

Using Data in Our Work with Transfer Students

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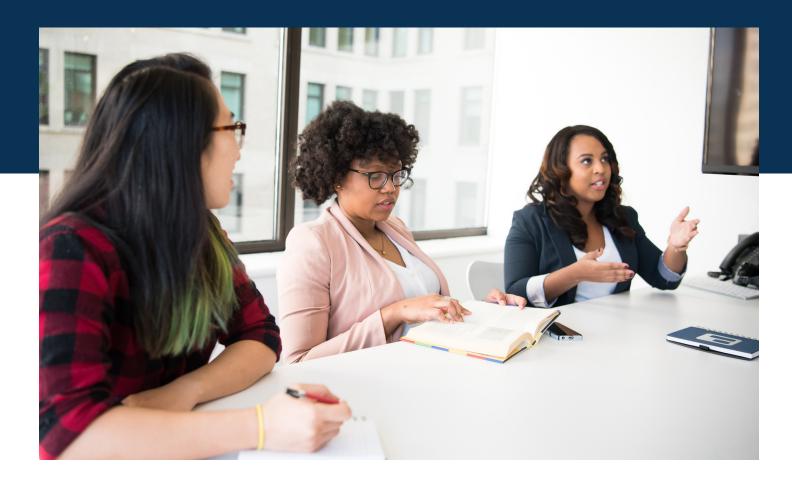
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CONTENTS

- 4 Introduction
 Bringing Transfer Needs Into Focus
- **8** Gathering Data
 Ask the Right Questions
 Find Campus and Community Partners
- **15** Analyzing and Interpreting Data Examine Trends to Build Understanding
- 21 Communicating Data
 Identify the Story and Audience
 Develop Print or Digital Materials to Support Communication Efforts
 Conduct Campus Presentations and Other Advocacy
- 25 Creating a Research or Assessment Plan
- **28** Planning for Continuous Improvement
- 29 Appendices
 - A: Research Questions and Data Sources by Functional Area
 - **B: Informational Sheet Template**
 - C: Using Data to Combat Transfer Myths
 - D: Selected Resources On Data Use and Analysis
- 38 References
- **40** About the Authors

INTRODUCTION



Transfer students are a unique group on college and university campuses. Their backgrounds, expectations, and needs differ from those of students who remain enrolled in a single institution throughout their higher education journeys. Programs and initiatives designed for first-time-in-college (FTIC) students, especially those coming directly from high school, are not applicable to most transfer students. Transfers need and deserve programs and initiatives designed specifically for them.

To provide these specialized supports, we need to know more about who transfer students are, the nature of their experiences on campus, and factors that contribute to their success or serve as roadblocks. To that end, we have designed this guide to help faculty, staff, and administrators working with transfer students gather, analyze, and communicate data to better serve transfer students through intentionally designed data-informed programs, services, and initiatives. The guide is intended to enhance understanding of common data analysis practices in 2-year and 4-year institutional settings

and will walk users through the process of formulating effective research questions. It also offers a framework for analyzing and interpreting information collected during the data-gathering process. Finally, we address the importance of communication and using data to build a transfer-inclusive culture.

We have intentionally designed the guide to be useful to a wide range of higher education professionals: admissions staff, advisors, faculty, deans, directors, upper-level administrators, and new professionals. The goal is to provide a practical resource for higher education professionals as they work to understand the varied needs of transfer students at their institutions and support their learning and success. Some basic understanding of research or assessment methodology is recommended prior to using the guide. In addition, we touch on statistical concepts that may require additional exploration. In Appendix D, we have highlighted several resources that may be useful for faculty, staff, and administrators with less assessment experience.

Throughout the guide, we include space to reflect on questions of interest, available sources of student data, key collaborators, and stakeholders. The final section of the guide provides a template for pulling these reflections together into a research plan. We have also included several scenarios, which we use to illustrate steps in the process. Finally, several appendices are included to support the design and implementation of a transfer-focused campus research study.

Bringing Transfer Needs Into Focus

Transfer students experience many challenges, which may include:

- academic, social, and financial adjustment in the middle of a 4-year degree process contributing to a drop in GPA (i.e., transfer shock; Hills, 1965; Diaz, 1992; Dennis et al., 2008) during the first term of enrollment in a new institution (Cejda et al., 1998; Elliot & Lakin, 2020; Pennington, 2006);
- disproportionately lower allocation of scholarship funds (as compared to first-time, full-time students) paired with higher financial need (Fernandez & Fletcher, 2014; Handel, 2011);
- structural racism impacting the transfer population that is typically more racially diverse than the FTIC population (Jain, 2010; Laanan & Jain, 2016);
- differences in social and cultural capital in the academic environment (Kruse et al., 2015; Moser, 2013);
- transfer pathway barriers such as outdated articulation agreements (Hodara et al., 2016; LaSota & Zumeta, 2016);
- institutional barriers, such as a lack of faculty and staff mentors who share demographic characteristics with the transfer student population (Hagedorn et al., 2007; Ponjuan, 2011);

- more work and family obligations that lead to less time for engagement outside the classroom (Johnson & Rochkind, 2009; Karp, 2011); and
- differences in self-efficacy and confidence navigating sending or transfer institutions (Amelink et al., 2015; Chen & Starobin, 2018).

Some of these challenges may be more salient than others for the transfer population at a particular institution. To understand how to best serve that population, we must first gather data about them. What we learn will inform service design and delivery. Skipping this step will not serve the institution or transfer students well.

We begin by asking questions about the institutional context. How many transfer students currently take courses? What is the process for welcoming these students and helping them acclimate? What are their biggest compliments and complaints about their experience? Once we have a general idea about the common issues impacting transfer student success at the campus level, we can conduct research to pinpoint specific needs and then devise plans to address those needs.

To help frame the discussion of transfer-centered research, we present three scenarios faculty, staff, and administrators may encounter. Throughout the guide, we will revisit these scenarios to illustrate data techniques and strategies. A fourth scenario focuses on transforming campus attitudes about transfer students. We offer insights on responding to this type of situation in Appendix C.

Scenarios

State University

The strategic plan at State University emphasizes decreasing student debt upon graduation. Administrators begin this effort by doing a baseline analysis of the borrowing patterns and debt loads of all students. They find the transfer student population is leaving with more debt than any other entering student group. With this information, campus leaders consider their next steps in education, financial aid counseling, and scholarship offerings to meet the strategic goals of the university.

Midsize City

Community college and university leaders in Midsize City are interested in learning more about which academic program pathways hold the most potential for increasing enrollments for both institutions. They plan to embark on a process that allows them to identify academic programs that could draw more students and increase transfer rates. As part of this analysis, campus leaders would also like to evaluate current student success data in academic programs with an emphasis on equity.

Midwest Community College (MCC)

MCC leaders are concerned about inequities in associate degree completion and credential attainment rates for students of color and low-income students, as well as disproportionately higher enrollment rates for students of color in academic programs with lower-paying jobs and limited potential for greater financial mobility (Jenkins & Fink, 2016; Landivar, 2013; Wassmer et al., 2004). MCC appoints a multi-department task force to study these issues and make recommendations, and begins by reviewing student completion rates, transfer-out rates, and previous success initiatives.

