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ABSTRACT

In reports on transfer outcomes to the state Board, the San Diego Community College District (SDCCD) regularly uses the definition of transfer developed by the Center for the Study of Community Colleges' Transfer Assembly (TA). This model does not consider student intent in the pool of transfer-eligible students. In response to concerns by some SDCCD leaders that the inclusive nature of the TA definition was artificially lowering transfer rates, a project was undertaken to examine transfer outcomes for cross sections of District students based on transfer-level courses completed, units completed, degree status, and intent to transfer. Project findings included the following: (1) the 1995 TA study derived a national transfer rate of 21.30%, 18.5% for California, and 16.11% for SDCCD; (2) for first-time fall 1988 SDCCD students who expressed an educational goal of transfer (n=4,481), 643 were transfer directed (i.e., completed transfer level English and math courses), and 338 of these were considered transfer eligible (i.e., had also completed at least 56 transfer units with at least a 2.0 grade point average); (3) of the 338 transfer-eligible students, 33% transferred to a public university in California, 19% graduated, and 12.4% both graduated and transferred, for a transfer rate of 63.3%; (4) limiting the transfer eligible pool by student intent to transfer only, however, was not found to dramatically affect the transfer rate; and (5) of SDCCD transfers from 1988 to 1993, 22% did not enroll in a basic skills course in their first two terms, while 9.7% of those who did, transferred. The project concluded that the TA model provides a valid and low cost methodology for determining transfer rates. (KP)

Transfer: Data, Definitions, and Eligibility in the San Diego Community College District

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Paper Presented at the Annual Convention of the American Association of Community Colleges (75th, Minneapolis, MN, April 22-25, 1995)

TRANSFER: DATA , DEFINITIONS, AND ELIGIBILITY, IN THE SAN DIEGO COMMUNITY COLLEGE DISTRICT:

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San Diego Community College District
Presented to the 1995 American Association of Community Colleges Annual Convention
Minneapolis, MN

The Research and Planning office of the San Diego Community College District (SDCCD) reports regularly to the Governing Board and Chancellor on district transfer activities and data. This report provides a brief description of the various definitions of transfer and uses the Transfer Assembly (TA) definition of transfer developed by the Center for the Study of Community Colleges to assess SDCCD transfer activities and performance. Analyses presented here provide models of Transfer Eligibility for describing institutional effectiveness in preparing students for transfer. Also this study presents variations in transfer rates when the student cohort eligible for transfer is modified. Options and implications of various models for calculating transfer rates and transfer eligibility are briefly discussed. In addition, this report describes the progress toward the baccalaureate of students starting their coursework in basic skills classes in the SDCCD.

Background

Concerns expressed by some SDCCD college leaders regarding the inclusive nature of the TA definition led to a request for additional analysis of the transfer cohort. It was believed by some that including students in the transfer eligible pool (the numerator) who had no "intent to transfer" was artificially lowering the transfer rate. Some suggested that students who stay to complete 12 units may be here for reasons unrelated to transfer such as vocational or personal interest reasons and ought not to be counted in the transfer eligible pool. To address these concerns, the Research and Planning Office conducted secondary analyses using the Transfer Assembly 1988 first time student cohort identified for tracking into all public universities in California by the Center for the Study of Community Colleges (CSCC). Students were divided into various categories and their transfer rates compared. In addition, criteria were applied to the cohort to determine their transfer eligibility. Transfer eligibility was determined by student course completions such as transfer level English and math, and units completed. To further account for student outcomes, the cohort was matched against graduation files to determine the number

receiving a degree from the SDCCD. Students expressing intent to transfer were also included in the model to compare the transfer rates of those stating intent to transfer with those who indicate other goals or behave as if they were going to transfer. Finally, the progression of basic skills students into four-year institutions was also tracked.

Transfer: Data and Definition Issues

As important as the transfer function is to the community colleges, there remains a lack of consensus on a definition of a transfer rate (Banks, 1990, Cohen, 1987). Although it is generally agreed that the transfer rate is the ratio of students who transfer to the potential number of transfer students, there is less agreement on what constitutes a potential transfer student. Some colleges use total headcount, others use full-time equivalents, and still others use credit students only. Each of the definitions yield a very different rate of transfer as shown in table 1 below.

