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## Creating a Culture of Transfer

This paper<sup>1</sup> addresses transfer disparities among students in the community college, conceptualizing these disparities as an achievement gap. Nevarez and Wood refer to these inequities in student success rates in the community college as the “community college achievement gap.” They define the “community college achievement gap as, “pervasive success disparities among students on academic performance indicators (i.e., rates for enrollment, remediation, retention/persistence, graduation, and transfer)” (73). This study sought to construct a model depicting background factors associated with low-transfer rates in the community college.

Transfer remains an integral function of the community college system, among many other functions (e.g., terminal degrees, remediation, continuing education). However, there has been increasing criticism of educators and policymakers as a result of the declining percentage of students who intend to transfer and the growing percentage of students seeking terminal certificates and associate degrees (Anderson, Alfonso and Sun 423-440). Further, the success of community colleges in facilitating student transition from two-year to four-year institutions has been questioned (Grubb 194; Kisker 282-283; Yang 147-149). Data indicates that 37.2 percent of students who enter community colleges intend to transfer; however, only 28.9 percent are successful in doing so (Hoachlander et. al 11-13). Extant research illustrates evidence of an achievement gap where some students are more prone to lower transfer rates than others. According to the California Postsecondary Education Commission’s *Student Profile Report*, only 10 percent of Latino students in the state of

California transfer from community colleges to a public four-year institution in the state.

The transfer function has been core to community college operations since their inception in 1901 (Townsend 29). The community college transfer process was modeled from the German system of education; in this system, students remain in high school until their generation education (G.E.) is complete, the equivalent of grade 14 in the U.S. Upon completion of their G.E., students can then transfer to a university for advanced study (Kane and Rouse 64). Similarly, the predominant conception of transfer in the community college follows the same pattern. Students complete their first two years of higher education at the community college, focusing on their G.E., and then transfer into a four-year university to complete the remainder of their baccalaureate degrees (Townsend and Wilson 440-442). While other definitions of transfer exist (e.g., transferring from a four-year university to a two-year college, transferring from a two-year college to another two-year college) (Wassmer, Moore and Shullock 652), the original definition of transfer (e.g., transitioning from a two-year to four-year institution) is often the foremost concern of most scholars and practitioners.

Given achievement disparities in transfer rates, there is a need to implement preventions and interventions that can address barriers leading to lower transfer rates; however, this requires an understanding of which populations are least likely to transfer. Based upon these background factors, the authors undertook this study with the intention of providing recommendations for the creation of a community college transfer model that addresses specific background factors associated with lower transfer rates. The purpose of the model was to aid college administrators in targeting interventions for groups most challenged to transfer. The next section describes the methods used to achieve this study's purpose.

## Method

Data from this study was derived from the *Beginning Postsecondary Students Longitudinal Study (BPS)*, 2003-04. BPS is a nationally representative sample of postsecondary students that examines students' progression through higher education, beginning with their enrollment. The dataset used for this research represents 2006 follow-up data from students beginning in 2003. The total cohort includes 19,000 students drawn from the 2009 *National Postsecondary Student Aid Study (NPSAS- BPS)*. Of these 19,000 students, 9,120 attended community college, of which 894 had intentions to transfer.

The authors employed logit analysis (logistic regression) to examine background variables associated with transfer (transfer, coded "1"; no transfer, coded "0"). This procedure was selected since transfer can be viewed as a binary variable. Logit analyses of nested models were conducted using the Data Analysis Systems (DAS) online application through the National Center for Education Statistics. This application allows users to run ordinary least squares (OLS) and logit regression analyses through an estimation of covariance virtual system (Data Analysis System). The authors employed two primary measures to assess the goodness of fit of the models. First, we examined the -2log likelihood to assess whether there was a statistically significant improvement in nested models by comparing the differences between the intercept-only model and the covariates model. DAS logit does not adjust for clustering in its sample; as a result, the authors employed a higher level of significance (.001) to avoid rejecting the null hypotheses when it was true (Type 1 error).

