The Transfer Assembly is a research effort of the Los Angeles-based Center for the Study of Community Colleges. The Assembly defines transfer students as "all students entering a two-year college in a given year who have no prior college experience, who complete at least 12 credit units at the college, and who subsequently enroll at a senior institution." Every year since 1989, colleges participating in the Assembly have provided student cohort data, and the Assembly calculates transfer rates for the colleges and provides data from all colleges in an annual report. In 1990 and 1991, Jefferson Community College (JCC), in Louisville, Kentucky, participated in the Transfer Assembly. Once student data were obtained for the 1,483 first-time freshmen for fall 1985, a cohort of approximately 816 were identified each of whom had earned a minimum of 12 credit hours. By contacting all public and private four-year institutions in Kentucky, data were obtained on students in the JCC cohort who had transferred to senior institutions. Study results for the 1985 cohort included the following: (1) Hispanics and Caucasians in the 1985 cohort were most likely to earn the requisite number of credit hours; (2) 27.7% of the cohort had transferred to a four-year institution, with Asians showing the highest transfer rate (50%); and (3) by modifying the Assembly's definition of transfer through removal of the 87 students in the cohort still enrolled at JCC, an adjusted transfer rate of 31% was generated. The paper discusses limitations of Transfer Assembly definition of transfer rate; reviews JCC 1985 cohort findings; and provides a revised formula for calculating transfer. Data tables and references are included. (PAA)
MOVING ON!

Assessing the Transfer Rate and the Characteristics of Transfer Students at an Urban Community College

by

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Theoretical Bases

Once upon a time there was a brand new institutional research coordinator working hard to establish a new institutional research office at a community college about to face its Southern Association of Colleges and Schools ten-year accreditation site visit. Does this scenario sound at all familiar? Where does one start when faced with the task of assessing institutional effectiveness for the first time?

As a new institutional research coordinator, I began the process of developing standard procedures for assessing effectiveness with a thorough examination of Jefferson Community College's missions. I reasoned that any assessment of effectiveness would, of necessity, need to relate directly to those missions. I uncovered five missions embraced by the college, preparation for work, access, preparation for transfer, developmental instruction, and responsiveness to community needs for training, retraining, and life-long learning. Once I understood these missions, I then proceeded to sort through all the college's data collection activities in order to categorize each activity according to the appropriate mission it addressed. These tasks moved smoothly forward until I began to look for data collection efforts focusing on the transfer mission of the college. I felt as if I had encountered a black hole--there was very little going on to determine how effective the college is in preparing students for transfer.
I did not doubt, at the time, that the transfer function was and would remain one of the key elements of a two-year college's overall effectiveness. Doucette and Hughes (1990) state that transfer is one of five distinct missions of the community college. Palmer (1989) discusses the importance of determining and recording student goals as they enter college so that it is possible to track students who intend to transfer. Friedlander and MacDougall (1990) discuss transfer as one of several desired outcomes of community college attendance. Friedlander and MacDougall also spend time discussing the importance of assessing student attainment in the area of transfer success. Parker, Mizell, Stuckman, and Preston (1985) include both transfer rates and transfer GPAs in their model of effectiveness assessment. The transfer function is such a critical mission of the community college that the need arose for a clearinghouse and newsletter focusing on transfer issues, and the National Center for Academic Achievement and Transfer developed to fill this need.

At Jefferson, the only data collected concerning the transfer mission of the college were indicators of student satisfaction with preparation for transfer, a portion of the college's GRADUATE SURVEY. Ewell and Jones (1991) suggest the need for cohort-based tracking which requires a student database. The database must include first date of entry on every student and updated information on student goals, and it must allow a user to extract relevant data when desired, to merge data from many files, and to calculate rapidly the necessary statistics on student progress before effectiveness efforts can result in sound assessment. I didn't have such a database available. The college still does not retain in its own records, date of first entry, for example, on enrolled students. I was pondering these facts, a mission vital to the college, a mission about which the college did little to assess effectiveness of its efforts, and the lack of necessary tools for doing the tracking necessary for sound assessment, when I read my first article concerning the Center for Community College Research, the Transfer
Assembly, and the work of Arthur Cohen.

