Title
Improving Transfer in California: Trial and Error in Statewide Reform and Local Implementation

Permalink
https://escholarship.org/uc/item/8sf3k04f

Journal
California Journal of Politics and Policy, 11(3)

Authors
Venezia, Andrea
Jez, Su Jin Gatlin

Publication Date
2019

DOI
10.5070/P2cjpp11343535

Peer reviewed
Improving Transfer in California:  
Trial and Error in Statewide Reform and Local Implementation

Andrea Venezia  
*California State University, Sacramento*

Su Jin Gatlin Jez  
*California State University, Sacramento*

**Abstract**

California’s community colleges play a wide range of crucial roles in providing educational opportunities for state residents, including providing transfer for students to four-year universities. Transfer students represent about half of each entering class in the California State University System (CSU) and almost one-third in the University of California. In 2010, California enacted legislation to streamline transfer from community college to the state’s four-year universities by creating a new transfer degree. It was implemented in 2012. This study examined how students experience policies and practices related to transfer from community college to California State University in the context of the new degree. Key findings reveal that, although there are improvements, capacity within the CSU and other factors have kept transfer complex and confusing for most transfer students. Major implications are that the state and systems need to continue to simplify the transfer process and strengthen supports for students.
Introduction

The US economy depends on an educated workforce, and a democracy relies upon its citizenry being educated. However, recent findings indicate that the educational attainment of the US workforce must increase significantly to meet upcoming workforce demands. Without major changes to the US postsecondary education system the economy could fall short 5 million workers with postsecondary degrees by 2020 (Georgetown U, 2014). California, one of the country’s largest economies, will face a shortfall of 1.1 million workers with Bachelor’s degrees by 2030, if current trends continue (Johnson, Mejia & Bohn, 2015). Like other states in the union, California relies on transfer as a major conduit of citizens into the higher education systems. However, low transfer rates in the state have stymied educational leaders and policymakers. California provides an appropriate case study for evaluating the transfer function, with the largest community college and state university systems in the country. The US cannot approach its national higher education goals without California’s efforts, and significantly, California has recently implemented major reforms in transfer.

Transfer has long been a primary lever to guarantee access for all students to higher education in California, as well as in other states, holding out a promise of the possibility for California students to move from open admission California Community Colleges (CCC), either to the University of California (UC)—the top, research-university tier—or to California State University (CSU), the state comprehensive university system. Through its transfer function, California sought to sustain its commitment to access to four-year universities for students who might vary in their level of academic preparedness upon completing high school. The Master Plan calls for a lower division to upper division ratio of 40:60 in order to provide transfer opportunities into upper division courses for Community College students. Thus, open access to a two-year college makes possible students’ preparation, knowledge, and skills—as well as credentials for baccalaureate college—key functions of educating for economic and social mobility. The transfer function is supposed to constitute a basic tenet of democratic equity for students, most specifically for students who opted out of or were ineligible to attend a four-year university directly. Yet in spite of considerable progress in its implementation, transfer has historically not met expectations in the state (Sengupta & Jepsen, 2006) for many reasons, among them the complexity of transfer processes and the lack of available space in courses and degree pathways in the CSU in particular.

Subsequent to the budget crises of recent decades in California higher education, the elephant in the halls of CSU campuses, specifically, has been overcrowding, and this also comprises a major obstacle for students aspiring to transfer from community college to the CSU system, along with other factors. The reasons for this are complex, but a key problem is under-funding for the CSU system. While the Master Plan requires that it educate approximately one-third of the students enrolled in higher education in the state, it has been serving upward of 40 percent without additional funds to support the additional students. Therefore, it is funded for about one-third of the state’s college students, regardless of the proportion it serves. As the number of college students in California rises, the availability of courses and campus services decline on a per student basis.

The effects of “impaction” across the system are broad. Declaring impaction is a way for campuses to signal that the entire campus, or certain majors within it, have reached or exceeded enrollment capacity, given available resources (CSU, 2017c). For the 2018-2019 school year, six of the CSU campuses are impacted in all undergraduate “programs, pre-programs, and unde-
clared/undecided programs”: Cal Poly San Luis Obispo, Fresno State, CSU Fullerton, CSU Long Beach, San Diego State University, and San José State. In addition to these six CSU branches, many more individual programs and majors—on every CSU campus save one, Dominguez Hills—are impacted as well (CSU, 2017b). The problems impaction causes are many, but within the focus of this study, impaction is one critical reason why the new transfer degree has fallen short of its intended purposes.

When the state enacted the Student Transfer Achievement Reform Act in 2010, the new associate degree for transfer (AD-T) was intended to facilitate transfer from community college to the CSU. However, the AD-T is designed to smooth the paths for students who already know their major, and who are interested in only one campus. Impaction is a wrench in the works; students may not be able to pursue their chosen major, let alone attend the campus of their choice.

Our research examined the policies and practices that support student transfer from the California Community Colleges to the California State University through the perspectives of students, administrators, and staff. Transfer processes in California are complex, as previous research has established (Moore, Shulock, & Jensen, 2009; Kisker, Cohen, & Wagoner, 2010). In the wake of previous reports about this topic and the implementation of the AD-T in 2012, our research sought to understand the experiences of students transferring from community college to the CSU. This was the first largescale examination of the implementation of the ADT degree.

We examined transfer-related policies and practices at six community colleges and four CSU campuses and found that, while the new legislation is simplifying some processes, overall transfer remains complex and difficult for students. From planning and course-taking at a community college to applying to and enrolling at a CSU campus, transfer processes remain burdensome for students, despite the services provided by institutions and the implementation of the new AD-T degree. As one student explained, successful transfer is often the result of trial and error. With the understanding that the state’s public systems face fiscal challenges in making changes, we recommend that higher education systems and institutions take additional steps to streamline the transfer process to help more students reach their educational goals.

**Methodology**

The findings in this manuscript are based on a study that sought to answer three questions: (1) How do community college and CSU campuses support transfer students, both those intending to transfer and those who have transferred? (2) How do students experience transfer-related policies and practices at individual community colleges and CSU campuses? (3) Is the implementation of the AD-T affecting campus policies and practices and/or students’ experiences in the transfer process? The study included CSU because it is the recipient of the largest number of CCC transfers, and because recent legislative reforms, including the AD-T degree, aimed to facilitate transfer to the CSU system.

Specifically, the analyses in this manuscript are derived from three data collection efforts. First, we conducted semi-structured interviews with 26 individuals at four CSU campuses and six community colleges. The selected CSU campuses have large shares in their undergraduate population of transfer students and underrepresented minority (URM) students. The selected community colleges are among the largest feeders of transfer students into those CSU campuses, and they also enroll large proportions of URM students. The six community colleges studied are in the southern and central regions of the state, and their combined enrollment represents about 9 percent of total enrollment across all California community colleges in Fall 2015. To select in-
Interviewees at each community college campus, we reached out to individuals there who we knew were likely to have knowledge of transfer policies and practices. Those interviewees then referred us to others on campus who could give us additional perspectives. Participants were guaranteed anonymity to encourage participation and frank discussion of issues; hence, neither individuals nor campuses are identified in this manuscript. Interviews were conducted with administrators and staff familiar with transfer issues, including individuals in both academic and student affairs who work directly with students. Interviews focused on the priority placed on transfer at the campus, the kinds of supports provided to students seeking to transfer or who have transferred, cross-sector collaboration around transfer, and experiences with transfer reforms.

