

Transfer Velocity Project

Key Findings on Student Transfer in California Community Colleges

Which factors promote student transfer from California Community Colleges (CCC) to baccalaureate-granting institutions? What community college practices support this transition? What student behaviors and characteristics particularly impact their movement to four-year colleges and universities?

The RP Group investigated these questions through the **Transfer Velocity Project (TVP)—the most comprehensive study of community college transfer implemented to date.**

The RP Group conducted the *Transfer Velocity Project* between 2007 and 2009 with funding from and in partnership with the California Community Colleges Chancellor's Office. Cal-PASS provided additional research assistance.

With CCCs serving as the primary point of access to post-secondary education and several reports predicting a debilitating shortage of baccalaureate-trained workers confronting the state, understanding and improving the community college transfer function is increasingly a priority for higher education policy-makers, advocates, researchers and practitioners alike.

What is the RP Group?

The Research & Planning Group for California Community Colleges (RP Group) is a nonprofit, non-partisan organization providing **research, evaluation and professional development services** to individual practitioners, colleges and statewide initiatives.

The RP Group seeks to build a community college culture that views **planning, evidence-based decision making and institutional effectiveness as key strategies for student success.**

With projects powered by teams of community college faculty, administrators, institutional researchers and student services professionals, our work benefits from an **insider's perspective** and **direct system access.**

As a result, RP has helped to shape issues such as statewide accountability reporting, local and statewide strategies for under-prepared students and implementation of student learning outcomes.

The following research brief **(1) introduces the project's primary components, (2) highlights key findings on institutional factors, student behaviors and characteristics affecting transfer and (3) aims to inform strategies and approaches** designed to improve this transition for California Community College students.

What is the Transfer Velocity Project (TVP)?

This project involved a large-scale investigation of student transfer in California Community Colleges including both quantitative and qualitative components. An RP Group team composed of institutional researchers, administrators, counselors and articulation staff from community colleges across the state conducted the study. The RP Group collaborated closely with the CCC State Chancellor's Office to define and generate data on the transfer cohorts and colleges considered in this research. Three major efforts make up the study.

Literature Review. The RP Group launched the TVP with an extensive *review of the research and analysis available on transfer issues and practices spanning over 100 references*. This review focused on identifying strategies and approaches to enhance student success in transitioning from community colleges to four-year institutions. Ultimately, this literature assessment served as a guide for developing the research questions and design pursued through both the project's quantitative and qualitative components.

Case Studies of Colleges with Higher-than-Expected Transfer Rates. Using data on transfer cohorts generated in partnership with the State Chancellor's Office, the RP Group identified seven CCCs with higher-than-expected transfer rates representing diverse geography, size and enrollment profiles. The TVP then performed two-day site visits, conducting focus groups and interviews with a broad range of stakeholders including administrators, faculty, student services professionals, transfer center directors and students. In this portion of the TVP investigation, the RP Group performed *108 interviews and 33 focus groups* and ultimately determined *six key transfer-promoting factors present at all seven colleges* visited. This part of the TVP resulted in a tool for colleges to assess their approach to promoting transfer and determine opportunities for growth and improvement.

Transfer Predictors Investigation. The RP Group further identified institution-level factors as well as student characteristics and behaviors that promote transfer through an extensive quantitative analysis based on a variety of data sources.

Working with the State Chancellor's Office, the RP Group developed *"SQL Orange"—a data warehouse that mirrors the CCC's Management Information System (MIS) and allows for innovative and exploratory research on behalf of individual institutions and statewide initiatives*.

The project also utilized course offerings data from the state's MIS system and archived responses from annual surveys of CCC Transfer Centers performed by the State Chancellor's Office to determine institutional factors facilitating transfer. To identify student behaviors and characteristics impacting this transition, the TVP analyzed *data from the transfer cohort starting in 1999-2000, following nearly 150,000 students for nine years*.