Table 1
Cross-Sectional Measures of
Transfer Rates for California Community Colleges:
1982-1983

Transfer Pool	Number of Transfers	Transfer Rate	Denominator
Total Enrollments 1,354,949	50,537	3.7%	Credit/Noncredit and Continuing Students
Total Credit Enrollment 1,164,195	50,537	4.3%	Includes Continuing but Eliminates Noncredit
Full-Time Credit 303,584	50,537	16.6%	Includes Continuing, Eliminates Noncredit and Part-time Credit Enrollment
First-Time Freshman 285,108	50,537	17.7%	Includes Full-Time and Part-Time Students. Eliminates Noncredit and Continuing Students

Source: CPEC

The data in table 1 show the different transfer rates obtained when the denominator varies. For example, the first column of table labeled "transfer pool" refers to the number of students considered eligible for transfer. Although the number of transfers for that year remains constant, the rate varies tremendously depending on the value of the denominator. This failure to agree on a

unitary definition of transfer has made monitoring the community college contribution toward student progress toward the baccalaureate problematic.

Definition questions of how best to count the transfer students have hindered efforts at arriving at a consistent rate. For example Cohen, (1990a) found in reviewing the ERIC files studies yielding transfer rates that ranged from 5 to 84 percent. The lowest rates were found in studies that divided the number of transfers into total college enrollment, and the highest rates were found where the number of transfers were divided by the number of students who entered the colleges with intentions of transferring and who received associate degrees.

The Transfer Assembly Definition

To define a transfer rate, the Transfer Assembly uses the definition, *all students entering the two-year college in a given year who have no prior college experience and who complete at least 12 college-credit units within four years, divided into the number of that group who take one or more classes at a public, in-state university within four years* (CSCC, 1994).

Table 2

Credit and Transfer Rates of Colleges In National Transfer Assembly

Transfer Assembly Year* (Number of Colleges)	Number of First-Time Entrants	Number and (Percent of First-time Entrants Completing 12+ Credits Within 4 Years	Number and (Percent) of First-time Entrants who Completed 12+ Credits and Transferred Within 4 Years (Transfer Rate)
1990 (48)	77,903	39,351 (50.5% of entrants)	9,316 (**23.7%** of those receiving 12+ credits)
1991 (114)	191,748	89,638 (46.7% of entrants)	21,171 (**23.6%** of those receiving 12+ credits)
1992 (155)	267,150	124,885 (46.7% of entrants)	29,180 (**23.4%** of those receiving 12+ credits)
1993 (366)	507,757	237,965 (46.9% of entrants)	53,863 (**22.6%** of those receiving 12+ credits)
1994 (395)	522,758	237,754 (45.5 % of entrants)	57,769 (**22.1%** of those receiving 12+ credits)
1995 (372)**	445,501	200,649 (45.0% of entrants)	48,176 (**21.3%** of those receiving 12+ credits)

Source: Center for the Study of Community Colleges, Transfer Assembly Results, April, 1995
(*Transfer Assembly Year is based on an entering cohort four years earlier, e.g., 1989 is based on 1985 entering cohort, 1993 is based on 1989 cohort, etc.) ** Washington state data not included 1995

National and State Transfer Rates

Data for the last five years of the TA are presented in table 2. These data indicate that, in summary, about one-half the entrants with no prior college experience complete at least 12 semester units (four courses) at the college, and of those, around one-quarter transfer. Data for the 1995 national rates, California state rates, and the SDCCD rates are shown below.