Second, we conducted focus groups with transfer students enrolled at each of the four CSU campuses. Two focus groups held at each of the four CSU institutions in February and March 2016 yielded the participation of 64 students. The method for recruiting students varied somewhat at each institution, but generally involved sending email requests to lists of transfer students provided by the university. The participating students had transferred from 48 California community colleges, not just the six included in our sample. About half of the focus group students had been at CSU two semesters or less. Three-quarters of them had been at CSU four semesters or less. Their majors at CSU varied widely—no more than five students shared the same major. The group discussions focused on the students’ experiences preparing for transfer while at community college and attending CSU and included the development of their goals, their awareness and understanding of the transfer process in general and the transfer degree pathway in particular, the kinds of supports they received at both community college and CSU, the barriers they encountered, and their strategies for dealing with challenges. Only a small share of the students in the focus groups said they had earned an AD-T (some students were confused about whether they had received an AD-T or another associate degree, which makes it impossible for us to cite a precise percentage here).

Finally, we reviewed data, various websites, and documents for the community colleges and CSUs included in the study. Our research included a review of resources for students intending to transfer (such as community college and CSU campus websites) and an examination to determine whether the institutions’ strategic plans included goals related to transfer or transfer students. We also examined general web resources providing transfer support for the state’s community college students (e.g., ASSIST.org, CSUMentor). Finally, we examined transfer-related data available through CSU’s Analytic Studies Division and CCC’s Datamart.

Researchers conducted content analyses of the transcripts of the interviews and focus group discussions to identify dominant themes. The results presented in this manuscript should be interpreted in the context of several limitations. 1) The selected campuses may not be representative of the CCC and CSU systems as a whole. 2) The perceptions of the administrators and staff interviewed at each campus may not represent those of their campus as a whole. 3) The perceptions of students in the focus groups may not represent those of all transfer students in CSU. Finally, 4) the students in the focus groups had successfully transferred from CCC to CSU, so their perceptions and experiences may not fully reflect those of CCC students who intended to transfer but did not actually do so.

The California Transfer Context

California’s community colleges play a wide range of crucial roles in providing educational opportunities for state residents, including providing transfer for students to four-year uni-
versities. Under California’s Master Plan for Higher Education, direct access to the state’s public universities and their baccalaureate degrees is supposed to be offered to the top one-third of high school graduates. Students not in the top third are intended to have access to a bachelor’s degree in California by transferring from a community college. In practice, the state’s public universities enroll only about one-fifth of high school graduates, even though over a third are academically eligible, and this places even greater pressure on the community colleges to support the transfer function (Jackson, Bohn, & Johnson, 2016).

Higher education suffered steep cuts in state funding in the late 2000s, when the Great Recession began—this on top of waves of cuts in the late decades of the twentieth century—and funding remains tight. In the community colleges, student services were scaled back and have not fully recovered, which has made it more difficult for students to maneuver the community college system. At CSU, impaction is a local, faculty decision that allows campuses and programs to be more selective in their admissions, to the point where a higher grade point average (GPA) or other supplemental criteria may be required. To meet these requirements, some students need to extend their stay at community college to boost their GPA or complete supplemental requirements, which can contribute to excess credit accumulation (CSU, 2017d). Statewide, the number of students transferring from community colleges is substantial. At UC in fall 2016, nearly 18,000 CCC transfers newly enrolled—over a fourth of new UC students had transferred from the California Community Colleges. Also, over 21,000 California Community College transfers enrolled as continuing students (University of California, 2017b). Of total enrollment at UC in fall 2016, 18% were CCC transfers. At CSU in the fall of 2016, over 53,000 transfer students enrolled. Indeed, at CSU statewide in 2016-2017, nearly 94% of students were transfers from a California Community College (CSU, 2017g). Over the course of 2016-2017, nearly 62,000 California Community College transfers were enrolled at CSU statewide (CSU, 2017).

Despite the substantial representation of community college transfer students at the state’s public universities, problems with the transfer function have been widely documented. Several studies have found that California’s higher education systems are not adequately supporting students who intend to transfer. While computational methods to determine transfer rates vary, based on the number of students who demonstrate intent to transfer, those rates are low (Johnson, 2016; Moore & Shulock, 2014; Moore & Shulock, 2010; Horn & Lew, 2007; California Postsecondary Education Commission, 2007; Sengupta & Jepsen, 2006). The CCC’s own method indicates that only 24 percent of the students who enroll in community college intending to transfer to a university actually do so after four years, and only 38 percent transfer after six years—and these figures include CCC students who transferred to any four-year university, not just to CSU or UC (California Community College Chancellor’s Office, 2017).

Moreover, substantial disparities in transfer rates across racial/ethnic groups have also raised concerns (Moore & Shulock, 2010): underrepresented minority students are less likely to transfer. Also according to the CCC Chancellor’s Office Velocity Rates for the 2008-09 cohort, 29% of Latino students and 34% of black students transferred within six years, compared to 41% of white students and 49% of Asian/Pacific Islander students (2017).

In addition to the problem of low transfer rates, the transfer function in California is plagued by inefficiencies. Many students take excessive time to transfer and they typically earn many more course credits than are required for a degree at both the community college and university levels. A study using data from the National Education Longitudinal Study found that transfer students in the California sample earned, on average, 157 units to complete a bachelor’s
degree compared to approximately 141 units earned by students in other states (most bachelor’s
degrees are designed to be completed in 120 semester units) (Roksa & Keith, 2008). Taking ex-
tra units increases the cost of a degree both for students and for the state, and limits access to
courses, as students take up seats that could be filled by others.

**Nuts and Bolts of the AD-T Degree**

In an effort to create clearer and more efficient transfer pathways to CSU, the California
state legislature passed the Student Transfer Achievement Reform Act (SB 1440, Chapter 428,
Statutes of 2010) to, over time, increase transfer rates and reduce excess course credits, thereby
increasing capacity to serve more students (CCC Chancellor's Office, 2017c). The legislation
required the community college system to create the new AD-T degree, which “guarantees” stu-
dents admission, with junior standing, to a CSU campus. Students with an AD-T do not have to
take additional lower-division coursework at CSU, and they need no more than 60 semester units
of upper-division coursework, which—in addition to the 60 required units from community col-
lege—results in a 120-unit pathway to a bachelor’s degree. The 60 lower-division units include
general education units and 18 units in a major area of emphasis—based on the Transfer Model
Curricula (TMC) for specific majors developed by CCC and CSU faculty in collaboration, to en-
sure a consistent set of degrees across colleges (Patton & Pilati, 2012). The TMC thereby reduce
inefficiencies caused when community college students have to take extra courses to meet vary-
ing requirements at different CSU campuses. Thus, students can complete their undergraduate
work more quickly and more students can be served.

CSU provides priority admission to community college students with an AD-T by way of
a “GPA bump”: For admission purposes, students’ GPAs are increased by 0.1 points if they are
applying to impacted majors (if at least 20 seats are available) and by 0.2 points if they are ap-
plying to non-impacted majors. In addition to the above advantage offered AD-T–holding stu-
dents who apply to impacted campuses or programs (slightly less advantage than for those apply-
ing to non-impacted programs), CSU redirects students who are not admitted to the campuses or
majors of their choice to a campus with a “similar” program that has more capacity.