South College

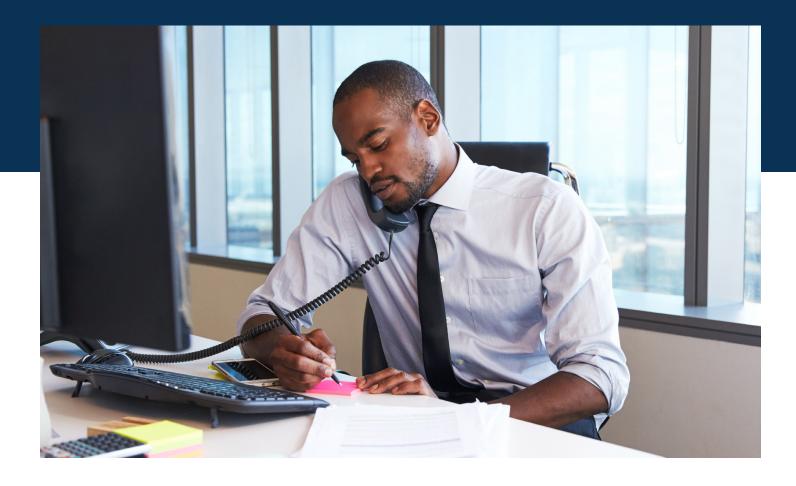
The newly formed Transfer Council at South College is charged with raising campus awareness of transfer and improving the transfer student experience. In early discussions, members note that several myths about transfer students seem to persist among faculty and staff around campus. These include a sense that transfer students are less academically prepared than other students and that they are less engaged on campus. The Transfer Council decides to document some of the common transfer myths they have encountered on campus and begin gathering data to evaluate and dispel those myths. Appendix C outlines those plans, offering a starting point for increasing awareness among faculty and staff and improving transfer student experiences.

Reflection

Use the space below to reflect on the following questions:

What have you already noticed about transfer students on your campus?
How would data help you make sense of what you are noticing?
What kinds of questions might you ask?

GATHERING DATA



To understand our campus's unique transfer landscape, we must be data informed. Data can help us identify the most pressing issues facing students and complement the programmatic work directed toward transfer students. Data collection efforts should be guided by the right questions and by an understanding of who is best equipped to answer those questions. Those efforts should also move beyond population descriptions. It is not enough to merely know who transfer students are; we must also understand how their paths differ from FTIC students and the impact of those differences on their success. This evaluation and exploration process is comprehensive and will require a deep dive into the data to gain the broad understanding that will inform our decision-making process.

In this section, we address two key issues in the data-gathering process:

- Understanding which questions to ask and how to ask them and
- 2. Identifying key transfer colleagues on campus and from partner institutions and soliciting their involvement.

Ask the Right Questions

In preparing to work with campus partners to identify and gather transfer student data, we need to ask questions that focus the data-gathering process and generate the most useful information. It is important to remember that how we phrase the data request will impact the outcome of the investigation. Therefore, we should always ask the best possible question. In this section, we detail the right questions to ask colleagues across campus.

A strong collaboration with institutional research (IR) or institutional effectiveness (IE) colleagues is crucial during this stage. These experts in campus data know what information is available and can provide access to it. IE colleagues can also help us reframe our questions based on the available information (see "Five Considerations Before You Ask"). For example, IE specialists may suggest using a cohort to measure retention and collecting data at the institution's census date to allow for standardization across reporting periods. It is also important to link research questions to department or unit goals and the larger institutional strategic plan. This alignment advances important department or institutional objectives and increases potential buy-in for recommendations stemming from the study, which ultimately improves transfer student success.

Following are some possible questions to ask about transfer student success organized thematically. The examples can be tailored to fit the institution's particular needs and the scope of the research plan. (See Appendix A, "Research Questions by Functional Area," for additional questions.)

Retention, Completion, and Student Success

- What are the transfer student retention and completion rates at the institution?
- What is the average time to degree for transfer students?
- What are the retention and completion outcomes by key demographic variables such as race/ethnicity, Pell eligibility, or parents' educational level?
- How many credit hours do students typically transfer? (Credits transferred vs. credits applied to the degree can sometimes be a tricky distinction without data systems that summarize degree audits.)

Reframing the **Research Question**

Good: Do students succeed at my institution?

Better: What factors impact student success at my institution?

Best: Do students from different backgrounds succeed at different rates than others at my institution?

Five Considerations Before You Ask

- 1. Has this question already been answered? Do some research before you ask.
- 2. How do you plan to act on the question you ask or the data you collect? Only collect data you plan to use.
- 3. Does your question align with the strategic priorities of your department or the institution? If not, how can you create greater alignment?
- 4. How might rephrasing your question allow you to look more deeply at a problem?
- 5. Who needs to know the outcome of your findings? What else might interest them?

- What indicators can help us determine transfer needs after matriculation (i.e., after a student enrolls at the institution and throughout the first several weeks of the first semester)?
 - What is the demographic breakdown of transfer students at the institution?
 - What is their academic profile?
 - What factors affect their successful transition and continued success at the institution (e.g., the number of credits accepted, transfer GPA)?

Academic Outcomes and Support

- What gateway courses most affect new transfer students? Are there high DFWI courses (i.e., courses where students are likely to withdraw, take an incomplete, or earn grades of D or F) that tend to create roadblocks for students as they try to take a sequence of courses or enroll in a higher-level course?
- What are the most common majors for transfer students at the point of admission, and do these change significantly by the point of graduation?
- What is the impact of existing academic initiatives (like a first-year transition course or a study strategy course) on transfer students compared to nontransfer students?

Other examples of academic support measures could include transfer peer mentoring and required academic advising for transfer students.

What Contributes to **Transfer Outcomes?**

If some data indicate transfer students have lower GPAs or success rates than non-transfer students, work to identify systemic barriers that may contribute to these issues. (For more information, see "Analyzing and Interpreting Data.")

Financial Support

Administrators at State University are interested in reducing the debt load of transfer students, which is higher for transfers than other segments of the student body. They may ask the following more specific questions:

- What percentage of the new transfer student population is Pell-eligible?
- What is the estimated family contribution for new transfer students, and how does that compare to FTIC students at the institution?
- What is the average amount of debt transfer students bring from their prior educational experience(s)?
- What are the top majors attracting transfer students, and how long do they take to complete? (Programs that take more time to complete may potentially require students to take on more debt.)
- What proportion of transfer students enter the institution having already completed an A.A. or A.S. degree? What is the graduation rate for these students compared to those who enter without an earned associate degree?
- How many transfer-specific scholarships exist at the institution? What is the average scholarship award received by transfer students?

Transfer Pathways

- Which academic programs at the 4-year institution do transfer students select most often at the point of admission? How do these programs align (or not) with programs at specific sending institutions?
- Which programs at nearby community colleges have strong enrollments and high transfer rates? Which programs have the capacity for growth, both in terms of current enrollments and transfer rates?
- What, according to market research, are careers with strong employment demand in the region? Which academic programs align with those careers, and where do opportunities for transfer partnerships exist to address those needs?