Key Terms & Definitions

Transfer Cohort. Based on the definition used by the State Chancellor's Office, the TVP tracked cohorts of students who met the following benchmarks over a six-year period:

- *Started as first-time freshmen*
- *Completed 12 units*
- *Attempted a transfer-level math or English course*

The TVP investigated three cohorts, the last of which began their enrollment in 2000-01. The project followed all cohorts through 2005-06.

Transfer Rates. To determine transfer rates, the TVP identified any student from the transfer cohort showing an enrollment record at a four-year institution within a given period of time and then divided that number by all students in the original transfer cohort. The TVP looked at different time periods in which each cohort could transfer ranging from three to twelve years.

Colleges with Higher-than-Expected Transfer Rates. Observing the three transfer cohorts discussed above, the TVP identified colleges exhibiting higher-than-expected transfer rates across the time period studied when controlling for the age of student body and the baccalaureate-attainment of the surrounding area.

Reader's Guide

The following sections focus on transfer predictors and facilitators identified through the Transfer Velocity Project. The first section outlines institutional factors that enhance transfer success as discovered through the study's quantitative and qualitative investigation. The second section describes specific student behaviors and characteristics that improve or impede transfer as discovered in the quantitative analysis.

Given the scope of the Transfer Velocity Project and the wealth of data available to this study through both the State Chancellor's Office and individual colleges across the CCC system, the RP Group has generated numerous findings on transfer facilitators and inhibitors and surfaced additional research questions pertinent to improving transfer success in the state. These sections focus on the most significant and provocative of the findings.

The document concludes with a brief discussion of possible areas for further research and a description of the RP Group's Career and Technical Education Transfer Research Project—a related initiative looking at specific transfer issues for students in career-oriented disciplines.

What key factors facilitate CCC student transfer success?

Institutional Factors

Both the qualitative and quantitative components of the TVP surfaced multiple key institutional factors that can support CCC student transfer. The seven case studies on colleges with higher-than-expected transfer rates distinguished six transfer-promoting factors that send one clear message: **transfer rates increase when there are institution-wide efforts designed to support all students in pursuing transfer goals.** TVP research indicates that CCCs concurrently implementing a culture of transfer across the institution, integrating instructional and student support divisions and partnering closely with high schools and four-year colleges and universities may experience enhanced transfer success. Outlined below are the six institutional factors that support transfer identified through the case studies.¹

Robust Transfer Culture. Colleges exhibiting a transfer culture implement a variety of actions and activities across the institution to support students in pursuing this goal. College administrators, instructors, counselors, student services and support staff and peer mentoring groups all work to promote transfer rather than just those assigned to provide related services. Students frequently receive the message from multiple sources that transfer is a viable option and resources are available to assist in exploring, preparing for and undertaking this transition. One example of transfer culture found across nearly all institutions is making transfer a strong theme in Student Success courses. For example, Skyline College offers a "Transfer Power" course designed to aid students in researching and selecting a transfer destination that meets their particular needs and interests.

For more information on the colleges investigated by the TVP, including **individual case studies and a cross-case analysis**, visit:
www.rpgroup.org/css/TVP.html

¹ The TVP acknowledges that the colleges studied implement these factors to varying degrees and that readers should not use these findings as a prescription for transfer success; rather these factors can help CCCs assess their own transfer efforts.

Taking a different angle, the TVP quantitative analysis confirmed the relevance of a transfer culture by observing the relationship between the number of transferable course sections available at a CCC and its transfer rates. Perhaps not surprisingly, the percentage of all courses offered that are transferable positively correlates with transfer rate—by providing a relatively large number of transferable courses, colleges exhibit a commitment to supporting students in their transfer preparation.

Student-Focused Environment. Colleges demonstrating a student-focused environment meet learners at their current level of academic achievement and personal development and implement programs, services and approaches designed to move them toward their transfer goal. One strong indicator of this factor, shown by most colleges studied, includes the integration of student services with instruction either through informal interactions or highly-formalized agreements. For instance, DeAnza College maintains division-based retention teams involving both instructional and counseling staff to provide a comprehensive approach to student service delivery.