While it is too soon to evaluate whether the transfer reforms have reached their potential,
early assessments of their impact concluded that, while implementation of the AD-T pathway to
transfer began slowly, institutions have made considerable progress both in developing AD-Ts at
community colleges and in accepting those degrees within majors at CSU campuses. (Moore &
Shulock, 2014; Shorette & Byrd, 2016). The number of AD-Ts awarded by community colleges
has increased dramatically (see Table 1, below), from just over 700 in 2011-12 to more than
38,000 in 2016-17 (CCCCO, 2017b). However, a recent analysis noted several ongoing chal-
lenges: colleges vary considerably in the numbers of transfer degrees awarded, many students
who have earned an AD-T have not transferred to a CSU, and CSU transfer students who have
earned an AD-T thus far represent a small share of all transfers to the system (Shorette & Byrd,
2016).
### Table 1
AD-T and associate degree conferrals in the California Community Colleges, 2012-2016

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>State of California Total</td>
<td>150,853</td>
<td>170,224</td>
<td>182,473</td>
<td>224,568</td>
</tr>
<tr>
<td>Associate in Science for Transfer Degree (A.S.-T)</td>
<td>1,674</td>
<td>4,784</td>
<td>9,747</td>
<td>14,218</td>
</tr>
<tr>
<td>Associate in Arts for Transfer Degree (A.A.-T)</td>
<td>3,490</td>
<td>6,668</td>
<td>10,990</td>
<td>16,652</td>
</tr>
<tr>
<td>Associate of Science Degree (A.S.)</td>
<td>29,193</td>
<td>31,212</td>
<td>31,471</td>
<td>32,247</td>
</tr>
<tr>
<td>Associate of Arts Degree (A.A.)</td>
<td>62,329</td>
<td>64,489</td>
<td>63,538</td>
<td>67,050</td>
</tr>
</tbody>
</table>

Source: [http://datamart.cccco.edu/Outcomes/Program_Awards.aspx](http://datamart.cccco.edu/Outcomes/Program_Awards.aspx)

Research from across the nation demonstrates that transfer student outcomes vary across institutions with very similar characteristics and student populations—a finding that suggests that institutional practices can make a difference (Jenkins & Fink, 2016). The findings of our research indicate that existing policies and practices do support some transfer students, but that resources are insufficient to help all students navigate a complex process.

**Findings**

The following findings from our research are presented in three major areas: (I) institutional policies and practices related to transfer, generally; (II) student experiences of those policies and practices; and (III) the associate degree for transfer (AD-T), specifically. All of the findings are based on the perspectives of students, administrators, and staff.

1. **Transfer Policies and Practices Remain Complex and Unwieldy**

   We heard repeatedly from administrators, staff, and students that transfer from community college remains complex and unwieldy, despite support services provided by institutions and efforts by the institutions and the state to streamline the process.

   **Campus policies are confusing and pose barriers for students.** Although some state, system, and institutional policies related to transfer have improved, interviewees told us that the changes have not gone far enough to simplify student transfer from the community colleges to the CSU campuses.

   Campus policies such as impaction and local admission area boundaries create barriers and complications for students preparing to transfer. Impaction, which is largely decided by campus faculty, causes admission requirements to vary by campus and by major and to change annually. If students apply to impacted programs or campuses, they must meet supplemental admission criteria, which means juggling varying requirements for multiple campuses and majors. Also, especially under impaction, some campuses choose to grant admission preference to “local” students—a definition that changes based on how CSU campuses define their local admission (or “service”) area. CSUs can change their local admission area boundaries for the purposes of enrollment management. “Local” first-time freshmen are defined as those students who graduate from a high school district with a significant number of historical enrollments in a CSU campus in that region. “Local” upper-division transfer students may be defined as those who transfer...
from a California community college with a significant number of historical enrollments in a CSU campus in that region—or they may be defined, again, as those from a “local” high school, as they are at CSU Long Beach, for example (CSU Long Beach, 2017). For transfer students, the available general guidelines for local admission area boundaries stipulate: “Students who earn the AA-T or AS-T degree at a California Community College will be granted priority admission consideration if they apply to a local California State University that has designated the community college granting the degree as within its local admission areas” (SB 1440, 2017). The boundaries of a campus' local region contain the entire territory of the school district or community college district in which the local high school or community college campus is located.

Moreover, campuses are not transparent in how they preference local applicants in the admission process—and Cal Poly San Luis Obispo does not grant preference to local students. For students who are transferring units from more than one community college, determining whether they qualify for local preference can be confusing. Under impaction, many students need to apply to more than one CSU campus, and trying to keep track of the different definitions and priorities can seem overwhelming. Other considerations to factor in include Priority Registration, which can make a big difference to students in whether they get into the courses they need (CSU, 2017e), and now the new California Promise Program, whereby students “pledge” to complete a given number of units within a given timeframe—and this grants them priority registration (CSU, 2017f). Administrators at the community colleges and at CSU campuses said these practices related to local preference and impaction directly affect transfer students. One community college administrator explained, “Students come to us and we say, ‘Here’s your pathway, and here are the 48 classes that meet the requirements, and you can take them any semester you want to, but we really can’t guarantee that we’re going to offer them, much less that you’ll get in if we do.’”

Complex requirements make transfer planning difficult for students. A strong tradition of faculty governance at both the community colleges and the universities complicates alignment of curriculum and the movement of students across institutions and systems. On the state level, decentralized governance of higher education systems in California does not incentivize coordination across systems and institutions.

For example, the UC and CSU systems worked to simplify general education (GE) requirements across campuses by establishing two common sets of courses: the Intersegmental General Education Transfer Curriculum (IGETC), which can qualify students for admission to either the CSU or the UC, and CSU GE-Breadth requirements, which can qualify students for admission to any CSU campus, but not necessarily to the UC. These sets of courses differ (see Appendix A). For example, CSU Breadth requires a course in oral communications, one in critical thinking, and one in lifelong learning/self development, which are not required by IGETC. IGETC requires a second composition course and proficiency in a foreign language, which are not required by CSU Breadth. Students following IGETC but intending to transfer to CSU are required to take an additional course in written communication and do not need to demonstrate proficiency in a language other than English. The CSU and UC systems also have recommended common GE patterns for students in science, technology, engineering, and math (STEM), but these are specific to each system and are not universally accepted across majors and campuses. The GE Breadth for Stem Majors Requirements are applicable only to certain AD-T majors for which the Transfer Model Curriculum explicitly indicates the availability of the option. The GE Breadth for STEM pattern allows students in the approved majors to defer two lower-division
GE courses (six semester/nine quarter units) until after transfer, in order to allow students to complete more major prerequisites (CSU, 2017h). UC similarly offers IGETC for STEM, a pattern of courses currently only available to students earning an AD-T at a California community college that offers IGETC for STEM as an option, and only accepted by UC majors and colleges that accept students’ partial completion of IGETC (UC, 2017).

Further, these common GE patterns do not go far enough in simplifying requirements because students must complete more than GE courses to transfer. General education courses can only account for 39 of the 60 semester (90 quarter) units that students need to transfer to CSU (CSU, 2017h). The balance of units are lower-division courses required for admission to majors: majors vary in the number of lower-division units required; some majors have space within the 60 units for elective courses.

ASSIST.org—the website that most students said they used to understand transfer requirements—reveals that major requirements vary widely among campuses in the same higher education system. This variation can be confusing if not overwhelming for transfer students, particularly those who plan to apply to more than one institution. Again, many students applying to CSU must at least consider more than one institution, because of the extent of impactation. The AD-T was intended to simplify this kind of complexity, but its effects have been limited so far (for findings about the AD-T, see section III).

Students also reported problems understanding the complex sequencing of courses at the various community colleges (such as which courses are acceptable as prerequisites to others), as well as difficulty getting the courses they needed in the required sequence. A transfer student at CSU said, “I see so many students [at community college] who take unnecessary classes or miss the sequence of things. The lack of understanding of how to get from A to Z is a huge problem."