Additional questions that campus leaders in a Midsize City might ask related to transfer pathways include the following:

- What careers requiring 4-year degrees are associated with high-enrollment academic programs at the community college?
- Which of these career pathways have limited transfer options? For example, if high-enrollment programs only have articulation agreements with private colleges, would students benefit from the addition of a public university partnership?
- Which majors at the 4-year institution are most often declared by community college transfer students? How does this differ from the majors most frequently pursued by FTIC students?
- What are the differential transfer, retention, and completion rates for students by race, income, and first-generation status in various academic programs?

Equity

Task force members at MCC examining disparities across racial and socioeconomic groups might ask the following questions:

- What are the most common majors at the point of admission and at graduation? Do these majors differ significantly by racial identity? What are the career outcomes, including job placement and average starting salaries, for students in these programs?
- What are the transfer-out and credential completion rates? Are there significant differences when these rates are disaggregated by race/ethnicity and socioeconomic status (SES)?
- Which academic programs have parity in student outcomes across racial/ethnic and different SES groups? What policies or practices are associated with these equitable outcomes?

Find Campus and Community Partners

Transfer students interact with a variety of faculty, staff, students, and others in their educational journeys. These campus partners are likely to collect data on transfer students, some of which may not be available through centralized data warehouses. As such, a collaborative approach may lead to a better understanding of the transfer student experience. For example, working with others ensures that we are aware of all key ideas or factors important for transfer student success. Partnerships also allow us to raise greater awareness of the transfer student population while building capacity for future work together.

Once we identify issues and recruit partners who can collaborate in data-gathering efforts, it is important to build consensus and solidify those partnerships. Being open to the input of others and working to incorporate everyone's ideas into the research questions will ensure a more successful outcome.

Engaging a diverse set of campus partners can also help us build the necessary skills for a successful research

collaboration. For example, for individuals who feel like Excel is a new language, partnerships with skilled spreadsheet users can help them learn how to create and read data displays. These graphics help us share the data we have collected in meaningful ways. Moreover, the act of creating them can lead us to helpful insights.

Campus partners may support data collection and analysis, but we should also consider partners who will ultimately use the data to build transfer-specific programs and services. These partners can help us ask more meaningful questions about the data we have gathered. The following list identifies some possible collaborators, though it is important to keep in mind that naming conventions and organizational structures vary by campus.

Institutional effectiveness: The IE or IR office has access to data on transfer students, including academic, financial, and various other demographic variables and should be the first point of contact for gaining insight into the factors impacting transfer

student success. IE staff can provide information about the institutions students attended prior to transfer. They also have the expertise to support meaningful analysis of the impact of transfer programs and initiatives. If the institution does not have an IE office, they likely have an individual (sometimes housed in the registrar's office, enrollment management, or admissions) who has data or reporting requirements in their position description.

- Admissions: Transfer admissions staff often have the most direct experience with transfer students and know about their needs, questions, and expectations. They advise students on the transfer process, gather transcripts from sending institutions, and work with the registrar's office to ensure that transfer credit is applied to degree requirements. Through frequent counseling sessions with students and their families, transfer admissions staff also have rich stores of anecdotal evidence to share.
- Orientation and new student programs: The orientation director on campus can share insights about the onboarding experience for new transfer students. Staff members in this department may have access to post-orientation surveys or other sources of data where transfer students share their perspectives on the transition into the campus community.
- Academic advising: Advising staff work on the front lines with transfer students, and they understand issues students have with credit transfer and prerequisites or corequisites, as well as common barriers or concerns transfer students face during their enrollment. They are familiar with academic policies that affect transfer students, as well as articulation agreements with academic programs at the primary partner institutions.
- Transfer centers: For institutions with a transfer center, coordination of data collection and interpretation efforts should be a given. Transfer centers are essential partners as they examine the impact of programming and initiatives on transfer transition and success. Staff members and student employees in this area work closely with transfer students and may have insights on salient topics.
- Multicultural affairs: We can work with staff in multicultural affairs to analyze participation levels of transfer students of color in campus resources and activities. Staff in this area can also help us understand to what extent transfer students in general and students of color, in particular, are underrepresented in high-impact practices such

- as study abroad, internships, or honors programs. Finally, they can lead efforts to measure the impact of the strategic allocation of campus resources and services for transfer students of color in the quest to achieve equitable outcomes.
- Financial aid: Finances are often a barrier to retention for transfer students, as they typically receive less scholarship support than non-transfer students despite greater financial need. Partnerships with financial aid can focus on offering innovative scholarship and financial aid opportunities for transfer students and measuring the impact of additional financial support on transfer student outcomes.
- Faculty: Faculty can provide important insights into transfer student challenges and strengths in the classroom. They are also critical agents in welcoming transfer students to campus and supporting their longterm success. Deans and academic department heads can help identify faculty members who either were transfer students or have been supportive of transfer students. A brief online survey of current transfer students is another strategy for identifying faculty and staff members students perceive to be especially helpful in the transition to campus. These individuals can be key partners in understanding how transfer students handle the transition to the institution. They can also be valuable partners in communicating what we know about transfer students to other faculty.
- Career services: Staff members who work with employers have access to workforce data important in analyzing transfer recruitment patterns and postgraduation outcomes. For example, are they tracking transfer-specific placement and starting salary data? They can also determine whether transfer students are using their services (e.g., internship placement, résumé help, interview coaching) at the same rate as non-transfer students.
- Information technology (IT): If a robust data warehouse exists on campus, IT can provide access to dashboards and data related to transfer students that have already been created for campus partners. They can also develop new dashboards to share data with transfer allies on campus.
- Transfer-sending and receiving partners: For professionals at primarily transfer-sending institutions, cultivating relationships with their counterparts at their primary receiving institutions is vital for understanding student outcomes. Data from the receiving institution can inform the development of new programs at the sending institution or point to places where program improvement is needed.

Similarly, professionals working at primarily transferreceiving institutions should strive to be transparent about student outcomes with their sending partners. Sharing information about the students we have in common improves institutional and student outcomes.

Other potential partners: In addition to the functional areas already identified, other potential collaborators include the library, tutoring, student involvement, academic enrichment, leadership programs, LGBTQ+ resource center, and faculty in statistics or research methods.

Collecting Transfer Data

Transfer student data can be much more complex to collect than data on FTIC students. Retention and graduation rates are often calculated only using the FTIC entering cohort. Rather than trying to calculate similar transfer metrics independently, we recommend that practitioners reach out to the IE/IR team and make use of existing resources. The IE/IR team can also create new metrics that match institutional reporting standards if needed.

A Few Notes on Data

A detailed discussion of research methodologies and data types is beyond the scope of this guide. That said, we encourage individuals studying transfer students to include both quantitative and qualitative data as part of the research project. Quantitative data such as demographic variables, GPA, graduation rates, and job placement rates, among others, are complemented by rich qualitative data collected through interviews, focus groups, openended questions on student and faculty surveys, and student artifacts (e.g., capstone projects, portfolios, internship reflections). Certain questions (e.g., how did transfer students perform compared to non-transfers?) are more readily answered by quantitative data, while other questions (e.g., what barriers did transfer students experience?) might be more readily answered by qualitative data.