Table 3

1995 Transfer Assembly Data for U.S., California, and SDCCD

	Number earning 12 credits within 4 years of entry	Number transferring after earning 12 credit units	Transfer Rate
National N of colleges=372	226,619	48,176	21.30
California N of colleges=64	66,992	12,048	18.50
SDCCD N of colleges=3	3,487	562	16.11

Defining Transfer in the SDCCD for Accountability and Program Improvement

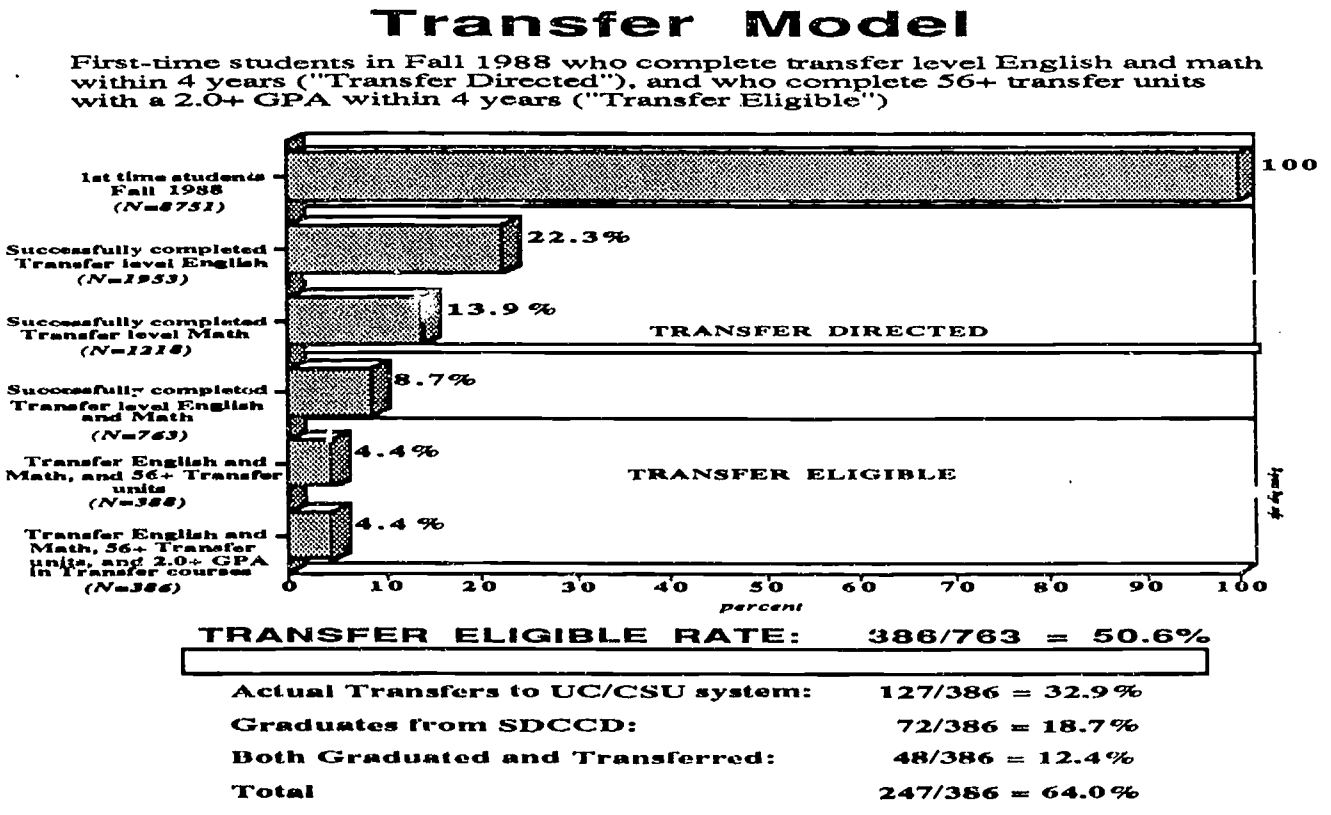
For the 1994 Transfer Assembly, the SDCCD Research and Planning office prepared data files that met the data elements and definitions required for participation in the data matching conducted by the CSCC. The three colleges in the SDCCD were among the 395 community colleges that participated in the 1994 Transfer Assembly. A data tape of student ID numbers for the fall, 1988 first time cohort who completed 12 or more transferable units was matched against enrollment files for all of the CSU and UC campuses by the Center for the Study of Community Colleges (CSCC). This matched file was returned to the SDCCD Research and Planning office where further analyses of the cohort were conducted. In addition to ethnic and racial data, transferring students were identified in the SDCCD historical files and additional data pertaining to these students were included. These data were matched by student ID number and added to each student record for the TA cohort.