Interviewees said that many counselors refer students to online resources such as ASSIST.org to understand transfer requirements (ASSIST.org, 2017). ASSIST.org displays articulation agreements between campuses; it shows what classes are required for majors at each CSU or UC, and what classes (if any) a student can take at community college to fulfill the requirements. We tried out ASSIST.org to understand how students experience this resource, and whether it helps simplify complex requirements. We found not only that requirements beyond general education courses vary by major and institution; and that in using ASSIST.org, it is difficult to compare requirements if students are intending to apply to more than one campus and/or major; but also that ASSIST.org does not have information on the AD-T.

We used ASSIST.org as though we were a student from a Los Angeles-area community college who was considering transferring as a business major to two local CSU campuses (referred to here as Campus A and Campus B). We found that the lower-division courses required for admission to a business major differ somewhat by campus (see Appendix B). Campus A requires two courses not required by Campus B, one in business communications and one in calculus. Campus A’s requirements qualify a student for admission into any concentration within the business major, while Campus B requires additional courses for several of its concentrations, some of which are not offered at the community college in our example. Given this scenario, the student can commit to one set of requirements and hope that she is accepted at that specific CSU campus. Alternatively, she can try to fulfill requirements for both, which will likely result in wasted time and money because she will have earned more credits than she needs. Another option for the student is to pursue a business administration AD-T—a curriculum she would follow in lieu of tracking major-specific course requirements for various CSU campuses. However, while the AD-T would likely qualify her for admission to any CSU, it does not guarantee admis-
sion to a local CSU, and the AD-T is not uniformly accepted by all concentrations within a major at each CSU. In our example, Campus A accepts the AD-T for all concentrations within business administration, while Campus B only accepts it for the general business concentration, and not for any of the eleven other concentrations in the major.

Further, ASSIST.org does not provide students information on the AD-T route to fulfilling requirements, but does provide a link to an AD-T website (adegreewithaguarantee.com). The resources at this site do not appear to be as robust as ASSIST.org in providing transfer requirements and course information for students to act upon without seeing a counselor.

Community college supports are insufficient to help students navigate the complexity of transfer. Community college administrators and staff said they help students navigate the complexity of requirements by offering a variety of supports. One transfer director said, “I think if a student takes advantage of the programs and services that are offered, they will have a clear understanding of [transfer] requirements. If they don't take advantage of those programs and services, it's going to be rather confusing for them.” But interviews with staff and administrators and the focus groups we held with students revealed that resources to support transfer students are inconsistent across community colleges and are often woefully inadequate to serve the large number of students who need them. A great deal of staff capacity is required to provide the individualized supports that students need to navigate the transfer process—and colleges do not have the resources to provide this. The recession-related budget cuts for higher education have had an enduring negative impact on student services. In fall 2014, the ratio of students to counselors at community colleges was 657 to 1. For the colleges in this study, the ratio of students to counselors in fall 2014 ranged from about 600 to 1 to more than 1,500 to 1.

Counselors, whom interviewees identified as the primary resource to guide transfer students, are faculty members with master’s degree-level training in academic, personal, and career exploration counseling. Their many responsibilities include helping students plan their courses, set goals, fulfill course requirements, and understand transfer requirements. While some campuses have counselors who are dedicated to serving transfer students, counselors generally provide many services for students other than transfer support. Non-faculty advisors (or paraprofessionals), such as those who often staff transfer centers, can support counseling faculty and students, but by regulation they cannot “venture into academic counseling where they would be called upon to interpret, advise, or judge the appropriateness of a student’s course or program choice” (Academic Senate for CCC, 2012). The Student Success and Support Program (SSSP), an initiative of the California Community College Chancellor’s Office, establishes minimum levels of matriculation services that colleges must provide to students, including an opportunity to develop an educational plan. The colleges can provide either an abbreviated plan (covering a term or two) or a comprehensive plan (identifying all the courses/requirements to complete the student’s academic goals). Currently the colleges are struggling to provide each incoming freshman even with an abbreviated plan, and have insufficient counseling staff to help students develop comprehensive plans (for more information, see CA.GOV, 2017). Efforts to track matriculation services such as comprehensive educational plans are still developing as a result of SB1456 (Chapter 624, 2012): some information on this is available at the CCC Student Success Initiative site (CCC, 2017). Many students in the focus groups said that they needed assistance in determining their academic and career goals, but this support is in short supply.

Another resource for students at many community colleges is the transfer center. The quality and use of transfer centers vary considerably across colleges, according to interviewees.
One campus that we studied did not have a transfer center; interviewees there said support for transfer students is “diffused” on campus. The colleges that have centers intend for them to be a centralized resource for transfer students. Transfer centers typically offer application workshops, meetings with four-year university representatives, essay review, information on and tours of four-year colleges, and college fairs. Interviewees said that advisors (who are different from counselors, as noted above) typically staff transfer centers and help students to understand what is required to transfer, to research colleges and majors, and to complete applications. However, they cannot directly advise as to courses and programs, nor provide many essential matriculation services. In general, students said that transfer center advisors were helpful, but that they still needed more consistent access to and advice from counselors to help them evaluate whether their courses were fulfilling transfer requirements. Several students reported more positive experiences with a few college transfer centers where they were able to meet with counselors who specialize in transfer. On one campus, students said it was helpful to have the transfer center as part of a “student services hub,” co-located with the admissions, financial aid, and counseling offices, and the career center.

In addition, some students have access to “special population programs” that serve different groups of students, such as students of color or low-income students, or those studying certain disciplines. Students who participated in special population programs such as the Educational Opportunity Program (EOP), the PUENTE Project, or a STEM-related learning community said these programs provided more personalized transfer supports than did other resources at their colleges, even though those programs are not designed specifically for transfer students. In the focus groups, many students said they could not participate in such programs because of capacity constraints (most of the programs can only serve a fraction of eligible students), an inability to qualify, or because they did not learn about the programs early enough.

Communication between sectors could be strengthened. Communication was cited by many interviewees as a critical way for counselors to keep up with changing CSU transfer requirements. CSU campuses offer workshops for counselors at the community colleges and send outreach staff to local campuses—relationships that interviewees said are important and helpful to counselors. Regional cross-sector councils and enrollment management committees that include CSU and community college representatives provide a mechanism for regular discussion about issues such as impaction and the potential consequences of changing admission requirements. Community college and CSU interviewees reported that these efforts are helpful, but many expressed that more regular, formal communication mechanisms are needed for community college counselors to keep up with changing CSU transfer requirements. One CSU administrator remarked, “It's great when you have administrators who are communicating with one another, but once you get down to the practitioner level, those folks have to be in communication with one another across institutions.”

Students at some community colleges receive more help navigating transfer than those at others. Colleges vary in the degree to which they communicate transfer options to students and in the way their leadership prioritizes transfer as a goal for both students and the institution. Several community college interviewees referred to their college’s transfer culture as an important support for transfer students. This study revealed variation in transfer culture across colleges (see Recommendations).
II. Students Say They Are Primarily On Their Own in the Transfer Process

The majority of students in our focus groups said they did not receive enough transfer guidance and support from the community colleges or the CSU. This left many students struggling through a process of trial and error to figure out on their own what courses they needed to take, and when. One CSU student explained, reflecting on his efforts to transfer from community college, "With enough trial and error, I finally kind of figured, 'Okay, I have CSUMentor, I have an ASSIST sheet open—maybe through both of those I can get out of here.'"