Where data sets already exist, campus partners can help us navigate creating and submitting a data request. In the case of central data repositories, a standard data request form may be available. In other cases, requests to individual campus units may be necessary. To answer the questions of greatest interest to us, we may need to combine data sets from different units. IT professionals can help us write programs for merging data sets.

Finally, when performing data analysis, we need to be aware of how sample sizes and confidence levels impact our analyses and what we can say about our findings. Well-designed statistical analyses can support buy-in for and implementation of recommended programmatic changes. Many resources are available to assist in survey design, sampling techniques, and controlling for error in analysis (please see Appendix D).

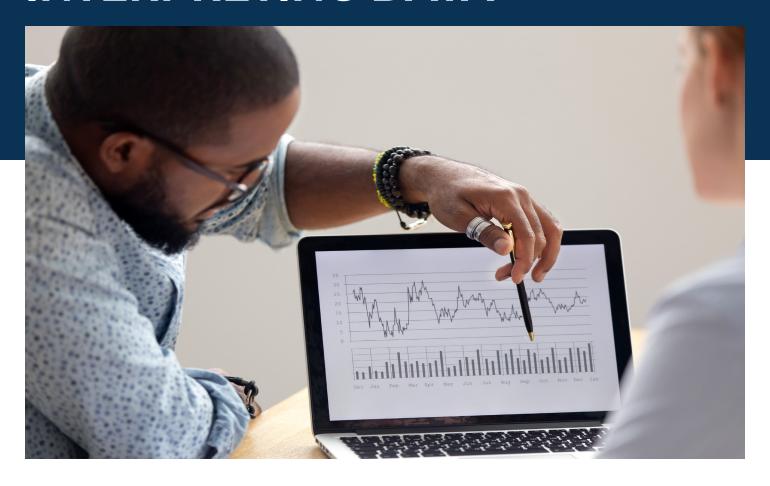
Reflection

After reviewing the sample research questions in this section, write out several research
questions most relevant for your institution in the space below. How are these questions tied
to the strategic vision of the department or institution?

Who are the campus and community partners engaged in transfer work that would be interested in collaborating on a research project? In the space below, identify possible partners for your context.

OFFICE/FUNCTIONAL AREA	NAME AND TITLE	PHONE AND EMAIL	DATA COLLECTED OR SHARED RESEARCH INTEREST

ANALYZING AND INTERPRETING DATA



Once we have identified transfer partners and gathered data to help answer our questions, we can begin to analyze the data and interpret the findings. (For basic information on summarizing data, see NISTS's [2017] A Beginner's Guide to Gathering Transfer Student Data on Your Campus.) The goal is to move beyond existing data points to gain a more comprehensive understanding of transfer students; their experience at the institution; and hopefully their persistence, degree attainment, or other measures of success.

In this section, we discuss the following key actions to support this stage of the process:

- Knowing transfer data trends at the institution,
- Digging deeper by disaggregating data,
- 3. Creating comparison groups to measure true impact, and
- 4. Benchmarking findings against comparable institutions.

Examine Trends to Build Understanding

The first step in exploring trends to assess the transfer experience is to conduct a thorough examination of background data by looking at the data across demographic variables of interest. What patterns emerge when we compare five-year rolling averages over time? Data visualizations can help us more readily identify patterns in the data. For example, we might want to have a sense of the racial/ethnic makeup of the transfer population compared to FTIC students. Are transfer students as a group more diverse? Has the composition of this population changed over time? Figure 1 (below) provides a data visualization that might help us answer these questions.

Looking back at State University, the institution has a goal to reduce student indebtedness and knows that transfer students are graduating with greater amounts of debt. One question they might want to explore is whether transfer students enter with higher levels of need than students who enter as FTIC students. The data represented in Figure 2 would offer a starting place for answering that question and considering interventions to decrease debt load among transfers.

As mentioned previously, working closely with the school's IE office will provide access to information related to student background, college preparation,

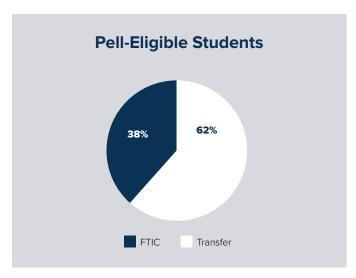


Figure 2. Pell-Grant eligibility for transfer students compared to FTIC students at State University.

socioeconomic status, and other data points that may indicate trends. Does the institution gather the same data points for transfer students as for FTIC students? For instance, high school GPA and ACT/SAT scores are often used as predictors of student academic potential. At many institutions, though, these data are not available for transfer students unless they originally applied as FTIC students. In this case, other measures may be needed to demonstrate student academic preparation, such as transfer GPA, associate degree completion (if applicable), or the number of credits transferred.

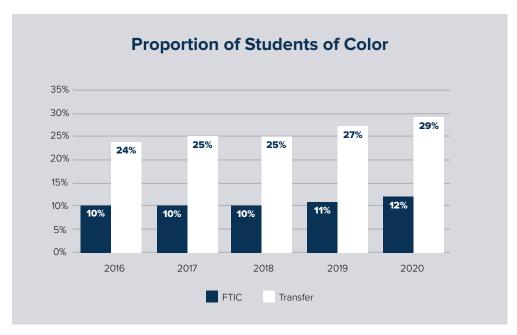


Figure 1. Racial/ethnic diversity of FTIC students compared to transfer students, 2016-2020.

Disaggregate Data for **Greater Insight**

Whole sample comparisons may mask performance differences for certain segments of the population. For this reason, it is important to break the data into smaller populations or components. This process, known as disaggregation, allows for a more nuanced understanding of student experience and helps us target outreach and interventions with greater precision. We typically think about disaggregation in terms of race/ ethnicity (e.g., examining impacts on White students vs. Asian students). However, there are many other ways to disaggregate a data set, especially when working with the transfer student population. For example, how might disaggregating the data by age or credits earned prior to transfer help us learn more about the student population and their needs?

Figures 3 and 4 (see p. 18) demonstrate the usefulness of disaggregation. An overall comparison of retention and graduation rates suggests transfer students perform as well as the FTIC cohorts (see Figure 3). As such, we might assume that special interventions for transfer students are not necessary. Yet, if we disaggregate the data by credits earned and degree attainment prior to transfer, we begin to see a different story. Students who transfer with anything less than an associate degree struggle to persist and graduate at rates similar to those who completed associate degrees prior to transfer (see Figure 4). So, we may not need an intervention for all transfer students, but we may want to consider what supports will help those who enter our institution without an associate degree.

These data may be disaggregated even further (see Figure 5, p. 18), comparing graduation rates for students of color to White students by the number of credits earned prior to transfer. Administrators working at institutions in Midsize City might want to use data disaggregation to identify which academic program pathways have significant racial disparities in success rates. These disparities may indicate barriers the institutions should address before moving forward with new or expanded transfer initiatives in those areas.

The NISTS Beginner's Guide offers other examples of data points to consider in the early stages of analysis, as well as a rationale for disaggregating these components where applicable. Looking at a range of data and considering different patterns across the sample can help us create more effective programming and outreach initiatives, which we will discuss in the next section.

