transfer students were aware of why they were not able to transfer all of their credit to their current institution.
  - Nearly 30 percent selected “grade earned in a course was not transferable,” and/or “change of major when transferring,” and/or “too many credits earned at the previous institution” as the known reasons for why some credits did not transfer.
- 60 percent of those whose credits did not all transfer indicated they were “Neither pleased nor displeased” as they expected there to be some credits that would not transfer.
- 58 percent of those who were displeased with the loss of credits selected better academic advising as a means to reduce credit loss potentially.

Less than half of students in the study were displeased with losing credits upon transfer, a result that counters much of the prevailing narrative on credit loss. This finding led AACRAO to question whether a national study of the college-going population in the U.S. would mirror the student experiences and opinions in their institutional-level study. Expanding our understanding of the influence that institutional practices and policies, as well as student choices, have on the transfer of credit will help address gaps in the literature on the loss of credit in transfer and inform measures to address credit loss more systematically. The present study and the data reported in this paper contributes to that understanding.

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2 Direct entry refers to “any students who enrolled at the university without first attempting or earning any post-secondary credits from another postsecondary institution after earning a high school diploma (or equivalent) and excluding the readmitted student population.”
Methodology

Researchers from AACRAO, ACE, and ED2WORK partnered with the survey platform partner, Qualtrics, to deploy a survey to over 1,000 current college students in the U.S. through the various survey panels available to Qualtrics. Using survey logic, Qualtrics narrowed the number of respondents to individuals with the following characteristics:

- Domestic students
- Currently enrolled in only one academic institution
- At least 18 years old
- Not currently in high school
- Not a graduate student
- Earned credits from more than one institution
- A mix of public and private institutions

The survey was incentivized, and the data self-reported. Self-reported data are known to have limitations on empirical outcomes; for example, objective data such as GPA or course grade are known to be misreported (Rosen, Porter and Rogers 2017). Still, it is a widely used method to gather attitudinal and factual data from students (e.g., National Survey of Student Engagement (NSSE), Cooperative Institution Research Program (CIRP), High School Longitudinal Study of 2009 (HSLS:09)). Gonyea (2005) asserts that the usefulness of self-reported data “in high-stakes policy decisions is open for discussion,” but also notes that self-reported survey instruments provide broader options than other research methods (74). The researchers applied several methods in developing and administering the survey to minimize self-reporting bias, including:

- Participation validation questions
- Limiting the length of the survey to be completed within 5–7 minutes
- Using a generic college student experiences title to identify the survey
- Randomizing all response choices
- Separating the questions about current institutional type, location, and name to minimize order and carry-over effect
- Not asking any potentially embarrassing questions such as questions about GPA, specific letter grades, or other similar questions
- Actively reviewing the data on current institutional type, location of institution, and name of the institution as it was being collected to identify and remove mismatched data from the pool of responses

3 Respondents were U.S. citizens or those with other legal domestic status, which excluded students enrolled in a U.S. postsecondary institution whose legal resident is something other than U.S. citizen, permanent resident, or citizen of a U.S. territory.
In order to gain a broad perspective on students’ experiences with transferring credit, the survey included questions about the following:

- High school experience with taking college-level courses
- Military experience and military credit-equivalent learning
- Current and immediate previous institution type, specifically identifying public and private institutions
- Description of the transfer credit process
- Perceptions and understanding of why some credits did not transfer
- Personal feeling about credits that did not transfer
- Perceptions of what, if any, institutional resources support the transfer of credit
- Perceptions about the level of support provided by the current and previous institutions to support the transfer of credit
- Perceptions about excess credits upon degree completion

**Results**

The national study included 1,003 survey completers, with 65 percent of respondents currently enrolled at a public institution and 35 percent at a private institution; 78 percent transferred from a public institution and 22 percent from a private institution. Students were enrolled at institutions in 47 states, the District of Columbia, and Puerto Rico. Ninety percent were enrolled full time, 95 percent were between 18 and 24 years old, and 3 percent had military experience. Seventy percent graduated from high school as opposed to others who earned a GED® or were homeschooled. Most respondents earned college credit from two academic institutions, 16 percent earned credit from three, and 14 percent earned credit from more than three academic institutions. More than two-thirds completed at least one advanced placement course exam, and more than half completed a dual enrollment course while in high school (Figure 1).