Students have trouble accessing counselors and receiving consistent information. While some students said they had positive experiences with counselors, the majority of students were disappointed with the counseling services they received in community college. Some students praised their counselors’ encouragement, their willingness to ask questions and to probe students’ interests, their sharing of information about available programs, and their assistance in identifying degrees for which students qualified. However, most students criticized counseling because of the limited availability of counselors. Students could not get appointments and said the process of making appointments was challenging—particularly when they need counselors most, such as during registration. They experienced difficulty in meeting consistently with the same counselor, and they received conflicting information from different counselors. Consistent with other studies, students mentioned that they needed to know the right questions to ask counselors, or risk getting false or inadequate information. They also did not appreciate it when counselors simply referred them to online resources (Wyner, Deane, Jenkins & Fink, 2016; Authors, 2010). One CSU transfer student commented, "It was more like [the counselors] weren’t really trying to look at what I was trying to do. It was just like, ‘Well, this is what we give everybody, so we’ll give you this information.’" Students said they were overwhelmed by having to learn how to navigate the many complexities of college simultaneously—including understanding financial aid, how to access counselors, how to register, where to park, and how to meet with professors. It is not clear how many of these students participated in orientation at community college; most students reported talking to a counselor at least once while enrolled, generally receiving a 15- to 45-minute appointment either before matriculation to community college or during their first two semesters there. Many did not see a counselor after that.

Students would like more personalized guidance. Most students said that counselors’ one-size-fits-all approach left them feeling alone in the transfer process. Most counselors in our sample are generalists in that they do not provide discipline-specific information, and they counsel students who have a wide range of aspirations, including the wish to transfer. One student said, “I feel like they were just going through the motions when I went to get advisement. They see so many of us that they’re just telling us what they have to tell us, and then they’re pushing you out.” Students said that counselors referred them to career advisement services (usually provided through courses or career or transfer centers) to help them understand options and establish goals, but that this approach lacked personalized attention. Also, as noted above, no one but an academic counselor can help with advice as to course or program choice. One student said, "Counselors kind of tell you, 'Take this career development class. It will tell you your personality and stuff,' and [they] hope you will weave your way through." Moreover, where programs and courses are impacted, it may be extremely difficult for students to enroll in the courses they need, including courses required for a major—especially if that course is only offered once a year, for example.
A CSU administrator observed that many students (including transfer students) appear to declare majors based on their perception of market demand for a degree rather than on their own personal interests. This is not surprising, given the pressures from every direction—including from within the educational system—not only to declare a clear and promising path from the outset and to stick to it, but also to prepare for the workforce. Part of higher education study is to explore disciplines, and a “mismatch” between students and their chosen disciplines can cause students to perform poorly in class or to change their major over time, resulting in lost time, money, and credits. Students recognized that career and academic goals are personal decisions, but several said they would have appreciated someone to help them consider their options.

Students want more meaningful engagement with CSU personnel while students are still enrolled at community college. Most students said they had interacted with CSU staff in varying degrees prior to transferring, but that this engagement could have been more helpful to the transfer process. Many students and community college interviewees said their local CSUs tend to send outreach staff to community colleges to help educate students about CSU academic programs and campus life. In general, students found that relationship to be beneficial, but some interviewees said that admissions staff could have been more helpful in determining whether the students were ready to transfer (such as by evaluating transcripts). A few students said they received helpful advice by contacting CSU staff on their own, not by engaging with CSU staff visiting their community college campuses.

Students need more targeted resources to help them succeed at CSU. Most students in the focus groups—all of them from CSU—said they need more support to navigate a new system and to connect with other CSU students and faculty in their majors. Students also said they need information such as whom to contact regarding financial aid or how to access student support services. A student said, “They do mandatory [orientation], but what would have been helpful is if they did mandatory one-on-one counseling, with a counselor for your own college to guide you and set your path, not just a group of students giving you general advice.” CSU administrators acknowledged that there are fewer resources directed at transfer students than at native freshmen, in part because of the perception that graduation rates for transfer students are already fairly high and that the greater need is to get native freshmen to complete. However, comparing graduation rates of native freshmen to transfer students is not valid, as transfer students are much closer to earning their degrees than freshmen and therefore more likely to complete. One CSU administrator admitted, “I think even with all of the knowledge that we have now, the transfer students are still a little bit of an afterthought. We think, ‘Well, they've been in college, they'll figure it out.’” Another administrator said, “The chancellor’s office has asked us to increase graduation rates for transfers, but we’ve been much, much more focused on freshman graduation rates, in part because that’s what the federal government measures.” Another said that it is difficult to tailor support services that appeal to a wide variety of transfer students—from the 20-year-old who quickly completed community college to the middle-aged student with a family and career. Most students said that a void in support causes a stressful transition to a complex, new system. One student said, “At the community college, you build your study group in that community to help you succeed. This is my second semester [at CSU], and I’m finally starting to get that back, but last semester it was pretty rough.”
III. The Associate Degree for Transfer Can Help in Limited Ways, But There is Room for Improvement

Interviewees from a few colleges said that the new associate degree for transfer (AD-T) prompted administrators and staff at their campuses to organize their curricula better. The degree also catalyzed some cross-sector communication to help streamline processes at a few colleges. However, the AD-T’s impact on student outcomes thus far appears to be hampered by students’ limited awareness and understanding of the degree, and limited applicability of the degree’s “guarantee” to students.

The transfer degree is catalyzing communication and organization of curriculum at some institutions. Administrators at a few colleges said the transfer degree legislation has increased communication across systems and within campuses. On some campuses, student success teams have helped faculty, student affairs staff, and administrative leaders collaborate in support of transfer students. A CSU administrator said that possibly the most important outcome of the transfer degree legislation is that it gave community colleges a basis upon which to organize their transfer curriculum—to look at their processes, courses, majors, and systems to streamline student transfer. The legislation prompted a similar reorganization on at least one CSU campus, which aligned its lower-division major requirements with Transfer Model Curricula so that native freshmen and transfer students were experiencing the same curriculum. A CSU administrator said, “I do think that SB 1440…has really caused many colleges and universities to look at their processes and their systems to make sure that once students do apply with this SB 1440 degree, that they can smoothly get their 60 units and get out of there.” Another CSU administrator asserted, "SB 1440 has given community colleges a way of organizing their curriculum around transfer, and that is so much more important than any advantage that transfer students may get individually.”

Students do not understand the AD-T. The transfer degree pathway appears to be misunderstood by many students. Only a small share of students in the focus groups had knowledge of the AD-T, and their knowledge was somewhat limited. However, given that the AD-T was only implemented in 2012, and many colleges were slow to adopt AD-T degrees (see Table 1), it might be too soon to expect that the focus group students would have deep knowledge of the degree. Not only did most of the students in the focus groups not understand the difference between an AD-T and a traditional associate degree, but most did not know which degree they had received. The few who knew they had a transfer degree had limited understanding of its benefits. For example, one student knew only about the 60-unit completion guarantee at the CSU after transfer. Others did not know about the guarantee but knew that it provided a bump in GPA. While a few students had intentionally pursued a transfer degree, other students said they were awarded transfer degrees at the suggestion of their counselor as they approached the time of transfer. Those students were mainly unaware of the benefits.

When students do not understand the AD-T—or even know they have one—it is difficult for them to take advantage of its benefits (such as completion within 60 units and priority registration at one CSU). One source of the confusion could be that many colleges seem to be adding new AD-T offerings while keeping very similar associate degrees in the same discipline; for example, when colleges offer an associate degree and an AD-T in the same discipline, students could be confused about which of those they are pursuing, making it harder to ensure they are correctly fulfilling requirements (see Appendix C).
Many CSUs are still implementing ways to flag AD-T students in their enrollment systems, which is critical in order to provide the 60-unit guarantee, but the first challenge is to certify whether or not a student has obtained an AD-T. Administrators and staff at several of the studied CSUs said that students must actively participate in a verification process to officially be considered an AD-T student. This process is not automated. Currently, the community college sends the student a letter verifying the degree award (often in July), which the student must then forward to the CSU campus where he or she plans to enroll. Some students said that they were aware of peers who received an AD-T but did not complete the verification. This need to verify the AD-T, but not other associate degrees, is confusing and onerous to students and provides an example of where better communication between community colleges and CSUs is needed.