Intense Commitment to the Institution. Those working at the institutions investigated express a high level of pride in and dedication to their college through focus groups and interviews. At these colleges, faculty and staff frequently define their role in terms of what they do to promote student success rather than simply by their specific job description. In some cases, this pride and dedication translates to low faculty and staff turn-over and the attraction and retention of what interviewees describe as highly talented and committed individuals.

Strategic High School Relationships. Nearly all institutions investigated in the TVP case studies help students make the transition from high school to college. These relationships span a range of activities targeting high school students, families, teachers and counselors. Approaches include direct outreach to secondary students and their families with a particular focus on under-represented groups, provision of matriculation services on-site at the high school, implementation of concurrent enrollment opportunities and regular interaction with high school guidance staff. In one example, Southwest Los Angeles College works through its Talent Search program to outreach to low-income, first-generation students at local high schools and bring participants to campus to use Transfer Center resources.

Strong Relationships with Four-Year Institutions. Community colleges with higher-than-expected transfer rates regularly engage students in interactions with baccalaureate-granting institutions. Almost all colleges studied facilitate a regular presence of representatives from four-year institutions on their campus. Most sites conduct tours to near-by colleges and universities, host transfer days and work to familiarize students with a range of transfer options, both private and public. For example, San Diego City College regularly hosts five private colleges at its Transfer Center and notes that relationships with private colleges gained more emphasis when data showed that 40% of its transfer students go to out-of-state and/or private four-year institutions.

The TVP quantitative investigation corroborated the pertinence of strong relationships with four-year institutions through an analysis of annual Transfer Center Survey data that identify the number of transfer articulation agreements in place between an individual community college and California State University (CSU) and University of California (UC) institutions. As the number of agreements in place increases, so does the college's transfer rate; the number of transfer agreements in place with CSUs show a particularly strong relationship with transfer rates.

Effective Use of Support Services. While all colleges maintain an articulation function, provide some form of transfer guidance, supply financial aid, offer special programs like EOPS, learning communities

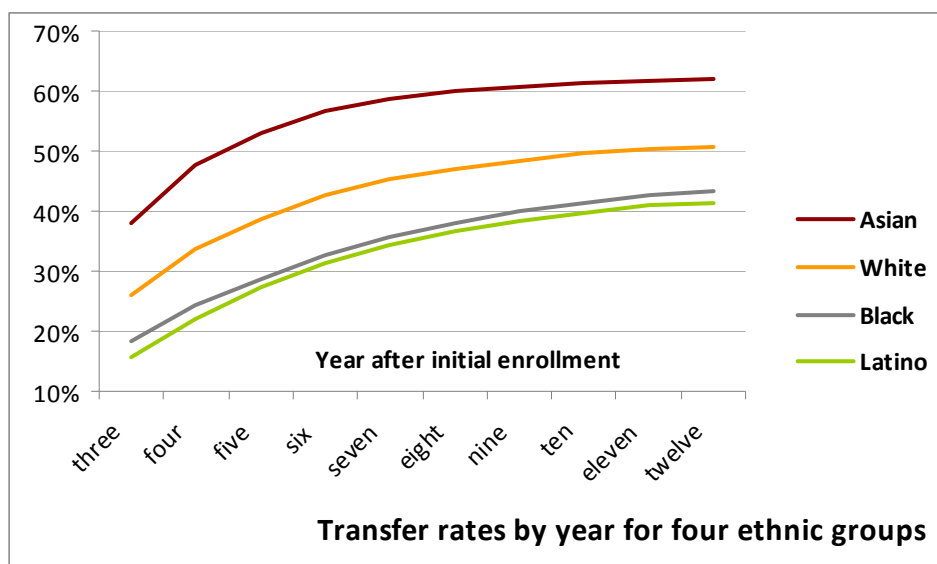
and honors initiatives, the colleges investigated through the TVP leverage these structures and services in unusual and effective ways to support transfer. To highlight a few examples, Irvine Valley College's Articulation Officer serves on the Curriculum Committee and meets regularly with faculty, ensuring they have current transfer agreement information to supply to students. Porterville College dispatches an outreach team to local high schools to provide financial aid advice and assistance. DeAnza College's Transfer Center engages underrepresented students who are well on their way to transfer as peer advisors.