Form Comparison Groups

Creating comparison groups or matched samples is another useful strategy for analyzing transfer data. This process can highlight the conditional effects of various initiatives on transfer students or demonstrate how transfer and non-transfer students differ. According to Moser (2018), it is unhelpful to compare students entering from a 2-year school to juniors at the receiving institution: "a student still enrolled at the institution as a junior has already demonstrated the ability to succeed at the institution, evidenced by their retention into their junior year" (p. 117). Instead, we should consider other ways to compare students. For example, we can use institutional data on relevant characteristics (e.g., transfer GPA, race/ ethnicity, Pell eligibility) to create matched samples. Using matched samples gives us greater confidence that we are comparing like groups and that the effects we see are associated with the intervention under study. Table 1 offers an example of how we might match a sample of transfer students to non-transfers across a range of background characteristics. Matching students on characteristics like SES, race/ethnicity, and academic background allows us to get a more accurate picture of the phenomenon under study. In Table 1, transfer students are performing better, as measured by spring term GPA and retention rates, than the matched nontransfer sample.

Characteristic	Transfer sample (n = 590)	Non-transfer sample (n = 590)
ACT composite	23.4	23.9
First-generation %	45%	40%
Conditionally admitted %	10%	11%
Pell-eligible %	33%	32%
Race/ethnicity %		
International	1%	2%
Students of color	29%	27%
Unknown	2%	2%
White	68%	69%
GPA		
Fall term	2.90	2.93
Spring term	3.12	3.04
Retention %		
Fall-to-spring	96%	95%
Fall-to-fall	88%	87%

Table 1. Characteristics of Transfer Students Compared to Matched Sample of Non-Transfer Students (N = 1,180).

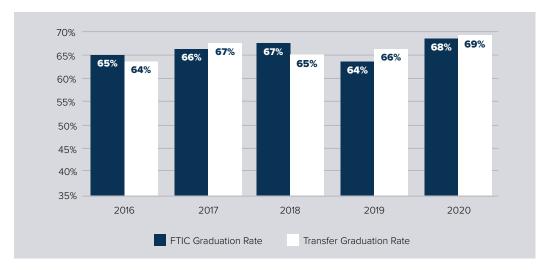


Figure 3. Graduation rates of FTIC students compared to transfer students, 2016-2020.

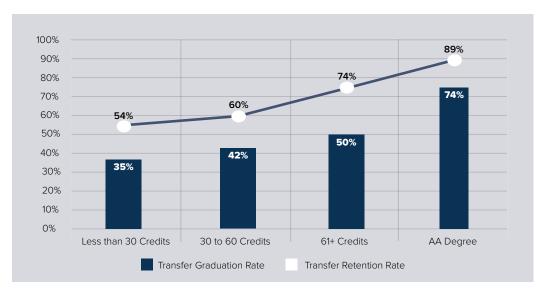


Figure 4. Graduation and retention rates of transfer students by credits earned and A.A. degree attainment.

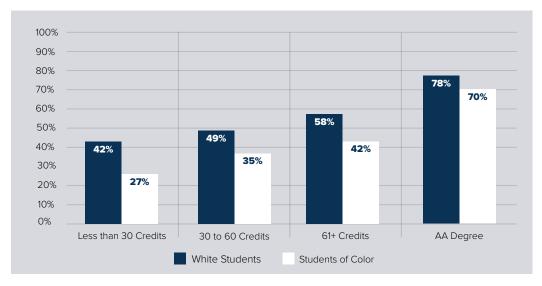


Figure 5. Graduation rates of transfer students of color compared to White transfers by credits earned and A.A. degree.

Benchmark Findings

Another data analysis and interpretation strategy is benchmarking, which offers a point of comparison for findings. It also provides context to determine whether the data reflect broader trends. Finally, it can help us establish goals related to our findings. For example, administrators at an institution that is part of a state system may want to compare transfer success rates to other schools in the system. They then might consider what realistic goals they can set to bring their rates into better alignment with those at other institutions.

Comparisons with peer institutions at a regional or national level are more challenging, as many national reporting standards still focus on the first-time, fulltime student cohort enrolling directly from high school. Fortunately, the Integrated Postsecondary Education Data System (IPEDS) from the National Center for Education Statistics (NCES) now requires 2-year and 4-year institutions to report outcomes for undergraduates who are non-first-time (that is, transfer-in) students on the annual Outcomes Measures survey. The Outcomes Measures survey also looks at the performance of parttime and Pell-eligible students. The IPEDS data center allows researchers to select a comparison group to determine how the transfer student graduation rate at their institution compares to those of peer institutions. The Student Achievement Measure also provides a point of comparison by student-entry type, displaying graduation rate information for FTIC students as well as transfer students who began at one institution but graduated from another.

In addition to the benchmarking opportunities within the IPEDS data center, the National Student Clearinghouse (NSC) has introduced a series of dashboards to allow for the comparison of credit accumulation, credit completion, outcomes, and retention/ persistence across institutions (see Figure 6 for the credit accumulation dashboard). Using these dashboards, an institution might compare its transfer-out rates and year-over-year transfer-out rates to peer institutions.

Using the tools provided within the NSC Postsecondary Data Partnership program, institutions can gain access to this valuable trend data in a visually pleasing manner to better understand how their home institution compares to a list of peer institutions.

Recognizing Multiple Pathways

The shift from only reporting outcomes for fulltime FTIC students to including outcomes for transfer and part-time students is significant in recognizing that not all students follow the same path to degree completion. Yet, all students deserve to be counted.

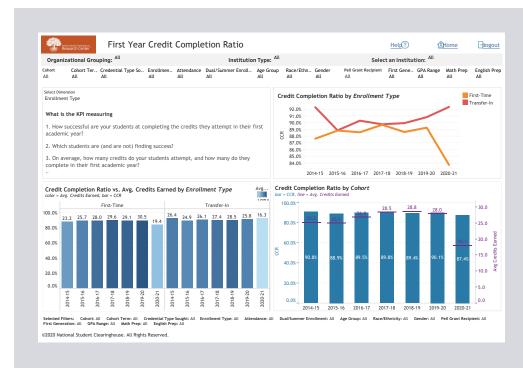


Figure 6 Example of benchmarking dashboard on first year credit completion from the National Student Clearinghouse's Postsecondary Data Partnership (PDP). Copyright 2020 by the National Student Clearinghouse. Reprinted with permission.

Reflection

Use the space below to reflect on the following questions:

What specific barriers might different subgroups of your transfer student population experience?
How could you disaggregate your transfer student success data to answer this question?
How might the answer(s) inform your programmatic, policy, and resource decisions?

COMMUNICATING DATA



The final step in using data to help transfer students is to share those data and insights with campus stakeholders. These communication efforts are critical for raising awareness about the importance of transfer students on campus and dispelling long-standing (and often negative) myths about transfer students (see Appendix C). Partnering with transfer allies to determine where and how to share what we have learned allows us to work together to create a transfer-affirming climate on campus.

In this section, we address the following essential ideas for effective communication of transfer research:

- Identifying the story we want to tell, the audience(s) for that story, and the most effective way to communicate the story;
- 2. Developing print or digital materials to share transfer data: and
- 3. Conducting outreach in the form of campus presentations and other advocacy.