Banks (1989) provides a background for the efforts of the Center and for the establishment of the Transfer Assembly. The author states that most difficulties with measuring the effectiveness of a college's transfer function are caused by the lack of a consistent or widely used definition of transfer. While my problems were far more basic than a struggle over how to define transfer, I did agree with Banks' assumptions that a transfer definition needed to establish a timeframe within which students would be expected to "move on", that one must measure the number of students who eventually transfer against an entering cohort, and that the more credits a student earns at the community college the more likely she is to transfer. Banks presented a simple formula for determining transfer rate that became the definition employed by colleges participating in the Transfer Assembly:

\[
\text{transfer rate} = \frac{\text{# transfers within four years of initial enrollment} \times 100}{\text{# of entrants who earned 12+ hours at the community college level}}
\]

Jones (1991) provides some history of the Transfer Assembly that, for me, clarified Banks. The Assembly, an effort of the Los-Angeles based Center for the Study of Community Colleges, began in 1989. The effort was supported by a Ford Foundation grant for assisting the nations two-year colleges in defining their transfer rates. Here I began to get excited about possibilities. Maybe the Transfer Assembly had a way out of my difficulties to share! During the Assembly's first year, it invited 240 colleges to participate in it. These colleges were asked to extract all 1984 first time freshmen, disaggregate these students by ethnicity, determine the number who had received 12+ hours at the community college, and finally determine how many had transferred to
baccalaureate institutions. In return, the Assembly calculated the transfer rate for the college and provided data from all colleges in a yearly report. The first year of the Transfer Assembly 48% of the 240 colleges invited actually participated. The following year, focusing on the 1985 entering freshman cohort, 114 of 240 invited colleges participated; again nearly 48% provided the required information. Jefferson Community College was a Transfer Assembly participant in 1990 and 1991.

In addition to these key papers, there are several cogent articles published by the Center for Community College Research that helped me decide to join the Transfer Assembly. One such publication, entitled “The Transfer Assembly” (1990) states the goal of the Assembly as seeking to establish a continuing procedure with which community colleges can assess their rates of transfer. The paper gives the transfer definition that focuses the efforts of the Assembly as

“all students entering in a given year who have no prior college experience who complete at least 12 credit units at the college and who subsequently enroll at a senior institution.”

“The Transfer Assembly” further demonstrates the growth of the Transfer Assembly; in 1991, its third year, 135 community colleges from 37 states participated.

A short paper by Cohen (1990a) proved the most influential document for me. It briefly summarizes the definition of transfer and describes the simple formula used to determine transfer rate. Cohen states that transfer rate is vital because the college can use its transfer rate to verify that it does contribute to its students progress through higher education.
Another paper by Cohen (1992) discusses the four separately funded national projects and several state initiatives dedicated to developing useful definitions of transfer and formulas for calculating transfer rates, thereby enhancing institutional effectiveness and research activities. Cohen then places the Transfer Assembly as the largest of these efforts.

So Jefferson became a member of the Transfer Assembly in 1990. The definition seemed applicable to Jefferson's needs, the Transfer Assembly gave a fledging institutional research coordinator the support and guidance necessary to get transfer data collection underway, and the process of data collection seemed manageable for a one-person office with limited resources. There was the problem of identifying that first-time freshman cohort, and there were problems obtaining student-specific data from four year institutions, but more on these issues to come. The Transfer Assembly seemed the answer to a difficult problem, and I was grateful for the opportunity to participate.

Results

Jefferson Community College is a three-campus, urban college under the jurisdiction of the University of Kentucky Community College System. It enrolls approximately 11,000 students per semester, and 47% of those have transfer as a goal of their community college attendance. Since the college doesn't retain date of first entry in its student records, the researcher must turn to the system data files for identification of any year's first-time freshmen. When I began the task, I did not know the right questions to ask, nor did I have a grasp of what University of Kentucky Community
College System data files could provide. I asked for a list of first-time freshmen, fall 1985 broken out by ethnicity and listing social security number. I could have asked for cumulative hours earned as well, but I did not. Therefore, my first task was to look up nearly 1,500 individuals in the college’s student files to determine who had earned the minimum 12 or more credit hours while enrolled at Jefferson. That task was overwhelming in the volume of time it took to complete it.

Once I had the cohort narrowed to approximately 800 students, I wrote letters to presidents of all Kentucky public and private baccalaureate institutions explaining the transfer project and asking for their assistance in encouraging their institutions’ researchers to complete the work I required. I asked my president to cosign the letter, which he did willingly. Then I produced a word processed list of students by name, social security number, ethnicity, and number of hours earned at Jefferson. I sent this document, in paper and pencil format, to all the baccalaureate institutions, requesting information on students’ matriculation, hours earned, and degrees earned, if any. This paper and pencil document was my second major error.