According to the CCC State Legislative Update, the state legislature—having recognized the difficulties this arrangement has fostered, and working closely with the Community Colleges Chancellor’s Office—passed legislation SB 478 to enact the following changes:

SB 478 requires community colleges to automatically provide an associate degree for transfer (ADT) to eligible students, and electronically report ADT student data to the Chancellor’s Office. The bill requires the Chancellor’s Office to maintain a data system that shares the data with CSU and UC by allowing them to have direct access to the data system. Students may opt out of these provisions. Implementation is subject to an appropriation in the annual Budget Act. (2017)

However, after having been passed, the Governor vetoed this bill due to its dependence on funding for manual degree audits (California Legislative Information, 2017). Therefore, whether or not these changes will be implemented remains to be seen.

The “guarantee” has limited applicability. While the AD-T is described by the CCC and CSU systems as “A Degree with a Guarantee,” it appears that the guarantee is limited to a small subset of students. For others, the guarantee is somewhat of a misnomer (see A Degree with a Guarantee, 2017).

First, the degree is most helpful for students who have selected career and academic goals early in their community college career, as they are able to start on a degree path early and potentially complete the degree in 120 units. Data are not available on the share of students who begin community college with specific academic and career goals, but previous research and our focus groups suggest it is likely low. Some colleges collect data on students’ goals; for example, administrators at one community college said the majority of its students enter with the intent to transfer. All community colleges are supposed to be using Student Success and Support Program funds to develop an educational plan with every incoming freshman, to document the student’s goals; however, most colleges in this study were not yet able to ensure that all new students have a comprehensive educational plan, largely due to insufficient numbers of counselors. Therefore, data do not yet exist to illustrate how many students enter with career and academic goals (see also Bailey, Jaggars, & Jenkins, 2015).

More than three-quarters of the focus group students said they entered community college knowing they wanted to transfer, yet most did not have clear academic goals and knew very little about the transfer process. Most of the students said they “wandered” around community college for at least the first year, enrolling in courses they did not need for completion. Some students and administrators noted that students need time during their first year of college to explore and consider their educational interests and goals. In order to avoid accumulating excess credits, and to complete the AD-T in 120 units as intended, students need earlier and better resources to es-
establish academic goals and more personalized guidance in making plans to meet those goals (including information about the AD-T and various other degree options).

Second, the AD-T is most helpful to students who have flexibility to go beyond their nearest CSU campus. While the AD-T guarantees admission to the CSU system, it does not guarantee admission to a specific major or campus. Nearly all students said they chose their CSU based on geographic proximity due to work and family obligations or financial considerations. Admission to another campus is not really a “guarantee” for them. Impaction further complicates the guarantee for those students with little flexibility; the high admission requirements for impacted majors and campuses reduces the likelihood that students will gain admission to their local CSU, with or without the AD-T. One transfer center director noted the challenge of helping students understand the guarantee: “[Explaining] the nuts and bolts pieces [of the transfer degree] is difficult. We've got to talk about the GPA bump, who gets the GPA bump, how much that GPA bump is depending on whether it's an impacted school or a school that's not impacted. That it's a guarantee to the system, and not necessarily a specific university or a specific major. And then the students kind of crinkle their faces, as in, ‘What do you mean by that? I thought it was a guarantee.’”

Third, the AD-T guarantee falls apart if students change majors or add a major or minor. Since data suggest that about half of students will change their mind at some point in college, many students will not experience the benefits of the transfer degree as envisioned (National Center on Education Statistics, 2013; Simon, 2012). One CSU administrator said the transfer degree requires too rigid a focus on one discipline from a very young age (for students who enroll directly from high school). A few students said they were reluctant to pursue an AD-T in community college because they did not want to be “stuck with” a similar major in CSU they knew little about. Administrators were unable to verify the frequency with which AD-T students “break their contract” by changing majors, but they did acknowledge it as an issue. Thus, the promises of the AD-T may not be fulfilled for many students.

Recommendations

In our study of transfer policies and practices in California, we identified two issues that affect student transfer, and that have broader implications for postsecondary student success. While we did not set out to examine these issues, we summarize them here, prior to making our recommendations, to call attention to their importance. Important frames for the recommendations are that impaction undermines the broad access mission of the CSU and therefore impedes transfer, and a lack of data inhibits our understanding of transfer in California. Our recommendations focusing on student transfer are aligned with our three major sections of findings.

I. Transfer Policies and Practices Remain Complex and Unwieldy: Take Further Steps to Simplify the Transfer Process

The CSU system should go beyond the AD-T to simplify transfer requirements. Faculty at CSU need to work with community college faculty to achieve greater consistency in requirements across campuses and majors, with the goal of making baccalaureate programs more accessible to transfer students. Faculty senates at the CSU could help negotiate compromises across departments and campuses with similar degree options, leading to simpler choices for students. Leaders of both systems need to ensure there is as much consistency as possible between
AD-Ts and UC’s Transfer Pathways (which, like the AD-T, are intended to simplify transfer by making course requirements more uniform across campuses). Counselors could then perhaps spend less time on the logistical aspects of transfer and more time on other facets of their work, such as helping students establish their academic and career goals.

Community colleges and CSUs should continue to organize curricula better for transfer students. The California Community Colleges Chancellor’s Office (CCCCO) should consider whether to continue its approval of non-AD-Ts in disciplines with an AD-T. Where there is no clear workforce need for certain terminal associate degrees, the AD-T could become the only option, which might reduce students’ confusion about which degree they received. The CCCC should also coordinate efforts to help colleges share curricula and resources, through online courses or other cooperative arrangements, so that smaller colleges would be able to offer more AD-Ts than they could on their own. CSU campuses could standardize curricula so that native and transfer students experience the same preparation for majors. Finally, both the colleges and the CSU campuses should offer the courses that transfer students demand most.

The CCC and CSU systems should improve online resources. Given scarce counseling and advising resources, online information must be easily accessible, consistent, and accurate. Existing websites could be improved by being more up-to-date and consistent, becoming more user-friendly, and featuring sections that help counselors and faculty stay current about transfer requirements. Information about the AD-T needs to be incorporated into existing websites that students use most frequently.

Community colleges should institute degree audit programs and use them to track student course demand. Degree audit programs have helped some CSU students decide what classes to take and in what order to fulfill their degree requirements. These programs would be particularly helpful for students in community colleges—especially AD-T students, since their course patterns are relatively set. The community college and university systems should also develop a statewide online academic planning tool that would allow community college students to track their progress toward transfer and toward a bachelor’s degree at any institution in the state, as was recommended several years ago by a joint task force (Kisker et al., 2010). Community colleges could use these degree audit programs as a tool to help them meet student demand by identifying the courses students will need over the next few semesters.

II. Students Say They Are Primarily On Their Own in the Transfer Process:
Create Better Supports for Transfer Students

Community colleges should develop a strong transfer culture that can help more students plan for and succeed in transfer (Serban, et.al, 2008). This can be particularly important for students who do not have family members or peers with college knowledge. (For indicators of a strong transfer culture, see Appendix D.)

The CCCCCO should monitor colleges’ implementation of the Student Success and Support Program (SSSP) and modify requirements as necessary. Abbreviated educational plans can help students navigate their first semester or two, but comprehensive plans can help students set longer term academic goals and identify all the courses they need in order to transfer.
The CCCCO should monitor colleges’ implementation of the SSSP to ensure that all students are receiving improved matriculation services (such as counseling, orientation, and effective educational planning) and that the services are substantive enough to improve student outcomes.