The TVP quantitative research also found that community colleges maintaining an adequately staffed transfer center show increased transfer success. An analysis of data derived from annual Transfer Center Surveys on staffing patterns indicates those colleges with a full-time Transfer Center Director tend to have higher rates of transfer.

Significant Student Swirl. One additional factor surfaced through the TVP quantitative research focuses on the phenomenon of “student swirl” or “lateral transfer,” where students enroll in multiple community colleges. The level of college swirl, as indicated by the average number of colleges attended by the student body, is positively associated with transfer. Transfer rates tend to be higher for colleges whose student bodies have a larger average number of colleges attended.

Student Behaviors and Characteristics

The TVP identified several transfer predictors for students through its quantitative analysis of nearly 150,000 students assigned to the 1999-2000 transfer cohort—representing about a quarter of all first-time freshmen for that academic year. Some of the TVP findings replicate existing research on student transfer predictors,



while other TVP discoveries extend this body of knowledge and increase what is known about the transfer function in California. As in the previous section, a select number of noteworthy findings are presented below. The discoveries are grouped in eight categories below.

Demographic Characteristics

Age

- Age is negatively associated with transfer; those who are 10, 20 and 30 years older than traditional age (<25 years old) are 40%, 80% and 120% less likely to transfer, respectively. Average student age was 20 years old at cohort entry.

Ethnicity

- Asian students have the greatest “transfer velocity.” Of those Asian students who transfer within 12 years, 92% did so by year six; in contrast, of all African American, Latino and Native American students who transferred within 12 years, approximately 25% made this transition *after* year six.
- Pacific Islanders, African Americans, Latinos and Native Americans in the 1999-2000 transfer cohort were 21%, 22%, 31% and 41% less likely to transfer than Asians, respectively. Another way of portraying this gap is to compare transfer rates within nine years. The Asian transfer rate is 64% compared with Latinos who transfer at a rate of 39%. This finding is particularly relevant given the demographic shift in the state, where Latinos comprise a greater portion of the population. The cohort includes 14% Asians, 6% African Americans, and 24% Latinos.

Educational Goals

Goal of transfer

- TVP analysis shows that declaration of a transfer goal boosts students’ transfer odds by almost 25%. While students often express multiple goals throughout their CCC attendance, the data indicate that stating the goal of transfer at least once during one’s community college academic career reliably and positively correlates with student behavior and outcomes. Nearly 75% of the transfer cohort indicated a transfer goal at some point during their CCC enrollment.

Academic Performance

Grade Point Average (GPA)

- Students’ academic performance directly affects transfer achievement; a straight “A” student is 43% more likely to transfer than a student maintaining a “B” average, and 86% more likely to transfer than a student maintaining a “C” average. The average GPA was 2.92.

Course Withdrawals (“W” Grades)

- Withdrawing from a class, or leaving the course mid-semester and receiving a “W” grade, negatively impacts transfer success. Students whose transcripts show 20% or more of enrollments resulting in a course withdrawal are 39% less likely to transfer than students with fewer “W” grades. Forty-six percent of the cohort had 20% or more “W” grades.

GPA and W Grade Tension

- Students who leave a course early receive a “W” grade but those who stay without ever demonstrating understanding of the curriculum may receive a failing or “F” grade—potentially lowering their GPA. The negative impacts that lower GPA and higher course withdrawals have on transfer makes advising students in this situation challenging. While neither outcome is desirable, a “W” grade allows students additional opportunities to retake the course without a significant negative impact on their GPA.