**FIGURE 1: HIGH SCHOOL CURRICULAR EXPERIENCES**

<table>
<thead>
<tr>
<th>Experience</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Completed at least one advanced placement course and test</td>
<td>68%</td>
</tr>
<tr>
<td>Worked part time while in high school</td>
<td>59%</td>
</tr>
<tr>
<td>Completed at least one dual enrollment course taught at your high school</td>
<td>57%</td>
</tr>
<tr>
<td>Completed a college or university course on my own outside of high school</td>
<td>26%</td>
</tr>
<tr>
<td>Completed at least one career or technical education course</td>
<td>22%</td>
</tr>
<tr>
<td>Completed the international baccalaureate program</td>
<td>3%</td>
</tr>
<tr>
<td>Participated in JrROTC</td>
<td>2%</td>
</tr>
</tbody>
</table>

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4 Idaho, Hawaii, and Vermont are not represented in this sample.
5 This 70 percent may or may not include credit already earned at the current institution.
THE CREDIT LOSS FUNNEL

The Initial Request for Transfer Credit Evaluation

Once a student has earned academic credit, the first potential point of credit loss occurs when a student has to navigate the institutional transfer policies and process to have their credits evaluated by the receiving institution. Initial credit loss may occur at this point in the funnel for at least two reasons: 1) the student makes a purposeful decision not to send any or all of their transcripts to the institution they plan on attending; 2) the institution may require that the student request their prior credit be evaluated rather than automatically evaluating prior credit, and students may be unaware that the request for credit to be evaluated rests upon them. These two factors play a role in the percentage of credits reported as being lost in the transfer process and are not readily explained or accounted for in much of the current research. Research that relies solely on the evaluation of transcript data (i.e., comparing the incoming credit to the credits awarded) lacks the context to explain one of the two reasons identified above.

Academic Transcripts as the Source of Credit

Almost all students in this sample (96 percent) sent all of their previous college transcripts to the transfer institution for evaluation; the remaining 4 percent chose not to send all of their transcripts for one reason or another not captured by this research. Reasons a student would not send all transcripts for evaluation might include earned credit for courses not applicable to their major at the transfer institution, not earning an acceptable grade to meet the requirement for earned credit at the new institution, or a student could choose not to send a transcript for personal reasons.

Among those who recalled the process for having their transcript evaluated for academic credit, 23 percent had to ask the receiving institution to evaluate their transcripts for potential transfer credit, and transfer credit evaluation for the other 77 percent occurred automatically. There is a subtle but statistically significant relationship between public and private institutions and practice for evaluating transfer credit. Private institutions are more likely to require an incoming transfer student to request their credit be evaluated.6

Military Joint Services Transcript as the Source of Credit

Only 27 survey respondents indicated they had military experience, and just 13 requested their Joint Services Transcript be sent to their current institution. Of those, only four respondents earned all of the credit they expected to earn, six earned some credit, and three received no credit for learning documented on the Joint Services Transcript.

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6 P=.0283; Cramer’s V: .0765; n=860
Evaluating the Transcript to Award Academic Credit

There are several factors, both policy and practice, that influence transfer of credit at the next stage of the transfer credit evaluation funnel. Any policy or practice on its own can impact the number of credits subsequently accepted by the receiving institution and awarded on a student’s transcript. Here we offer examples of some influencing factors:

- Whether the receiving institution evaluates possible credit only for the major at the time of admission or all possible equivalencies, or whether the institution transcripts credit only up to the number of credits eligible to be transferred, or all possible credits and applies them as needed
- The 2019 AACRAO academic records and transcript practice report noted that
  - “39% of institutions transfer all eligible transfer credits regardless of major/degree at admission and transfer credit limit (credit limits applied to the degree program as needed after enrollment),
  - 31% only transfer the credit that apply to the major/degree at admission and up to the transfer credit limit, and
  - 30% transfer all eligible transfer credits up to the transfer credit limit and regardless of major/degree at admission” (2019, pg. 10).
- Policies that limit the number of credits that can be awarded by the course level (e.g., 100, 200, 300, 400)
- Policies that limit the percentage or number of credits that can be awarded in transfer and applied to a degree (e.g., meeting residency requirements)
- Curricular policies that impose limits on specific courses that can be awarded in transfer as opposed to being earned at the institution to which the student transferred (e.g., awarding transfer credit for ENG101 but requiring that ENG102 be residential credit)
- The receiving institution excludes college credit earned while still in high school if it can be identified as such on the transcript from the sending institution
- A 2016 AACRAO report on dual enrollment noted that 14 percent of institutions do not accept dual enrollment credit in transfer, and private institutions are less likely than public institutions to accept dual enrollment credit in transfer (Kilgore and Taylor 2016).
- Course equivalency does not exist at the receiving institution
- A grade earned in a course is not eligible for transfer
- A course was repeated for credit, and the repeated credit is not accepted in transfer
- A course is repeated to earn a better grade and the initial credit with the lesser grade is not accepted in transfer
- The receiving institution sets a time limit on the age of credit that can be transferred in, either broadly or for specific subjects or majors.

These practice and policy decisions can result in equivalent credits being left on the table. As such, some loss of equivalent credits is unaccounted for in the research informed solely by transcript data. The AACRAO May 2017 60-second survey focused on the content of transfer credit policy (Kilgore 2017). As evidenced by the contents of the undergraduate transfer policy summarized in Figure 2 from that report, the breadth and depth of policies that impact whether credit will be accepted in transfer are numerous.
In the present study, students were asked whether “all,” “some,” or “none” of their credits were accepted in transfer. This self-reported data is based on their perception of credits awarded and may or may not be based on an understanding of what makes credit eligible for transfer based on the policies described above. For example, a student may have earned credit for college preparatory/remedial courses or received a passing grade of “D” at the sending institution but is not aware of the institutional policies at his current institution, which limits or excludes this type of earned credit from transferring. In the present study, 56 percent reported that all of their credits transferred, 41 percent indicated some transferred, and 3 percent indicated none of their credit transferred. Like the earlier data point, students enrolled in private institutions are statistically less likely to report that all credits transferred and more likely to report that none of their credits transferred (Figure 3).

56% reported that all of their credits transferred.

Source: Transfer Credit Policy: Results of the AACRAO May 2017 60-Second Survey

FIGURE 2: UNDERGRADUATE TRANSFER POLICY

The minimum grade required to transfer credit
Accreditation status of sending institution and its relation to the acceptance of transfer credit at your institution
Maximum number of transfer credits allowed
International transfer credit requirements
Credit for prior learning credit practice
Credit conversion of transfer credit (e.g., quarter to semester)
Number of credits a student can apply to a specific area in the degree
Credit equivalency appeal process
Timeline for application of transfer credit to a student’s file
Courses are not equal in number of credits earned between sending and receiving institution
Transfer of credit across academic levels
Other

85%
81%
73%
47%
46%
41%
32%
32%
32%
25%
23%
20%
17%

FIGURE 3: ELIGIBLE CREDIT AWARDED IN TRANSFER BY INSTITUTION TYPE

P=.000164; Cramer’s V: .132; n=1003
Applying Awarded Credit to the Degree

Institutional curricular policies that impose limits on the applicability of equivalent credit to a particular component of a degree, percentage, or credit count, and not others (e.g., major, minor, general education, electives) also contribute to loss of credit in transfer. Seventy-four percent (74 percent) of students reported that their transfer credit was applied to meet general education requirements, 55 percent applied as elective credits, 41 percent towards major requirements, 18 percent towards minor requirements, and 4 percent were unsure how their transfer credits were applied to their program of study. Despite the small percentage of students reporting that they do not know how their transfer credit was applied, all students should be made aware of how transfer credit has been applied. Figure 4 highlights the difference between public and private institutions in this sample.

FIGURE 4: DEGREE APPLICABILITY OF TRANSFER CREDIT BY INSTITUTION TYPE

![Diagram showing the degree applicability of transfer credit by institution type.]