Identify the Story and Audience

To send a compelling message drawn from transfer data, we need to clearly define the story we want to tell and the audience(s) who need to hear that story. Starting with our end goal will ensure that our story has clarity and focus. For example, in presenting these data, do we want to propose a new initiative, highlight the outcomes of an existing campus program, or identify issues of equity in an institutional system? Once we know what we want to accomplish, we can more easily identify the stakeholders who should be part of the audience for that story. Understanding what we want to accomplish and who we are addressing also helps us identify the most effective messages and delivery strategies.

Academic leaders in Midsize City are focused on identifying transfer academic pathways with strong career outcomes for students and the potential for articulation partnerships (and enrollment benefits) for two or more institutions. As such, their audience includes decision-makers from institutions that will invest time and resources in these pathways. The audience will eventually include enrollment officers and marketing professionals who will support and promote the development and implementation of new initiatives. Messages for these audiences might include a data-heavy analysis of local and regional workforce trends, potential student demand in proposed pathways based on current enrollment patterns and return on investment projections. When new partnerships are in place, the audience will shift to prospective students and their families. At this point, more effective forms of communication might be infographics and other brief, marketing-focused messages that highlight career outcomes and other exciting elements of the transfer pathway.

For Midsize City, the end goal for their story and the intended audience will ultimately drive decisions about the dissemination of information. As part of this process, they may encounter politically challenging situations that require additional considerations regarding stakeholders and approach. On our own campuses, we may sometimes have stories to tell that may not be particularly welcome. At those times, we might consider using one or more of the following strategies, such as

consulting with a trusted mentor in a leadership position who is familiar with some or all the parties involved about strategies for shaping the message or timing its delivery,

- reviewing the messaging to ensure that it will not be perceived as assigning blame to a particular department or person in the process of identifying a problem, and
- researching the larger context so that we walk into presentations with a deep understanding of the history of situations and people surrounding the story we plan to tell.

Develop Print or Digital Materials to Support Communication Efforts

In determining the best ways to spread the word about transfer student successes, needs, challenges, and strategies for helping them feel more integrated into the campus community, the institution's marketing and public relations office may be a good partner. They can assist by developing well-designed pieces that highlight data for use with various audiences. They can also identify opportunities for publicizing transfer student profiles and news stories in local and campus media outlets.

One idea is to create a visually engaging one-pager that highlights key transfer student data. The one-page overview document may be configured as an infographic featuring demographic information, such as the number of enrolled transfer students and the percentage who are first-generation students, members of historically underrepresented groups in higher education, Pelleligible, and military or veteran students. (See Appendix B, "Informational Sheet Template," which also includes spaces to identify top feeder/sending schools, transfer student profiles, top graduating majors, and points of contact for transfer student initiatives.) Infographics are extremely helpful in quickly conveying information in an easily digestible manner. As illustrated in the discussion of data disaggregation, however, it is sometimes necessary to create specific charts to further elaborate research findings. No matter the situation, visualizations are an extremely effective way to share information with stakeholders.

Conduct Campus Presentations and Other Advocacy

Campus leaders are often unaware of transfer-specific data, and providing this information creates an opening to build buy-in and support for future transfer initiatives. As such, sharing relevant and compelling data about transfer students is an essential element of transfer advocacy, helping us identify partners on campus, establish collaborations that extend the impact of our research, and provide a rationale for supporting promising initiatives. By educating campus colleagues about key transfer data points, we can inspire them to become more invested in the transfer population.

Printed information sheets can be used to tell the story of who transfer students are and what brings them to campus. They can also help us connect the success of transfer students to departmental or institutional goals. For example, demographic data points may allow us to highlight the diversity of the transfer student population compared to FTIC students and demonstrate the importance of transfer students in meeting institutional diversity goals.

The following list identifies potential audiences for reports and presentations on transfer student data:

- Senior leadership groups. Data can be used to initiate a conversation about how transfer enrollment connects with the institution's strategic goals.
- College leadership groups. Sharing college or academic-discipline specific transfer-student data with faculty senates or other academic leadership teams can bolster student support initiatives at the department or college level.
- Student affairs leadership groups. Transfer data can inform the design of transition programs and services along with strategies for engaging transfer students in cocurricular activities and campus leadership roles.
- Academic advising centers. The data could inform conversations about how to best support transfer advising needs.
- Faculty groups. Working through the institution's center for teaching excellence or meetings at the department level, we can share data to inform teaching and advising practices, pathway development, or curricular alignment.

Campus community at large. Marketing professionals at the campus or department level can share strategically selected transfer data points to raise broad awareness and send a positive message about and to transfer students within the campus community.

Revisiting State University's concerns about student debt, administrators at that institution may use Pell eligibility and other transfer profile data to encourage financial aid and enrollment management personnel to create scholarship offerings designed specifically for transfer students. Campus leaders from the community college and 4-year institution in Midsize City could use workforce trends and student enrollment data to begin strategic conversations with academic department heads whose programs have strong potential for pathway development. Task force members at Midwest Community College can report preliminary findings related to equity concerns and success stories to department heads, using these conversations to drive the development of data-informed recommendations for ensuring the inclusion and success of learners representing a wide range of backgrounds.

Finally, publicly telling the transfer student story is an effective way to increase knowledge around the factors that impact transfer student success. It can also illustrate institutional support and, thus, serve as a recruiting tool for future transfer students. Social media channels are ideal platforms for creatively presenting institutional commitment to transfer student success.

Customizing the Message

Each presentation should be customized for the target audience, whether it contains administrators, faculty, staff, or student leaders. Understanding the strategic goals, enrollment concerns, and transfer enrollments within the department or area of focus helps us disaggregate the data to highlight stories most relevant to that audience. As a baseline, we can simply tell faculty what percentage of students in their majors are transfer students. In many cases, the faculty and staff in academic and cocurricular units are unaware of how many transfer students they serve. Sharing the information with them may encourage them to learn more about transfer students and their experiences inside and outside the classroom.

Reflection

Who on your campus would be receptive to a presentation on transfer student data? Which faculty, staff, student, and administrative groups could benefit the most? What transfer data points do you think they would find most interesting or relevant? How so?

POTENTIAL AUDIENCE	POSSIBLE STORY

CREATING A RESEARCH OR ASSESSMENT PLAN

In concluding the guide, we encourage you to revisit the reflection questions in the previous sections. Also, respond to each question in the boxes below to develop a comprehensive research or assessment plan.

What is your primary research question?
Which individuals or units on campus might serve as partners in gathering or analyzing data related to this question?
Which community partners should you engage in data collection or analysis related to this question?

What data do you need to answer this question? If it already exists on campus, which units or individuals can provide access to it?		
Data	Exists Y/N	Source/Collection Method
	1	
How will you analyze the data? Who are the institutional researchers, faculty in research		who can support your analysis (e.g., IT professionals, ?
Analysis		Support/Resources Needed
What are the key findings?		