The researchers also examined the variance in the pseudo  $R^2$  between each nested model. Since this study only examined background variables in this dataset, we did not expect a significantly high pseudo  $R^2$  as other important factors (academic, environmental, psychological, social) were excluded from the

analyses. In order to address the inclusion of students who did not intend to transfer, we controlled from transfer intentions across all nested models. This approach is also used in previous transfer research (Alfonso 881-884; Anderson, Sun and Alfonso 271).

In keeping with prior transfer research, this study employed a widely used retention model to inform which background variables would be examined in this research. Bean and Metzner's 1985 model of non-traditional student attrition was utilized in this study. Bean and Metzner's model of nontraditional student attrition focuses on the role of four factors in the attrition of students that commute to school, work part-time, are students of color, and are older than traditional aged students (488). In general, this model is more fitting of the demographic background of community college students. In this model, seven background variables are included: age, enrollment status, residence,<sup>2</sup> educational goals, high school performance, ethnicity, and gender (493-499). In addition to these variables, the examiners also explored the disability, income percentile, parent's highest level of education, and whether students had dependents. These independent variables were grouped together and analyzed in three nested block models (see Table 1).

**Table 1.**  
*Independent Variables by Block*

Block #	Variable Types	Variables	Coding Schema
1	Demographic	<ul style="list-style-type: none"> <li>• Age</li> <li>• Gender</li> <li>• Race/Ethnicity</li> <li>• Disability</li> </ul>	<ul style="list-style-type: none"> <li>• Continuous</li> <li>• Male (1); Female (0)</li> <li>• White (1); Minority (0)</li> <li>• Disability (1); • No Disability (0)</li> </ul>
2	Family	<ul style="list-style-type: none"> <li>• Dependents</li> <li>• Income Percentile</li> <li>• Parent's Highest Level of Education</li> </ul>	<ul style="list-style-type: none"> <li>• Dependents (1); No Dependents (0)</li> <li>• Continuous</li> <li>• BA or Higher (1); Less than BA (0)</li> </ul>
3	Performance & Status	<ul style="list-style-type: none"> <li>• High School GPA</li> <li>• Remediation*</li> <li>• Enrollment Status</li> </ul>	<ul style="list-style-type: none"> <li>• 2.5 or higher (1); lower than 2.5 (0)</li> <li>• Remediation (1); no remediation (0)</li> <li>• Part-time (0); full-time (1); mixed (3)**</li> </ul>

Note: \* remediation is included as another indicator of previous academic performance. \*\* Part-time served as reference group, full-time and mixed compared to part-time.

## Findings

Data from the first nested model indicates that age, race/ethnicity, and disability are associated with transfer. The output indicates that younger students are more likely to transfer than older students. In essence, for every year increase, the odds of transferring decrease by 7.5 percent. No statistically significant relationship was found by gender, which is true for all models. With respect to race/ethnicity, white students were significantly more likely to transfer than students of color. In fact, the odds of white students transferring are nearly 71 percent higher than that of non-white students. In addition to students of color, disabled students are also less likely to transfer. Results from the first nested model indicate that their transfer odds are 40.2 percent lower than students without a disability.

The second nested model illustrated a statistically significant improvement from the first model (even at the .001 level). While the odds ratios did change from the addition of the second block, all factors that were statistically significant on the first model remained significant at the same p-levels. The second model included the family variables block. This model illustrates that the odds of transferring for students with dependents are significantly lower (54 percent) than students without dependents. It also illustrates that students with higher incomes are

more likely to transfer. Parental education was not found to have a significant relationship to transfer.