Known Reasons Why Earned Credit Did Not Transfer

Students who reported that only “some” or “none” of their credits transferred were asked if they knew the reasons why; 57 percent said they knew the underlying reason(s). However, the fact that 43 percent indicated they did not know why their credits did not transfer is indicative of an institutional gap in practice. Students who attempt to transfer credit and who are not awarded all the possible credit should be provided with reasons for why the credit did not transfer.

As noted above, reasons for losing credit in transfer can be rooted in institutional policy and practice or student choices or student academic outcomes. In this sample, under half (47 percent, n=247) of students who lost credit in the transfer process knew why credit had been lost. Of those, 47 percent noted that some credit was lost due to there not being an equivalent course at the institution to which they transferred (Figure 5). What we do not know from this data is whether no course equivalency exists because the credit earned was specialized, such as college preparatory or technical credit.

Students’ course taking choices may or may not be based on an understanding of how their course taking choices will impact the transferability of the credit. For example, 28 percent report that at least some of the credit they earned through dual credit while in high school does not apply to their major now that they are in college. It is likely that many of these students, who can often start taking dual enrollment as sophomores while in high school, either do not know what they want to major in when they get to college or do not understand the transfer eligibility entirely or degree applicability of the dual enrollment courses they enroll in. It is worth noting that dual enrollment credit also meets high school graduation requirements and is often earned at no cost to the student. However, as noted above, this credit is not always accepted in transfer.

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8 Appendix A disaggregates the data in Figure 4 by institutional control.
Students also choose to take courses that will not transfer for cogent reasons, such as pursuing one major for a period of time and then changing majors (26 percent), exploring a major (19 percent), personal interest (19 percent), to earn a better grade (15 percent), and pursuit of a certificate (8 percent) or minor (5 percent) that was not required. Further, as noted earlier, policies limit the transferability of some earned credit, and the student may only become aware of the transfer credit limits after the credit has been earned. For example, a student earned a grade that will not transfer (23 percent) or earned more credits than will transfer (10 percent).

The effect of academic advising and related resources should not be discounted as a contributing factor to credit loss. Students selected three factors directly related to academic advising that contributed to their loss of credit in transfer: 15 percent reported feeling misadvised, 8 percent chose to self-advice, and 6 percent noted that the degree checklist was hard to understand.

**FIGURE 5: KNOWN REASONS FOR LOSING CREDIT IN TRANSFER**

<table>
<thead>
<tr>
<th>Reason</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>No course equivalency at current institution</td>
<td>47%</td>
</tr>
<tr>
<td>Earned dual enrollment credit that did not apply to major</td>
<td>28%</td>
</tr>
<tr>
<td>Changed majors</td>
<td>26%</td>
</tr>
<tr>
<td>Grade earned would not transfer</td>
<td>23%</td>
</tr>
<tr>
<td>Major exploration courses</td>
<td>19%</td>
</tr>
<tr>
<td>Personal interest courses</td>
<td>16%</td>
</tr>
<tr>
<td>Repeated at least one course to earn a better or passing grade</td>
<td>15%</td>
</tr>
<tr>
<td>Felt misadvised</td>
<td>15%</td>
</tr>
<tr>
<td>Courses were not offered when needed, took other courses to remain financial aid eligible</td>
<td>11%</td>
</tr>
<tr>
<td>Earned more credits than will transfer</td>
<td>10%</td>
</tr>
<tr>
<td>Other reason not listed here</td>
<td>8%</td>
</tr>
<tr>
<td>Pursued a certificate that was not required</td>
<td>8%</td>
</tr>
<tr>
<td>Self-advised</td>
<td>8%</td>
</tr>
<tr>
<td>College preparatory credit for reading, math, or writing</td>
<td>7%</td>
</tr>
<tr>
<td>Degree checklist was hard to understand</td>
<td>6%</td>
</tr>
<tr>
<td>Changed my academic catalog of record</td>
<td>6%</td>
</tr>
<tr>
<td>Pursued at least one minor that wasn't required</td>
<td>5%</td>
</tr>
<tr>
<td>Repeated at least one course for personal interest</td>
<td>5%</td>
</tr>
<tr>
<td>Pursued more than one major</td>
<td>4%</td>
</tr>
<tr>
<td>Did not send transcript</td>
<td>4%</td>
</tr>
<tr>
<td>Military credit did not apply to major</td>
<td>2%</td>
</tr>
<tr>
<td>Military credit not accepted</td>
<td>2%</td>
</tr>
<tr>
<td>ESL credit</td>
<td>1%</td>
</tr>
</tbody>
</table>
Although several of the response choices in the present survey were not among the list of choices in the 2019 AACRAO study of students at a large public research university in the Southwest, where they aligned, the percentages are similar (Table 1).