Transfer Eligibility

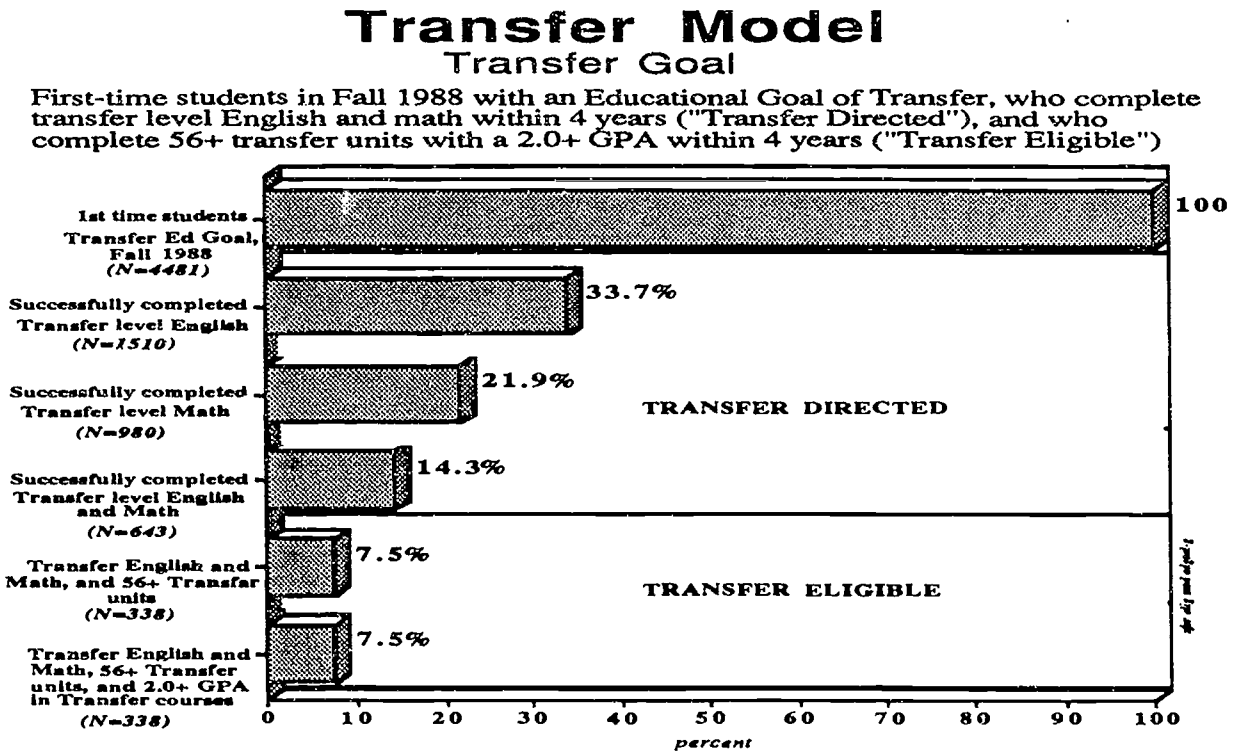
There has been a growing interest on the part of some researchers and college administrators and faculty in determining the "transfer eligibility" rate of a cohort of students. Given the changes in the policy environment and fluctuations in the regional economies, the

dependent or criterion variable of student transfer to a four year institution has become increasingly unstable from year to year. Thus some suggest that colleges can best communicate and document their success with students by analyzing the rate at which they prepare students to be eligible for transfer, regardless of whether they actually transfer or not. It is suggested that this is an area over which the institution has greater control, and is more independent of the transfer policies, fee structure, or available seats at the local college or university. An analysis of the Transfer Eligibility of the 1988 TA cohort was conducted by the SDCCD Research and Planning Office. The results are summarized in the graphs below.

Several definitions of transfer eligibility were tried out to see what effects they have on both the populations of students available for transfer and the actual transfer rates of each group of students. Figure 1 below summarizes the different definitions and illustrates the effects on the final sample associated with each method. As one would expect, each additional condition for inclusion in the transfer eligible pool results in significant reductions in the number of students meeting those criteria. Also, as might be expected, adding more conditions to inclusion in the Transfer Eligible pool also raises the transfer rate as noted by Cohen earlier in this paper.