	What policy or programmatic changes would you recommend because of these findings?		
	Who are the key stakeholders for the finding	ngs and your recommendati	ons? What story do you want to share?
	Stakeholder		Story
How will you communicate your story to various stakeholders?			
	Stakeholder/Story		Delivery Method

PLANNING FOR CONTINUOUS IMPROVEMENT



As awareness and knowledge of transfer students grow, campus communities will continue to identify gaps in transfer-specific programs and services. When new initiatives are designed, we should articulate desired outcomes and identify strategies for determining whether transfer students are achieving those outcomes. Yet, institutions will find themselves at various stages of readiness to engage in this kind of data analysis. Perhaps the institutional data structure is not robust, or maybe we have not yet developed the necessary relationships with campus partners to engage in this work. That is okay. We should acknowledge these limitations and then move forward with intentional planning to build capacity. Carefully studying students' experiences with new transfer initiatives, using both qualitative and quantitative methods, is an essential part of continuous improvement. It also demonstrates an ongoing commitment to datainformed support and advocacy for transfer students. Finally, it ensures that we are not collecting data for the sake of collecting data. Rather, we are thoughtfully connecting our assessment planning to institutional priorities and student success goals. Our goal in writing this guide was to provide ideas on how campuses can increase their ability to engage in data-informed approaches to serving transfer students.

APPENDIX A

RESEARCH QUESTIONS AND DATA SOURCES BY FUNCTIONAL AREA

Admissions and Transfer Recruitment

Research Question	Data Source/Example
How do articulation agreements impact course taking and credit transfer?	Degree audits and transcript analysis
What are the most common courses/credits that transfer?	Degree audits and transfer equivalency guides
What are the most pressing needs of students and their families as they research where to enroll and then to transfer?	Outreach and surveys both to students who attend and to those who end up going elsewhere
What factors most impact recruitment?	Analysis of communications and yield events
What academic programs are of greatest interest to our students?	Institutional data on top majors at the prospect stage and point of admission Prospect and applicant data from CRM and applications State and national workforce development data
Which institutions are top transfer pipelines?	Institutional data and transcript analysis
What are the economic, enrollment, and workforce trends at your top transfer-sending institutions?	Enrollment figures and course-taking patterns at transfer- sending institution(s) Transcript analysis State and national workforce development data State or U.S. Department of Education publications

Academic Advising

Research Question	Data Source/Example
How often do students meet with their advisors? Does participation in advising have a significant impact on transfer outcomes?	Outreach to advisors on campus, CRM/tracking data, outcomes analysis in collaboration with IE
Are students satisfied with their academic advising experience?	Advising feedback surveys, National Survey for Student Engagement (NSSE) data
Do students participate in programming like career advising or major selection activities at a rate similar to other students?	Advising tracking/participation rates

Financial Aid and Scholarships

Research Question	Data Source/Example
What are the yield rates on scholarships?	Scholarship and enrollment analysis
What proportion of institutional aid is given to entering transfer students each year as compared to FTIC students? Do transfer students receive a disproportionately smaller amount of institutional aid?	Scholarship analysis
What are the GPA and retention outcomes for students with various levels of federal, state, and institutional aid? Are there any groups with disproportionately lower success rates that should be equipped with more financial resources?	Retention analysis in collaboration with financial aid/ scholarships

Orientation Programs

Research Question	Data Source/Example
Are students achieving the learning outcomes identified for orientation programs? If not, are assessment results being used to make program improvements?	Annual assessment reports
Are students who attend orientation more likely to persist and graduate?	Persistence and graduation analysis
What comments are students with transfer intentions (2-year) or transfer students (4-year) providing about their orientation experience?	Orientation feedback survey

Student Life and Recreation Services

Research Question	Data Source/Example
What are the participation rates of transfer-bound (2-year) or transfer students (4-year) in various campus involvement and recreation programs? Is there a relationship between involvement and transfer rates or post-transfer success?	Student involvement/student life event attendance counts
What are the characteristics of programs most attended by transfer-bound or transfer students (e.g., timing, access for family members, topics, location)?	Student involvement/student life event attendance counts; student focus groups or needs/interests assessments
Is there a transfer student organization on your campus? If so, who participates, and what topics, concerns, or ideas are of interest to members?	Annual reports, meeting minutes

Career Services

Research Question	Data Source/Example
What are the success rates (e.g., employment, graduate school acceptance rates) for community college graduates and 4-year transfer graduates as they complete their degrees?	Career services first destination survey
What is the internship participation rate of transfer students?	Internship class registration rates NSSE data
Which employers or alumni partners identify as community college graduates or transfer students and might be especially interested in providing specific opportunities/pathways for transfer students?	Outreach to career services and alumni office partners
How many transfer-bound students or current transfer students are attending career development workshops and related programs? Does attendance increase when programs are designed and promoted specifically for transfer students?	Outreach to career services partners

Institutional Effectiveness

Research Question	Data Source/Example
What is the demographic makeup of the transfer-bound or transfer population?	Race/ethnicity, gender, age, Pell eligibility, first-generation status, veteran status
What is the academic profile of the transfer-bound or the transfer population?	Transfer GPA, number of credits transferred/applied, first- term GPA, major at admission
Which students are most at risk of leaving the institution? Where do they go after leaving?	Retention analysis in collaboration with IE; National Student Clearinghouse
What is the retention rate of transfer-bound or transfer students? That is, of students who begin at the institution in the fall, how many are still enrolled the following fall semester?	Retention analysis in collaboration with IE
What is the average time to associate or bachelor's degree completion?	Time to degree/average credits at graduation analysis in collaboration with IE

APPENDIX B

INFORMATIONAL SHEET TEMPLATE

Transfer Student

Any student who graduated from high school less than five years ago and has earned 30 or more transferable college credit hours

Transfer students make up over 25% of our new student class each year and are a vital part of the State University community. We value the academic accomplishments, skills, and experiences that transfer students bring to our classrooms and co-curricular activities.

State University is committed to building a more diverse and inclusive campus environment, and transfer students are helping us to reach that goal. SU transfer students are more likely to be students of color, first-generation students, and military veterans as compared to our student body overall, and this diversity makes our community better.

Join me in welcoming students transferring to State University from colleges and universities across our state and across the country. We're grateful that they have chosen State University as their transfer destination, and we are fortunate to be a part of their educational journey!

All the best,

Jennifer Smith

State University President

REFERRAL SOURCES

TOP 10 COMMUNITY COLLEGE PARTNER SCHOOLS

- Crest Community College
- 2. Canyon Community College
- 3. Western Community College
- 4. North State Area Community College
- 5. Central State Community College
- 6. Small Town Community College 7. North Hills Community College
- 8. Southeast Community College
- 9. Gibbonston Community College
- 10. Lakes Community College

TOP 10 4-YEAR PARTNER SCHOOLS

- Northern State University
- State University
- Collinsburg College
- Eastern College
- 5. First University 6. Central Coast College
- Copper College
- 8. Grand Vista University
- 9. Springfield College
- 10. Southern State University

STATE UNIVERSITY



AT-A-GLANCE STATS FOR TRANSFER **STUDENTS** STUDENTS OF COLOR PELL ELIGIBLE **FIRST-GENERATION** 3% **VETERANS AVERAGE**

9/10 FROM STATE

LIVING ON **CAMPUS**

TOP GRADUATING MAJORS, 2020-2021

- 1. Business Administration
- 2. Nursing
- 3. Psychology
- 4. Biology
- 5. Engineering
- 6. Elementary Education
- 7. Communication
- 8. Accounting
- 9. Criminal Justice
- 10. Sociology
- 11. Computer Science
- 12. English
- 13. Economics