### TABLE 1: CURRENT STUDY DATA COMPARED TO 2019 AACRAO DATA ON SELF-REPORTED REASONS WHY CREDITS DID NOT TRANSFER

<table>
<thead>
<tr>
<th>Reason credit did not transfer</th>
<th>Present study</th>
<th>2019 single-institution data</th>
</tr>
</thead>
<tbody>
<tr>
<td>Changed majors</td>
<td>26%</td>
<td>27%</td>
</tr>
<tr>
<td>Grade earned would not transfer</td>
<td>23%</td>
<td>29%</td>
</tr>
<tr>
<td>Major exploration</td>
<td>15%</td>
<td>19%</td>
</tr>
<tr>
<td>Degree checklist was hard to understand</td>
<td>6%</td>
<td>3%</td>
</tr>
<tr>
<td>Felt misadvised</td>
<td>15%</td>
<td>16%</td>
</tr>
<tr>
<td>Self-advised</td>
<td>8%</td>
<td>4%</td>
</tr>
<tr>
<td>Courses not offered when needed</td>
<td>11%</td>
<td>7%</td>
</tr>
</tbody>
</table>

Perceptions About Institutional Resources to Support Transfer of Credit

All respondents were asked about their level of agreement with two statements about transfer guidance resources at their current institution and previous institution. The first being, “My current institution provided clear information or resources that made transferring academic credit into my current major/program of study easy to navigate.” Most respondents agree that their current institution provided clear information or resources about transfer (81 percent either strongly agree or somewhat agree with that statement, 10 percent neither agree nor disagree and 9 percent somewhat or strongly disagree). Students currently enrolled in a public institution tend to have slightly higher ratings for this statement than those in private institutions.9

The second statement was, “The most recent institution I transferred from provided clear information or resources that made it easy to understand how each of my courses would transfer towards my major/program of study at my current institution.” Almost three-quarters strongly or somewhat agree that their previous institution provided clear information and resources about transfer, 14 percent neither agree nor disagree, and 13 percent somewhat or strongly disagree. Like the statement above, those previously enrolled in public institutions have slightly higher ratings than private institutions.10

Among those who were not able to transfer all credit earned, 59 percent were not displeased with the results. More specifically, 30 percent selected “Generally pleased. I expected there to be some extra credits earned that would not transfer,” and 29 percent selected “Neither pleased nor displeased. I expected there to be some extra credits earned that would not transfer.” Forty-nine respondents (12 percent) were extremely displeased, and 118 (29 percent) were somewhat displeased. There was no statistical difference in opinion by institutional control. These data are almost identical to the 2019 AACRAO study, in which 60 percent indicated they were not displeased, 25 percent somewhat displeased, and 14 percent extremely displeased.

---

9 P = .0201; Cohen’s d: .162
10 P = .0030; Cohen’s d: .245
The average percentage of students in the present study who strongly agree or somewhat agree (77 percent collectively) that both previous and current institutions have resources to support transfer is on par with the percentage of students not displeased with loss of credit plus those that did not lose any credit in transfer (79 percent; n=797).

Part of the transfer experience narrative informed by limited data is around understanding how students who are not able to transfer all their earned credit feel about that outcome. Given the data in Figure 5, students appear to understand that, in part, some credit lost in transfer is attributable to personal course taking choices.