Both of the figures labeled Transfer Model illustrate the development of a transfer eligibility model. Both figures portray how the initial sample of students eligible for transfer shrinks dramatically when conditions are progressively added for inclusion in the final group. The initial cohort is divided into two groupings. The first grouping, called "Transfer Directed," are those students completing both Transfer Level English and mathematics successfully (N=643), while the second grouping (Transfer Eligible), are those students who completed all requirements of Transfer Directed and 56 or more transferable units with at least a 'C' average.



TRANSFER ELIGIBLE RATE: 338/643 = 52.6%

Actual Transfers to UC/CSU system:	**115/338 = 34.0%**
Graduates from SDCCD:	**57/338 = 16.9%**
Both Graduated and Transferred:	**42/338 = 12.4%**
Total	**214/338 = 63.3%**

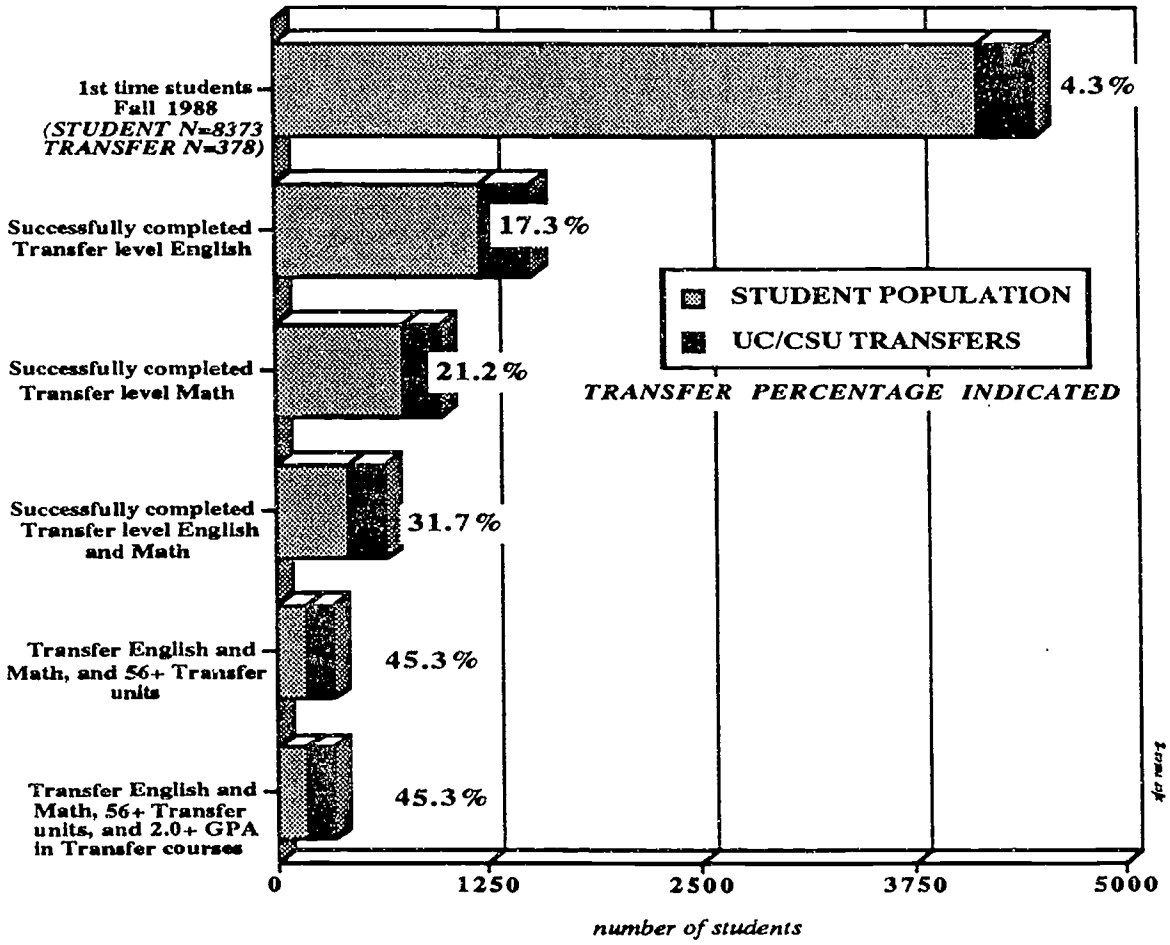
As with the Transfer Assembly model, students were given four years to complete the requirements outlined in the model. The Transfer Eligibility rate is calculated as the Transfer Eligible grouping divided by the Transfer Directed grouping. This calculation gives a Transfer Eligible rate of approximately 51%. This final grouping of Transfer Eligible was matched against the actual Transfer Assembly matched files and SDCCD graduation files to provide transfer and