**CSU needs to strengthen its role in supporting transfer students—before and after transfer.** CSU campuses are important partners to the community colleges in supporting transfer students. Efforts by CSU campuses in the following areas could help smooth the transfer process.

- Better communication with community college counselors.
- Improved transfer-related information for community college students
- Data sharing across systems to track former students’ progress after transfer.
- Tracking of AD-T students.
- First-year transition resources for transfer students.

**III. The Associate Degree for Transfer Can Help in Limited Ways, But There is Room for Improvement:**

**Help More Students Benefit from the AD-T**

**Community colleges should improve counselor awareness of and expertise in AD-Ts.** Identifying a set of community college courses that apply broadly across the various degrees could help counselors provide early advice to students who want to transfer but have not yet selected a major.

**Community colleges should work with K-12 schools to expand students’ exposure to career options before they enroll.** The impact of the AD-T could be increased if students enter community college with clear academic goals and can begin to follow an AD-T pathway early on. Early goal setting could also improve students’ ability to interact with community college counselors and ask them the right questions.

**Conclusion**

While significant improvements have been made and implementation of the AD-Ts is ongoing, student transfer from community colleges to the CSU remains a complicated and confusing process for many students. The California Legislature adopted transfer degrees to streamline transfer to the CSU, UC is implementing a similar transfer pathways program, and further legislative efforts may help. In our sample, however, the AD-T appears to benefit a relatively small proportion of students: those who have clear academic and career goals when they enter community college, who have flexibility to go to CSUs beyond their closest campus, and who never change their major (or add another). With impaction and changing local service area boundaries affecting their admission prospects, students must plan to apply to several CSU campuses and majors, but varying transfer requirements across campuses outside the AD-T option make the process complex. Policies and practices to support transfer-seeking students in community colleges and at the CSUs vary widely and have been susceptible to budget cuts.

Further simplifying transfer processes would require a new and higher level of coordination across the community college and CSU systems, including faculty collaboration to create clearer and more aligned requirements. Without a statewide coordinating body, however, the systems and institutions must find ways on their own to ensure that transfer-seeking students achieve their goals. By working together, the state’s education systems can continue to remove
existing barriers and create clearer paths for students.

Note:
We are grateful to the students who shared with us their achievements and challenges in transferring from a community college to a four-year university. Their voices—and their suggestions for improving the transfer process—helped to enrich and ground our research. We also thank the administrators and staff from the California Community Colleges and the California State University who provided invaluable perspectives about their efforts to support students. In addition, the Foundation for California Community Colleges provided graphic design. Finally, we thank the College Futures Foundation for its support of this work.
References


California State University. (2017e). Registration priorities. Retrieved from https://www2.calstate.edu/attend/student-services/casper/Pages/registration-priorities.aspx

California State University. (2017f). The California Promise Program. Retrieved from https://www2.calstate.edu/apply/freshman/getting_into_the_csu/Pages/the-california-promise-program.aspx

California State University. (2017g). Transfer. Retrieved from https://www2.calstate.edu/attend/transfer

California State University. (2017h). Upper-Division transfer. Retrieved from https://www2.calstate.edu/apply/transfer/Pages/upper-division-transfer.aspx#breadthTable


University of California. (2017b). Infocenter, Fall enrollment headcounts. UC undergraduate enrollment headcount by enrollment status and entry level [Data file]. Retrieved from https://www.universityofcalifornia.edu/infocenter/fall-enrollment-headcounts

Appendix A

Comparison of IGETC and CSU GE-Breadth Requirements

<table>
<thead>
<tr>
<th></th>
<th>UC IGETC</th>
<th>CSU GE-Breadth</th>
</tr>
</thead>
<tbody>
<tr>
<td>English communications</td>
<td>One course in English composition</td>
<td>One course in English composition</td>
</tr>
<tr>
<td>Critical thinking</td>
<td>Second composition course emphasizing critical thinking</td>
<td>Stand-alone course in critical thinking</td>
</tr>
<tr>
<td>Oral communications</td>
<td>Not required</td>
<td>One course required</td>
</tr>
<tr>
<td>Mathematical concepts/quantitative reasoning</td>
<td>One course required</td>
<td>One course required</td>
</tr>
<tr>
<td>Arts and humanities</td>
<td>Three courses, at least one in arts and one in humanities</td>
<td>Three courses, at least one in arts and one in humanities</td>
</tr>
<tr>
<td>Social and behavioral sciences</td>
<td>Three courses from at least two disciplines</td>
<td>Three courses from at least two disciplines</td>
</tr>
<tr>
<td>Physical and biological sciences</td>
<td>Two courses, one in each area</td>
<td>Two courses, one in each area</td>
</tr>
<tr>
<td>American institutions</td>
<td>Not required</td>
<td>One course in U.S. history and one course in government*</td>
</tr>
<tr>
<td>Foreign languages</td>
<td>Proficiency equivalent to two years of high school study</td>
<td>Not required</td>
</tr>
<tr>
<td>Lifelong understanding and self development</td>
<td>Not required</td>
<td>One course required</td>
</tr>
<tr>
<td>Certification of GE completion</td>
<td>Complete package must be completed to be certified</td>
<td>Certification done area by area</td>
</tr>
</tbody>
</table>

The courses in American government and history are not technically part of CSU GE-Breadth requirements, but are CSU graduation requirements that most students complete as part of their lower-division coursework.
Appendix B
Comparing Transfer Requirements for Business Administration Majors at Two CSU Campuses

The information in the table below is drawn from ASSIST.org. We used the website to inquire about what courses would be transferable from one southern California community college to two local CSUs; this process is similar to what a student might do if he wanted to compare courses that are required to transfer as a Business Administration major at the two CSUs, and to understand which courses he could take at his community college to satisfy the requirements. Researchers took considerable time to analyze and compare the requirements as presented in the table below, including looking up the requirements for the business administration AD-T as an additional point of comparison. Below the table is a screenshot of how the information would actually appear to students using ASSIST.org. The requirements for the AD-T are available in community college course catalogs.

Requirements to transfer into business administration (and related concentrations) from a Los Angeles-region community college to CSU campuses A and B