To help address the lack of data on how students feel about credit that does not transfer, students unable to transfer all their earned credit were asked how they felt about it and what, if anything, colleges and universities could do to help (Figure 6). Although the sample size is small (n=167), the results are again similar to the 2019 AACRAO study. Better academic advising at both the previous institution and current institution is at the top of the list of resources that could have helped students retain more of their transfer credit. This data does not tell us what “better advising” means to the student, and it is essential to understand the nuances of that before making any changes to academic advising practice. For example, for some students this could be better or more regular access to an advisor, more directive advising as opposed to consultative advising, better alignment between advisors’ depth of knowledge of the academic program of study for which the student selects, more direct follow up after an advising session, or any number of other advising practice and policy factors. It is interesting, but not statistically significant, that there are a few key differentiators between those who are extremely displeased and somewhat displeased, especially around academic advising. However, the sample sizes are too small to generalize to the population.

**FIGURE 6: RESOURCES THAT COULD HAVE HELPED REDUCE LOST CREDIT BY LEVEL OF DISPLEASURE WITH LOST CREDIT**

<table>
<thead>
<tr>
<th>Resource</th>
<th>Extremely displeased (n=49)</th>
<th>Somewhat displeased (n=118)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Better advising at the institution(s) which I completed courses prior to transferring</td>
<td>57%</td>
<td>39%</td>
</tr>
<tr>
<td>Better advising at the institution which I transferred courses to (my current institution)</td>
<td>55%</td>
<td>40%</td>
</tr>
<tr>
<td>Better course scheduling (more times and/or days or ways to earn credit)</td>
<td>41%</td>
<td>13%</td>
</tr>
<tr>
<td>Better advising in high school about dual enrollment courses or AP courses</td>
<td>31%</td>
<td>26%</td>
</tr>
<tr>
<td>Better degree checklist</td>
<td>27%</td>
<td>24%</td>
</tr>
<tr>
<td>More engagement with faculty</td>
<td>20%</td>
<td>19%</td>
</tr>
<tr>
<td>More flexible financial aid</td>
<td>16%</td>
<td>18%</td>
</tr>
<tr>
<td>Better tutoring</td>
<td>10%</td>
<td>7%</td>
</tr>
<tr>
<td>None of the above: losing credits during transfer was unavoidable (exclusive choice)</td>
<td>10%</td>
<td>25%</td>
</tr>
<tr>
<td>Other</td>
<td>6%</td>
<td>2%</td>
</tr>
</tbody>
</table>
The researchers aimed to compare transfer resources identified by students who were able to transfer all of their credits with the resources identified as lacking among those who could not. Students who transferred all of their credit were asked to identify from a list of resources that were most useful to them. For those who were able to transfer all of their credit, academic advising was at the top of the list of resources that helped ensure all of their credits transferred (Figure 7).

FIGURE 7: RESOURCES IDENTIFIED AS MOST USEFUL IN THE TRANSFER CREDIT PROCESS

- Academic advising at my current institution: 41%
- Academic advising in high school: 28%
- Academic advising at the institution(s) from which I transferred: 27%
- My current institution's website: 26%
- At least one faculty member at my current institution: 23%
- A family member: 20%
- Member of the current institution's recruitment/admissions staff: 20%
- At least one faculty member at the institution(s) from which I transferred: 16%
- My previous institution's website: 14%
- Another student: 10%
- None of the above: 5%
- A co-worker: 1%
- Other: 1%
- Veteran's educational benefits representative: 0%
EXCESS CREDITS UPON COMPLETION

One of the goals of the 2019 AACRAO institutional case study on the source of excess credits at graduation was to understand whether or not those who start at the university (direct-entry students) have more, less, or the same number of excess credits at graduation as transfer students. In the present study, the researchers asked students the same questions about excess credits even though there was not a comparison population of direct-entry students with which to compare. All were asked if they will have earned more credits than needed to graduate. Among those who knew the answer (n=875), 76 percent will have earned more credits than needed. Some (24 percent) will have earned the credits only at the institution(s) from which they transferred, 30 percent only at their current institution, and 46 percent will have earned extra credits at both the transfer and current institution. There is no statistical difference in these values by institutional control. We examined the relationship between whether all, some, or none of the transfer credit was awarded, and where extra credit at graduation was earned.

Those who indicated that no credit transferred were nearly twice as likely to report that they earned extra credit at their current institution than those who transferred all or some (Table 2). This data may point to a small population of students who are not getting the assistance they need to navigate their college careers. It may also be that this small segment of students changed majors at their current institution, perhaps rendering some of their coursework not applicable to their new program of study.