graduation data for this group. Of the Transfer Eligible grouping, 33% transferred to one of the 29 public universities in California, approximately 19% graduated, and 12.4% both graduated and transferred. In sum, about 64% of the students declared Transfer Eligible either graduated, transferred, or did both. The second figure provides similar data but includes only students stating intent to transfer. Students indicating intent to transfer did show somewhat higher rates of transfer directed behavior such as completion of transfer level English, mathematics, and they also demonstrated slightly rates of transfer eligibility, however the differences were not large. Thus it appears that transfer directed behaviors are perhaps better indicators of transfer intent than student responses to surveys or the initial application for admission.

Transfer Goal versus Transfer Behavior

A common criticism often raised regarding the different approaches to calculating transfer is the issue of including all students, regardless of stated intent at entry to the college. Some assert that only students declaring a transfer or baccalaureate goal at entry should be included in pool of potentially eligible transfer students. Others suggest that only students who demonstrate a predisposition or commitment to transfer as indicated by successful completion of transfer level English or mathematics, completing lower division requirements, and maintaining at least a 2.0 GPA should be considered as potential transfers, regardless of initial intent. Analyses were conducted to determine if student intent to transfer was related to what has been termed "transfer directed" behavior as indicated by GPA, or completing certain transfer level courses. Additional analyses were conducted to determine if intent to transfer in conjunction with completion of all transfer eligibility requirements changed the actual transfer rate when compared with students who also completed all requirements but did not declare transfer eligibility at entry. The results of these analyses are summarized in the graphs below.