The third model produced a statistically significant advancement from the second model. As with the second model, this occurred at the .001 level. The third block examined in this model included performance and status variables. High School G.P.A. and remediation were not found to have a statistically significant relationship to transfer rates. However, the enrollment status variable illustrates the largest odds ratios found in all models. The odds of a full-time student transferring to a four-year institution are 5.405 times than that of a part-time student. Stated more simply, the odds of full-time students transferring are more than 440 percent higher than the odds of part-time students. Interestingly, students with mixed enrollment exhibited an even higher odds ratio in comparison to part-time students. The odds of a mixed enrollment student transferring are 7.554 times or more than 655 percent that of part-time students. Age, race/ethnicity, disability, dependents, and income percentile were also significant in the third model. Similar to the first nested model, younger students are more likely to transfer. Every year increase in age decreases the odds of transfer by 4 percent. The odds of

White students transferring are still significantly higher than that of minorities, by 56.5 percent. Disability remains an issue in this model, as the odds of a student with a disability transferring are 36.4 percent less than students without a disability. As with the first model, more affluent students are more likely to transfer than low-income students. (see Table 2)

The findings from this study indicate that several groups have statistically significant lower transfer odds: 1) older students; 2) students of color; 3) students with disabilities; 4) students with dependents; 5) lower income students; and, 6) students who are attending college part-time. Three important facts should be considered in tandem with these findings: 1) While the traditional age of college students has been from 18-24, enrollment data from community colleges illustrates that 40.4 percent of community college students are 25 and older (Digest of Education Statistics 282); 2) the percentage representation of students of color in the community college is 36 percent and is continuing to rise, especially among Latino students (Almanac 14); and, 3) nearly a third (62 percent) of community college student attend college part-time (Provasnik and Planty 5).

In reality, the vast majority of community college students are at risk for lower transfer

**Table 2.**  
*Odds Ratios of Nested Models*

Nested 1		Nested 2		Nested 3	
Age	.925***	Age	.944***	Age	.96**
Gender	1.002	Gender	.916	Gender	.943
Race/Ethnicity	1.707***	Race/Ethnicity	1.51***	Race/Ethnicity	1.565***
Disability	0.608 **	Disability	.618**	Disability	.636**
		Dependents	.46***	Dependents	.487***
		Income Percentile	1.004*	Income Percentile	1.004**
		Parent's Education	1.197	Parent's Education	1.139
				HS GPA	1.053
				Remediation	.812
				Enrollment Status	5.405 (FT)***
					7.554 (M)***
Df= 5		Df=8		Df=12	
Pseudo R <sup>2</sup> = .154		Pseudo R <sup>2</sup> = .163		Pseudo R <sup>2</sup> = .185	
-2Log Diff= -1048397.366		-2Log Diff= -1062940.043***		-2Log Diff= -1098525.258***	

rates. To address the realities and challenges faced by these students, college and system/state-level initiatives are needed, which can both address barriers in the transfer process and also encourage baccalaureate degree attainment. Recommendations that are specific to the college-level are presented.

## Recommendations

As indicated in this research, many large student groups (e.g., students of color, part-time students) in the community college have lower odds of transferring to four-year institutions. Thus, while small 'boutique-style' programs that address the needs of specific student groups (e.g., African Americans, veterans, disabled students) are important and should continue to be sustained, new initiatives should have a wider target purview by developing a culture of transfer. Ornelas and Solorzano noted that creating a transfer culture entails the cohesive work of all campus personnel (e.g., faculty, staff, administration, counselors) in creating a climate where transfer is encouraged and given priority (244-247). Creating a transfer culture does not suggest that the community college should ignore or give lesser importance to other institutional functions (e.g., terminal degrees, remediation); however, it does suggest a paradigm shift in the institutional value system. Recommendations for campus personnel in creating a transfer culture include(s) counselors, administrators, and faculty.

*Counselors.* Counselors serve as the primary source of transfer information for students and the logical institutional source of transfer knowledge. Thus, they remain a crucial tool to aid institutions in the development of transfer cultures. To support the creation of this culture, counselor(s) can:

- Engage students in initial transfer discussions during their first counseling visit and schedule regular follow-up transfer discussions with students (Ornelas and Solórzano 246). Turner and Fryer found that personal contact with counselors

was "important in establishing effective, working linkages for students within and between institutions" (225). Thus, at a minimum, these discussions should focus on encouraging and cultivating transfer goals, becoming familiar with transfer requirements, and learning about transfer agreement programs.