Enrollment Patterns

Student “Swirl”

- Data indicate that attending more than one community college may increase a student’s transfer success. Those who “swirl” or take courses at more than one community college increase their odds of transferring to a baccalaureate-granting institution by 15%. Students in this situation may expedite their transfer process by picking up classes unavailable at their primary institution and/or may parlay the effort of enrolling in multiple institutions into increased capacity to navigate the paperwork and bureaucracy associated with transfer. Approximately 40% of the transfer cohort students enroll at more than one community college.

Summer Enrollment

- Students who attend at least one summer session within their first three years of enrollment also improve their transfer odds by 47% relative to those who do not. This finding correlates with engagement theory, which predicts that increased student contact with school activities enhances learners’ commitment to college and positively impacts achievement and degree attainment. Sixty-nine percent of the transfer cohort attended summer session within three years of initial enrollment.

Course-Taking Patterns

Math

- Initial math placement significantly impacts students’ transfer success. Those who start in basic skills math are 48% less likely to transfer than those who start in college-level math coursework. Twenty-three percent of the transfer cohort began in basic skills math.

English

- While not as pronounced as math, starting in basic skills English also affects students’ transfer achievement. These learners are 12% less likely to move to a four-year institution than those who begin at a transfer-level English course. Sixteen percent of the transfer cohort began in basic skills English.

Degree and Certificate Attainment

Associate’s Degree Completion

- Attainment of an associate’s degree shows a strong positive impact on students’ likelihood for transfer, with the period of time in which they reach this achievement being significant to their transfer odds. Those students who complete their degree within three years of their first enrollment are more than twice as likely to transfer than those who do not receive an Associate’s degree. Even those who reach this benchmark in years four through six are 45% more likely than learners who did not. Nine percent of the cohort attained an AA within 3 years.

Certificate Achievement

- On the other hand, students obtaining a certificate are 43% less likely to transfer than students who did not. Six percent of the transfer cohort attained a certificate.

Financial Aid & Special Program Participation

Loans

- Receipt of a student loan increases students' transfer odds by almost 17%. Four percent of the transfer cohort received student loans.

Areas for Future Research

- Initial investigation reveals that the impact of financial aid and special program participation on student transfer success are best examined in combination.
- Preliminary data analysis indicates complex interaction between financial aid, membership in special programs and student ethnicity. The TVP plans further examination of the impact of participation in special programs such as Equal Opportunity Programs and Services (EOPS), Disabled Students Programs and Services (DSPS) and CalWorks.

Where do we go from here?

Through the Transfer Velocity Project, the RP Group has generated an array of additional questions about how to best accelerate transfer for California Community College students. The organization aims to leverage its extensive access to a range of CCC student data and the novel take on the time period in which to examine transfer success (e.g. lengthening the window for transfer beyond the traditional six year period) to investigate additional aspects of transfer facilitation. In particular, the RP Group will seek to learn more about how the achievement of an associate's degree impacts transfer for different subgroups, uncover the relationship between financial aid and special program participation and better understand what particular factors might increase the transfer velocity of our growing population of Latino students.

Additionally, the RP Group is currently implementing the **Career and Technical Education (CTE) Transfer Research Project**, a multi-year study of the factors that facilitate and impede students' transfer in career-oriented disciplines. Funding from the State Chancellor's Office launched Phase I of this investigation, conducted between Fall 2007 and Summer 2009. The research continues into a second stage with additional support from the James Irvine Foundation; Phase II of the project will conclude in Fall 2010. Current research activities focus on the experience of students who successfully transferred in key career-related programs including 1) mapping what kinds of courses they took while enrolled in a community college and 2) identifying why they made these course and enrollment choices prior to this transition.

For further information...

For reports and presentations generated by the Transfer Velocity Project, visit:

www.rpgroup.org/css/TVP.html

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