Without the institutional context of the transfer credit practices, we are unable to determine how 45 percent of those who indicated they transferred all credit also state that excess credits at graduation were earned at both their current and transfer institutions. One practical explanation for this is that some institutions transfer all eligible credits regardless of whether they apply to the major. In this example, one could transfer all credits but have less than all apply to the degree and, as a result, have excess credits at graduation.

**TABLE 2. WHERE EXTRA CREDIT WAS EARNED BY THE AMOUNT OF CREDIT THAT TRANSFERRED**

<table>
<thead>
<tr>
<th>Where extra credit was earned</th>
<th>Credits that transferred</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total</td>
</tr>
<tr>
<td><strong>At the transfer institution(s) and current institution</strong></td>
<td>46%</td>
</tr>
<tr>
<td><strong>At the current institution</strong></td>
<td>30%</td>
</tr>
<tr>
<td><strong>At the institution(s) from which I transferred</strong></td>
<td>24%</td>
</tr>
</tbody>
</table>
DISCUSSION AND UNANSWERED QUESTIONS

As stated earlier, one of the goals of this study was to examine if a national sample of transfer student experiences and perspectives replicates the outcome and findings of the 2019 AACRAO single-institution survey. In the present study of 1,003 students nationally, we found that students’ experiences with credit transfer and their perceptions of institutional resources associated with the process are very similar to those in the single-institution study. The findings in the present study give further credibility to the validity of the conclusions drawn in the single-institution study.

From the present study, we identified several key takeaways:

• Most students feel that their transfer institution and their current institution have resources in place to help with the transfer process.

• More than half of transfer students successfully transfer all credit.

• Among students that were not successful in transferring all credit, most are aware of why the credit did not transfer.
  - Most knew credit would be lost in transfer and were not displeased with the outcome.
  - Students understand that their course taking choices and individual circumstances in those courses (e.g., grade earned, college preparatory, major exploration, personal interest) contributed to losing credits in transfer.

• Academic advising is an integral part of the transfer funnel, having both positive and negative implications.
  - Students that successfully transferred all credits listed advising as the top resource that helped them do so.
  - Students that were unable to transfer all credits also listed academic advising as the resource that could have been more helpful in the transfer process.

• Dual enrollment courses have a role in the credit loss story for almost a third of students who lost credit.

The present study reinforced other research findings that students who are currently enrolled in private institutions have a different experience in transferring credit than those enrolled in public institutions. This study also elucidated institutional practices that are likely direct contributors to the loss of credit during transfer. For example, among the 20 percent of institutions in this study that required a student to request that their transcript be evaluated for transfer credit, it is unknown how many students chose not to submit their transcripts for credit.

Limitations

The present study has several limitations regarding the scope and outcomes of the research. The researchers had to place specific constraints on the study to administer and analyze the results in a short timeframe and given limited resources.

Given that the study only included currently enrolled transfer students, there could be an element of survivor bias in the results—the results do not include students who attempted to transfer but were unsuccessful in transferring for any number of reasons. Another study might include students who attempted to transfer but were unsuccessful in doing so to understand what inhibited their successful transfer.
This study only looks at currently enrolled transfer students’ perceptions about transferring credit at a given point in time and does not look at how transfer credit was applied to a program of study at the point a student graduates. To that point, if students in the present study change their major, their credits may apply differently at the time of graduation based on a new degree audit.

The researchers made an intentional decision to include only currently enrolled domestic undergraduate students (i.e., students who are U.S. citizens or have other legal domestic status). Due to the more complicated nature of transferring academic credit to a domestic institution from a foreign institution, we excluded this population of students to limit how transfer and award of credit for foreign coursework might skew the results of domestic transfer.

**Areas for Future Research**

There is a gap in our understanding of the number and type of credits lost because the present study was limited in scope, only asking students if “all,” “some,” or “none” of their credits transferred. The relative percentage of credits lost for those who answered “some” is unknown. Other research has attempted to address this data point (e.g., the 2017 GAO study), but does not account for the type of credit lost and to what extent credit loss can be explained by student choice, student course taking behaviors, or institutional policy.