- Conduct trainings with campus administration, faculty, and students regarding transfer policies, articulation agreements, and regulations. In order to be effective, training sessions should be both mandatory and ongoing for campus personnel. More intensive transfer trainings should be implemented for new hires in order to acculturate them to the transfer culture that colleges are encouraging.
- Hosting ongoing transfer fairs, events, activities and fieldtrips to ensure that transfer is a continual conversation among students and campus personnel. As noted by Turner in *It Takes Two to Transfer*, transfer is a two-way relationship between sending and receiving institutions, thus these events should include representatives from four-year universities (27-33). These events can also serve as a platform to facilitate inter-institutional relationships among community college-university counseling and admissions faculty/staff.

*Administrators.* Campus administrators retain access to institutional resources such as money and physical space. They can also shape institutional values through the approval of new hires, mandated trainings, administrators-faculty discussions, among other ways. Bearing this in mind, administrators can encourage a transfer culture by:

- Creating space allocations for a campus transfer center. Transfer centers can serve as a central location for transfer information and guidance for students (Hagedorn, et. al 14-32). Information posted should go beyond college posters

and pennants to include information on potential majors and transfer requirements. Both campus counselors and university-level admissions advisors can use this space to host transfer events and activities. Regular visits from partner universities should occur at these centers.

- Requiring mandated transfer trainings for all campus personnel and students. Transfer trainings should be mandatory for new hires. Quarterly, on-going trainings to increase staff knowledge of changes in agreements, requirements, and policies should be implemented. For students, transfer trainings should be incorporated into student orientation and mandatory advising sessions.
- Establish strategic partnerships with universities (e.g., articulation agreements, information sharing), even those with a history of low transfer rates. As Turner noted in *A California Case Study*, “four-year colleges seem to respond more favorably to curricular articulation with community colleges having a high student transfer record” (8). This is referred to as an individual and organizational-level problem. Establishing partnerships can counteract issues of organizational socialization, which limit transfer options for students.

**Faculty.** Faculty have the most direct and continual contact with students. Students are a captive audience in their classrooms and laboratories. Thus, faculty members are central characters in presenting a transfer message and imbuing a transfer culture. Faculty can support the establishment and maintenance of a transfer culture by:

- Encouraging classroom discourse focused on transfer issues. If discussed regularly, faculty can work to demystify perceptions, answer questions, reduce stereotypes, and address concerns that students may have about transfer. Faculty should aim to elevate conversations

around transfer by making students informed transfer consumers.

- Integrating transfer information and messages into the curriculum is a key component to transfer success (Ornelas and Solórzano 246). Regular classroom activities can focus on researching, writing about, and analyzing transfer options. For instance, in a computer class, students could use their Internet research skills to find information on transfer policies and procedures. In English and writing-intensive classes, paper topics can focus on potential transfer options and career goals.
- Promoting students’ participation in coursework at potential transfer destinations is invaluable. By doing so, students may become more confident in their ability to succeed at the university level. For institutions that are located near the community college, students can enroll in open-university classes. In cases where distance is a barrier, online courses and open courseware can serve as viable options.

In addition to these suggestions, we encourage leaders to glean successful preventative and intervening strategies from equity-based retention and transfer programs. Leaders should investigate the Extended Opportunity Programs and Services, Puente Program, the Umoja program and other initiatives designed to facilitate the success of community college students. These programs may offer additional insights into advancing the transfer function of the community colleges.

## Conclusion

This study sought to create a transfer support model that addressed background factors associated with low transfer rates. After performing a series of logit analyses on BPS data, it was determined that many large community college student groups had lower odds of transferring. Given the widespread achievement gap dis-

parities evidenced by lower transfer odds, a college-wide transfer culture is a logical method for combating low transfer among community college students. Ultimately, creating a transfer culture does not occur overnight, as organizational affiliates (e.g., faculty, administration, students) in non-transfer cultures may be social-

ized to value other community college functions (e.g., terminal degrees, leisure activities). Thus, it is incumbent upon campus personnel to work proactively to create and sustain transfer cultures. If successful, greater transfer rates may be achieved for community college students with lower odds for transferring.

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<sup>2</sup>Since many community colleges do not have on-campus housing, residence was eliminated from this examination.

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