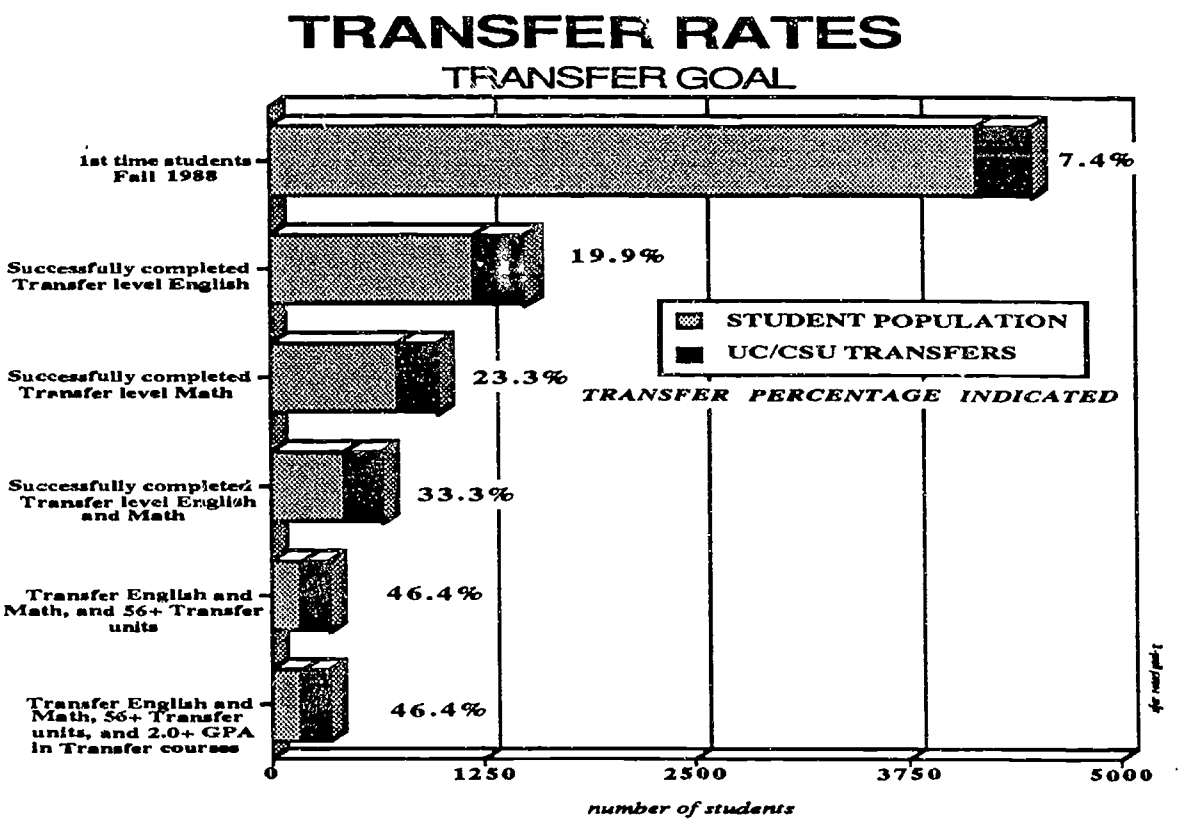
TRANSFER RATES



Transfer Assembly Rate 15.8%

As was discussed at the beginning of this report, the transfer rate can vary considerably when the conditions are applied to including the transfer eligible students in the numerator. The two figures illustrating transfer rates graphically depict the shrinking of the transfer pool when various conditions are applied to the initial cohort. For example, as different conditions for inclusion in the transfer eligible pool are added as in the figure above, the transfer rates increase. However, the proportion of the initial cohort included as transfer eligible decreases dramatically. These various approaches yield transfer rates that vary from 7.4% (all first time students) to just over 46.4% (first time students completing transfer level English and mathematics, 56-plus transferable units with a 2.0 GPA). The graph below presents data similar data to the graph above but includes student intent to transfer as one of the conditions for inclusion in the transfer eligible

pool. Interestingly, this does not seem to dramatically affect the final transfer rate although it does shrink the size of the initial pool of potentially eligible transfer students.



Transfer Assembly Rate 15.8%

Transfer of Basic Skills Students

Interest has also been expressed by college leaders and state legislators in learning about the transfer rates of basic skills students. To accomplish this the SDCCD Research Department obtained the matched Transfer Assembly data files from the Center for the Study of Community Colleges and tracked the students included in the cohort files used to determine the SDCCD transfer rate. To be included in this part of the study, students had to have been transfer eligible using the TA definition, and enrolled in a basic skills class either their first or second term. Basic skills courses were grouped into three areas. Courses not applicable for credit (such as English 50, lower level ESL courses, or Math 33, were classified as two levels below college level. Courses such as English 51 or Math 54, that were associate degree applicable, but not necessarily transferable were classified as one level below college. Courses such as English 101 or Math 104

that were transferable were classified as "college level." The transfer rates and performance of basic skills students are presented below in table 4.

Table 4
Transfer Rates of Basic Skills Students

		CSU	UC	Either
Basic skills students (math or English)		9.0	0.7	9.7
Students w/no B.S. courses		17.4	4.6	22.0
Math				
basic skills math		7.5	0.2	7.7
1 level below		16.1	2.9	19.0
college level		22.2	7.9	29.8
no Math (883, 891)		9.7	1.7	11.4
English				
basic skills English		9.0	1.0	1.0
1 level below		14.1	2.4	16.5
college level		19.3	5.6	24.7
no English (883, 891)		10.1	1.7	11.8
Success in Math				
basic skills:	successful	7.9	0.3	8.3
	not successful	1.6	0.0	1.6
1 level below:	successful	17.7	3.5	21.1
	not successful	13.2	2.7	15.9
college level:	successful	19.3	9.1	28.2
	not successful	25.4	5.0	30.3
Success in English				
basic skills:	successful	10.0	1.3	11.3
	not successful	1.6	0.0	1.6
1 level below:	successful	16.0	2.7	18.8
	not successful	8.1	0.9	9.0
college level:	successful	22.8	6.6	29.1
	not successful	10.6	2.3	12.9

Students who did not enroll in a basic skills course in either of their first two terms had a significantly higher transfer rate than students not enrolling in a basic skills course. Of the students transferring from 1988 to 1993, approximately 22% did not enroll in a basic skills course

either one of their first two terms. Of those students who did enroll in a basic skills course during either one of their first two terms, about 10% transferred to a public in-state university in California.