- 14. Political Science
- 15. History
- 16. Physical Education
- 17. General Studies
- 18. Graphic Design
- 19. Math
- 20. Environmental Science
- 21. Computer Science
- 22. Food and Nutrition
- 23. International Relations
- 24. Film Studies
- 25. Chemistry



COLLEGE PARTNERS:



















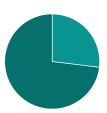




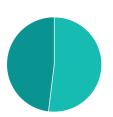
THUMBPRINT OF TRANSFER STUDENTS



25% OF ALL STUDENTS



27% **OF NEW STUDENTS**



52% **TRANSFER STUDENTS WITH AA DEGREES**

FOR MORE INFORMATION ABOUT TRANSFER INITIATIVES CONTACT:

email@stateuni.edu | 977-555-0321

STATE UNIVERSITY

APPENDIX C

USING DATA TO COMBAT TRANSFER MYTHS

Misperceptions about transfer students, such as their level of academic preparation and success rates, are widespread. We can dispel faulty assumptions using institution-specific and national transfer data sets. The Transfer Council at South College named some common myths about transfer students and identified strategies for busting or dispelling these myths.

MYTH: Transfer students are less prepared academically than students who begin their undergraduate experience at South College.

BUST IT: We plan to examine the academic performance of all new students in the first semester. We anticipate finding that FTIC students experience a drop in GPA in the first semester similar to that experienced by transfer students. In addition, by identifying and celebrating the academic capital transfer students bring to the campus community from their previous institutions, including mentoring relationships with faculty and rigorous classroom and cocurricular experiences, we will demonstrate that they belong at our college.

MYTH: Transfer students are not engaged in campus activities.

BUST IT: We plan to highlight success stories of current transfer students and profiles of influential faculty and staff members who started as transfer students. We will support and promote transfer student organizations on campus such as Phi Theta Kappa and Tau Sigma, disaggregate campus-wide student involvement and student employment data to determine transfer engagement levels, and design transfer-specific opportunities in areas with barriers to participation. We will identify on-campus organizations that systematically exclude transfer students and encourage policy change. For example, where campus organizations require that students complete 30 credits at South College to join or serve in leadership roles, we will advocate for relaxing these requirements so that credit earned at other institutions is accepted.

MYTH: Transfer students are not a significant proportion of our new student enrollment. Most of our recruitment efforts should focus on high school students.

BUST IT: For many years, transfer students have been an afterthought in South College's enrollment planning. We will share the proportion of the new student population who enter the institution via transfer pathways. We will also highlight the ways in which program-to-program articulation agreements can bring new life to under-enrolled programs and help meet overall institutional enrollment goals.

MYTH: Transfer students are more vocationally minded and less interested in academia.

BUST IT: We will share stories of transfer students who participate in the honors program, are accepted into graduate and professional programs, receive prestigious scholarships, and excel in the classroom. We will enlist the help of respected faculty members who started their postsecondary journeys as transfer students. We will also collaborate with colleagues from transfer-sending institutions to develop relationships among faculty and share student success stories.

MYTH: Transfer students could not get accepted to South College straight out of high school, so they had to start at a community college.

BUST IT: National research suggests students start at community college for many reasons (Asa et al., 2018; Bensimon & Dowd, 2009), including distance from home, financial considerations, involvement opportunities, and strong academic programs. Community colleges serve as pathways to 4-year degrees for talented students who face financial and circumstantial (or structural) barriers. Helping faculty and staff understand the factors affecting college choice will help dispel negative beliefs about transfer students at South College.

MYTH: Community college is not academically rigorous enough to prepare students for the level and quality of work we expect at our institution.

BUST IT: National research has highlighted that rigorous community college academic experiences prepare students for academic success after transfer (Cejda et al., 1998; Keller, 2018; Laanan, 1996). We can demonstrate the academic preparation available at community colleges by using carefully designed matched samples to assess the performance of transfer students at the department level. In departments where transfer students struggle with the academic transition, we can work with faculty and administrators to develop transfer-specific support programs and ensure that transfer students have equitable access to high-impact opportunities such as undergraduate research. We will also ensure campus partners are aware of disparities regarding outside obligations (like work hours and family responsibilities) that may affect the academic experience for transfer students.

MYTH: Transfer students already have some college experience, so they should not need as much support.

BUST IT: While transfer students bring valuable higher education experience to the campus, South College likely has policies, processes, and resources that differ from what they experienced at previous colleges or universities. Numerous scholarly articles document the challenging psychosocial, academic, and financial adjustments students face during and after the transfer process (Barnett, 2010; Laanan et al., 2011; Moser, 2013; Townsend & Wilson, 2006). We can initiate campus-based studies to identify specific needs, interests, and concerns of transfer students at our institution. Institutional data on the demographics of our transfer student population may also highlight the resources and supports important to this population. For example, at South, our transfer population has a higher percentage of low-income students. As such, it may be important to design and implement scholarship programs and financial counseling initiatives to address needs related to paying for college.

Reflection

What are some of the myths about transfer students on your campus? List some of these myths and the ways you could work to dispel them by gathering and communicating transfer data.

MYTH	STRATEGIES FOR DISPELLING THE MYTH

APPENDIX D

SELECTED RESOURCES ON DATA USE AND ANALYSIS

Print Resources

Achieving the Dream and Advising Success Network (2021). Knowing our students: Understanding & designing for success.

Bresciani, M. J., Gardener, M. M., & Hickmott, J. (Eds.). (2010). Case studies for implementing assessment in student affairs (New Directions for Student Services, No. 127). Jossey-Bass.

Carroll, W., & LaViolet, T. (2021). Evaluating transfer student success and equity: A primer on quantitative data for two- and fouryear institutions (Tackling Transfer Report). Aspen Institute, HCM Strategists, and Sova.

Creswell, J. W., & Creswell, J. D. (2018). Research design (5th ed.). SAGE.

Davies, C. (2020). A quick guide to quantitative research in the social sciences. University of Wales Trinity Saint David.

Maldonado, M., Mugglestone, K. & Roberson, A.J. (2021). *Developing* a data-informed campus culture: Opportunities and guidance for institutional data use. Institute for Higher Education Policy.

National Institute for the Study of Transfer Students. (2017). A beginner's guide to gathering transfer student data on your campus.

Online Resources & Tools

Center for Urban Education's Racial Equity Tools https://www.cue-tools.usc.edu/

Integrated Postsecondary Education Data System (IPEDS) https://nces.ed.gov/ipeds/

IPEDS 2022-2023 Data Collection Glossary https://surveys.nces.ed.gov/ipeds/public/glossary

Postsecondary Data Partnership https://www.studentclearinghouse.org/colleges/pdp/

Student Achievement Measure www.studentachievementmeasure.org

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Dr. Kristin Woods is senior associate vice president for enrollment management and student success at the University of Northern Iowa. She provides strategic leadership for the enrollment and student success functions of the university, including the collaborative development and continuous improvement of seamless transfer pathways. Woods has a Ph.D. in higher education from Iowa State University, an M.A. in college student personnel from Bowling Green State University, and a B.A. in communication studies from the University of Northern Iowa.



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