<table>
<thead>
<tr>
<th>Core Requirements</th>
<th>AD-T Business Administration (23 – 25 units)^1</th>
<th>CSU Campus A Transfer Requirements for Business Administration (27 – 30 units)^2</th>
<th>CSU Campus B Transfer Requirements for Business Administration (18 – 21 units)^3</th>
<th>Community College Articulated Courses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Managerial Accounting</td>
<td>ACCT 120 – Managerial Accounting (3)</td>
<td>ACCT 230 – Intro. to Managerial Accounting (3)</td>
<td>ACC 231 – Managerial Accounting (3)</td>
<td>ACCTG 2 – Introductory Accounting II (5)</td>
</tr>
<tr>
<td>Microeconomics</td>
<td>ECON 201 – Principles of Microeconomics (3)</td>
<td>ECON 160 – Principles of Microeconomics (3)</td>
<td>ECO 210 – Economic Theory 1A Microeconomics (3)</td>
<td>ECON 1 – Principles of Economics I (3)</td>
</tr>
<tr>
<td>Macroeconomics</td>
<td>ECON 202 – Principles of Macroeconomics (3)</td>
<td>ECON 161 – Principles of Macroeconomics (3)</td>
<td>ECO 211 – Economic Theory 1B Macroeconomics (3)</td>
<td>ECON 2 – Principles of Economics II (3)</td>
</tr>
<tr>
<td>Law</td>
<td>Business Law (3) OR BUS 120 – Legal Environment of Business (3)</td>
<td>Business Law I</td>
<td>Legal Environment of Business (3)</td>
<td>Business Law I (3)</td>
</tr>
<tr>
<td>-----</td>
<td>---------------------------------</td>
<td>-----------------</td>
<td>--------------------------</td>
<td>---------------------</td>
</tr>
<tr>
<td><strong>Mathematics Requirements</strong></td>
<td><strong>List A: Select One of the following (3 units):</strong></td>
<td><strong>Both Calculus AND Statistics required</strong></td>
<td><strong>No Calculus required; Statistics is recommended</strong></td>
<td></td>
</tr>
<tr>
<td>Calculus</td>
<td>MATH 140 – Business Calculus (3)</td>
<td>MATH 103 – Mathematical Methods for Business (3) OR MATH 150A – Calculus I (5) OR MATH 255A Calculus for the Life Sciences (3)</td>
<td>Not required</td>
<td>MATH 238 – Calculus for Business and Social Science I (5) OR MATH 261 – Calculus I (5)</td>
</tr>
<tr>
<td>Statistics</td>
<td>MATH 110 – Introduction to Statistics (3)</td>
<td>SOM 120 – Basic Business Statistics (3) OR MATH 140 – Introductory Statistics (4)</td>
<td>MAT 131 – Elementary Statistics and Probability (3)</td>
<td>No course articulated for SOM 120 at CSU Campus A</td>
</tr>
<tr>
<td></td>
<td>MATH 130 – Finite Mathematics (3)</td>
<td>Not required</td>
<td>Not required</td>
<td>MATH 227 – Statistics (4) OR MATH 228 B Statistics Pathway Part II (5)</td>
</tr>
<tr>
<td><strong>Additional Requirements</strong></td>
<td><strong>List B: Select Two of the following (5-7 units):</strong></td>
<td><strong>Both of the courses below are required</strong></td>
<td><strong>One course below is required</strong></td>
<td></td>
</tr>
<tr>
<td>Computer Course</td>
<td>BUS 140/ITIS 120 – Business Information Systems (3) OR Computer Skills (2-3)</td>
<td>COMP 100 – Computers: Their Impact and Use (3)</td>
<td>CIS 270 – Information Systems and Technology Fundamentals (3)</td>
<td>CO SCI 501 – Introduction to Computers and Their Use (3) OR CAOT 82 – Microcomputer Software Survey</td>
</tr>
<tr>
<td>Communications Course</td>
<td>BUS 110 – Introduction to Business (3) OR BUS 115 – Business Communication (3)</td>
<td>ENGL 205 – Business Communication in its Rhetorical Contexts (3)</td>
<td>Not required</td>
<td>CAOT 32 – Business Communications (3)</td>
</tr>
<tr>
<td>-----------------------</td>
<td>--------------------------------------------------------------------------------</td>
<td>---------------------------------------------------------------</td>
<td>-------------</td>
<td>--------------------------------------</td>
</tr>
<tr>
<td></td>
<td>Any course from List A not already chosen (3)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Notes:

1. The AD-T in Business Administration is accepted in all 5 of the options/concentrations within the Business Administration major at Campus A, and also in the separate degree programs in Management, Finance, and Marketing. At Campus B, the AD-T is accepted only in the General Business option/concentration, and not in the other 11 options/concentrations offered within Business Administration.

2. These transfer requirements apply to all 5 options/concentrations within the Business Administration major at Campus A, and also to the separate degree programs in Management, Finance, and Marketing.

3. These transfer requirements apply to 9 of the 12 options/concentrations within the Business Administration major at Campus B. The other 3 options have additional course requirements; for two of those options, there are no articulated courses at the selected community college that meet the additional requirements.

The number of units students earn for courses are in parentheses in the table below.
Units students earn in business administration (and related concentrations)

<table>
<thead>
<tr>
<th>Core Requirements</th>
<th>AD-T Business Administration (23 – 25 units)¹</th>
<th>CSU Campus A Transfer Requirements for Business Administration (27 – 30 units)²</th>
<th>CSU Campus B Transfer Requirements for Business Administration (18 – 21 units)³</th>
<th>Community College Articulated Courses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Managerial Accounting</td>
<td>ACCT 120 – Managerial Accounting (3)</td>
<td>ACCT 230 – Intro. to Managerial Accounting (3)</td>
<td>ACC 231 – Managerial Accounting (3)</td>
<td>ACCTG 2 – Introductory Accounting II (5)</td>
</tr>
<tr>
<td>Microeconomics</td>
<td>ECON 201 – Principles of Microeconomics (3)</td>
<td>ECON 160 – Principles of Microeconomics (3)</td>
<td>ECO 210 – Economic Theory 1A Microeconomics (3)</td>
<td>ECON I – Principles of Economics I (3)</td>
</tr>
<tr>
<td>Macroeconomics</td>
<td>ECON 202 – Principles of Macroeconomics (3)</td>
<td>ECON 161 – Principles of Macroeconomics (3)</td>
<td>ECO 211 – Economic Theory 1B Macroeconomics (3)</td>
<td>ECON 2 – Principles of Economics II (3)</td>
</tr>
</tbody>
</table>
Confusing Degree Options: The Example of Associate Degrees in Psychology

Psychology is a popular major:
- Eight percent of bachelor’s degrees awarded by the CSU are in psychology (second only to business administration).
- Twenty percent of AD-Ts awarded by community colleges are in psychology.

Many CCCs offer two kinds of associate degrees in psychology:
- An AD-T in psychology is offered by 106 of 113 colleges.
- Of those colleges, 44 also offer non-AD-T associate degrees in psychology. For example, three of the four colleges in the Los Rios Community College District offer both an AD-T and an associate of arts (AA) degree in psychology. Cosumnes River offers only an AD-T.
- Nearly one-third of degrees awarded in Los Rios Community College District (2014-15) in psychology were AA, not AD-T.

It is difficult for students to understand the difference between degree options:
- The AA degree is listed first, before the AD-T, in Los Rios District college catalogs.
- Both degrees are described as being for students intending to transfer, and the student learning outcomes and career opportunities are essentially the same for both degrees.
- Fifteen of the 18 units of course requirements are the same.
- The AA degree has a broader list of course options for the last 3 units; several course options would have to be repeated at a CSU to count toward the major because they are generally offered at the upper-division level (e.g., Introduction to Organizational Psychology).
Appendix D

Indicators of a Strong Transfer Culture

Based on our interviews, indications of a strong transfer culture likely include:

- **Leadership that strongly supports transfer.** This includes college or university administrators who can be influential by stating publicly that transferring to a four-year school is important and by providing resources to support that process.

- **Dissemination of information to all students about transfer options.** Putting mechanisms into place to ensure that all students understand transfer pathways and requirements from the outset can help community college students explore their options, including transferring or earning a certificate or associate degree.

- **Academic support for transfer students.** Several counselors and administrators said it is critical for students to have academic as well as student services support, and that ideally the supports are integrated.

- **Data shared across departments and divisions within a college to improve transfer success.** Colleges that appeared to be more focused on transfer shared data about student progress across the campus, including with faculty. Colleges are beginning to track services related to Student Success and Support Program (SSSP) funds, and some intend to use those data to improve transfer outcomes (see CA.GOV, 2017).

- **Students connected with a variety of transfer services, support, and information.** Colleges that appeared to have a stronger transfer culture had well-resourced transfer centers and relatively complete information on websites, and they communicated regularly with students about transfer-related information and events.