Future research might focus on the extent to which it is acceptable that some credit will be lost for a certain percentage of students because of their course taking choices (e.g., major exploration, personal interest) or decisions that are thrust upon them (e.g., needing to repeat a course, college preparatory course). Researchers might also explore whether credit lost through dual enrollment should be categorized as lost credit or more explicitly tied to major and career exploration because it is earned while students are still in high school and is intended to meet high school graduation requirements.

Exploring to what degree, if any, the various advising models impact the number of credits lost in transfer, or how student behavior or decision-making impact the utility of advising services provided is another important area for future research. Similarly, deeper exploration of advising models and their impact on transfer of credit will be useful. Among students who lose credits in transfer and do not know why, it would be helpful to identify what institutional practices contribute to students’ uncertainty about the reasons credits do not transfer.

Given that most students end up with excess credits at graduation and which are earned at the transfer institutions or the current institution, more information is needed on the factors that most significantly contribute to this additional loss of credit. Finally, additional research is needed to better understand the factors that cause differences in the transfer of credit between public and private institutions.
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United States Department of Education. Institute of Education Sciences, National Center for Education Statistics. Baccalaureate and Beyond Longitudinal Survey (B&B:16–17).

United States Department of Education. Institute of Education Sciences, National Center for Education Statistics. Beginning Postsecondary Students Longitudinal Study (BPS:12/17).

APPENDIX A: KNOWN REASONS WHY CREDITS DID NOT TRANSFER, BY INSTITUTION TYPE

<table>
<thead>
<tr>
<th>Reason</th>
<th>Public (%)</th>
<th>Private (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>No course equivalency at current institution</td>
<td>49%</td>
<td>45%</td>
</tr>
<tr>
<td>Earned dual enrollment credit that did not apply to major</td>
<td>25%</td>
<td>34%</td>
</tr>
<tr>
<td>Changed majors</td>
<td>24%</td>
<td>28%</td>
</tr>
<tr>
<td>Grade earned would not transfer</td>
<td>23%</td>
<td>22%</td>
</tr>
<tr>
<td>Repeated at least one course to earn a better or passing grade</td>
<td>21%</td>
<td>7%</td>
</tr>
<tr>
<td>Major exploration courses</td>
<td>20%</td>
<td>18%</td>
</tr>
<tr>
<td>Personal interest courses</td>
<td>16%</td>
<td>16%</td>
</tr>
<tr>
<td>Felt misadvised</td>
<td>16%</td>
<td>13%</td>
</tr>
<tr>
<td>Courses not offered when needed, so took other courses to remain financial aid eligible</td>
<td>12%</td>
<td>8%</td>
</tr>
<tr>
<td>Earned more credits than will transfer</td>
<td>11%</td>
<td>8%</td>
</tr>
<tr>
<td>College preparatory credit for reading, math, or writing</td>
<td>9%</td>
<td>3%</td>
</tr>
<tr>
<td>Degree checklist was hard to understand</td>
<td>9%</td>
<td>3%</td>
</tr>
<tr>
<td>Other reason not listed here</td>
<td>9%</td>
<td>7%</td>
</tr>
<tr>
<td>Self-advised</td>
<td>9%</td>
<td>6%</td>
</tr>
<tr>
<td>Pursued a certificate that was not required</td>
<td>7%</td>
<td>8%</td>
</tr>
<tr>
<td>Changed my academic catalog of record</td>
<td>7%</td>
<td>8%</td>
</tr>
<tr>
<td>Pursued at least one minor that wasn't required</td>
<td>6%</td>
<td>4%</td>
</tr>
<tr>
<td>Repeated at least one course for personal interest</td>
<td>6%</td>
<td>3%</td>
</tr>
<tr>
<td>Pursued more than one major</td>
<td>5%</td>
<td>3%</td>
</tr>
<tr>
<td>Military credit did not apply to major</td>
<td>3%</td>
<td>0%</td>
</tr>
<tr>
<td>Did not send transcript</td>
<td>3%</td>
<td>5%</td>
</tr>
<tr>
<td>Military credit not accepted</td>
<td>2%</td>
<td>1%</td>
</tr>
<tr>
<td>ESL credit</td>
<td>1%</td>
<td>1%</td>
</tr>
</tbody>
</table>