Avoiding English or math during the first year of attendance appears to be related to transfer performance. Students who avoided taking English or math during either one of their first two terms had lower transfer rates than students taking these subjects at the higher levels. This may both be related to transfer intent and readiness to engage in a transfer level curriculum.

Additional analyses were conducted to observe the relation between success in the basic skills courses and transfer performance. The results of these analyses are also included in the above table. These data suggest the importance of success in the basic skills courses. Students successful at one level below college had transfer rates similar to or in the case of math, slightly above the SDCCD average. However, students not successful at one level below college English had transfer rates below the SDCCD average. Students not successful at two levels below college in either English or mathematics were far below the SDCCD average for transfer. Success in these courses is very important to transfer and these data suggest that even among those successful at the lowest levels of basic skills do transfer, although at lower rates. They take longer to transfer than we are able to track them using this methodology. Instead of four years from initial entry into college these students may take five, six, or more years to transfer and are not included here. However, in general, attempting these courses or achieving success in English and mathematics courses seem to be strongly related to transfer at any level with the exception of college level math. Here the transfer rates are similar for those who were successful and not successful (note: withdrawals are included in the non-success categories). The reason for this is unclear and may require additional analyses and study.

Summary and Recommendations

For a model to be informative and useful to our colleges, it must be easy to calculate, understandable, inexpensive, timely, and communicable. The advantage of using a consistent definition of transfer is the ability to track trends over time. By looking at the transfer rate before and after the implementation of a program (such as Transfer Centers, articulation agreements, matriculation, etc.), the possible impacts of the program on transfer can be studied. The analysis

of various methods for calculating transfer indicated that the adoption of the Transfer Assembly approach to be the most useful based on its methodology, validity, and relatively low cost. Additionally, it had the added advantage of being readily understood by a variety of constituents ranging from faculty and staff, journalists, board members, and community groups and organizations.

The transfer rates of basic skills students suggests that although the transfer rates of this group is lower than students who don't enroll in basic skills courses, when these students are successful in basic skills courses, they transfer at rates only slightly lower than the average for their respective college. This is more evident for students enrolling in math courses than for English. Success in math basic skills courses suggests that passing grades in these courses positively affects transfer rates.

An important question raised by this study is the determination of what best represents the institutional transfer rate. Although some express dissatisfaction with models that included all students as potential transfers regardless of intent, inclusion of student intent to transfer as a condition for transfer eligibility seems to be less important than actual transfer related behaviors such as completion of transfer level English or math courses. Clearly there has been value added to the student as a result of successful completion of college level English and math, particularly when preparing for employment in our increasingly information-based economy. The question then becomes more difficult. Who ought we to include as a potential transfer? The data from this study suggest there are important questions to consider when we restrict entry into the transfer eligible pool. While we increase our transfer rate dramatically by restricting entry to only the most serious students, we risk a cynical response by legislators, the media, and community groups by severely limiting the potentially eligible pool of transfer students. Herein lies the fine art of policy making regarding local accountability. Transfer rates, as with other educational indicators, are difficult to use both as a program accountability tool for external audiences, and for local planning and program review purposes. Local college leaders need to review the various models of transfer and determine for themselves which of the several models shown in this study best describe the role of their college in preparing students for transfer. For whom should the college take responsibility for transferring? The answer to this question seems to lie somewhere in-

between the all inclusive transfer eligible pool and the most restrictive definitions of transfer eligibility presented here. All the while bearing in mind that the highest rate may not necessarily reap commensurate rewards in public relations and hence program improvement because of the number of students not accounted for.

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