Several researchers/registrars who received the tool simply refused to do the work involved. They told me they had enough of their own work to do and could not spare the time to provide the data I requested. They assured me that, had I provided them with an ASCII file of the same information, they would have been able to comply with my request with minimal time and effort.

One university refused to provide student-specific data and cited Federal Education Right to Privacy Act (FERPA) as the reason for not providing such information. A personal contact at this institution eventually provided me with the information I needed, but had I not had this personal contact, I would not have had access to
information from the university to which roughly 70% of Jefferson's students move.

Other contacts steered me toward the Kentucky Council on Higher Education, stating that it would be far easier for this institution to provide information on student transfers. I investigated this possibility, but the Council would not meet my time deadline and would provide only aggregate figures on transfer without identifying students or the institutions to which they transferred. Student specific data seemed important to me because students may transfer to more than one baccalaureate institution before completing their college work. I wanted to have as accurate a data set as possible. Thus I rejected the Council's database and continued to press my colleagues at the four-year colleges for the information I needed. In the end, all but one university provided the information I needed, and the missing institution finally provided the information approximately six months beyond the Transfer Assembly deadline.

Once I had all the data, I was ready to provide my first transfer report, and I was surprised by what I discovered. The tables below summarize the results on the 1985 first time freshman cohort.
Table 1
1985 First-time Freshmen

<table>
<thead>
<tr>
<th># in original cohort</th>
<th># who earned 12 or more hours</th>
<th>% of original cohort</th>
</tr>
</thead>
<tbody>
<tr>
<td>African American</td>
<td>232</td>
<td>105</td>
</tr>
<tr>
<td>Hispanic</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>American Indian</td>
<td>8</td>
<td>4</td>
</tr>
<tr>
<td>Caucasian</td>
<td>1,230</td>
<td>702</td>
</tr>
<tr>
<td>Asian</td>
<td>9</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>1,483</td>
<td>816</td>
</tr>
</tbody>
</table>

Roughly half of the entering cohort earned the requisite 12+ hours to be included in the transfer-potential group. Hispanics and Caucasians were most likely to earn the requisite hours, and Asians were the least likely to earn the 12+ hours necessary.
Table II
1985 cohort

<table>
<thead>
<tr>
<th>Ethnicity</th>
<th># in cohort with 12+ hours</th>
<th># who transferred to a baccalaureate institution</th>
<th>% of cohort with 12+ hours who transferred</th>
</tr>
</thead>
<tbody>
<tr>
<td>African American</td>
<td>105</td>
<td>17</td>
<td>16.2</td>
</tr>
<tr>
<td>Hispanic</td>
<td>3</td>
<td>1</td>
<td>33.3</td>
</tr>
<tr>
<td>American Indian</td>
<td>4</td>
<td>1</td>
<td>25.0</td>
</tr>
<tr>
<td>Caucasian</td>
<td>702</td>
<td>206</td>
<td>29.3</td>
</tr>
<tr>
<td>Asian</td>
<td>2</td>
<td>1</td>
<td>50.0</td>
</tr>
<tr>
<td></td>
<td><strong>816</strong></td>
<td><strong>226</strong></td>
<td></td>
</tr>
</tbody>
</table>

TRANSFER RATE 27.7%

While Asians were least likely to earn the requisite 12+ hours at Jefferson, the transfer rate for the Asian cohort was the highest of any ethnic group. Hispanics have the second highest transfer rate, with Caucasians third. Not surprisingly, the African American population had the poorest transfer rate.
Several things bothered me concerning these results. First, I was reluctant to publish any statistics advertising minority transfer rates based on this effort. To say that Jefferson's transfer rate for its significant Asian population is 50% would be misleading, at best. Another concern was the number of students in the transfer cohort - first time freshman with 12 or more credit hours earned - who are still enrolled at Jefferson. Observe what happens when I remove those still enrolled from the transfer cohort.

I checked each student in the cohort against the student files of the college and discovered that 87 of 816 (10.7%) are still enrolled at Jefferson.
<table>
<thead>
<tr>
<th>cohort with 12+ hours</th>
<th># of cohort still enrolled</th>
<th>real transfer cohort</th>
<th># transferred</th>
</tr>
</thead>
<tbody>
<tr>
<td>816</td>
<td>87</td>
<td>729</td>
<td>226</td>
</tr>
</tbody>
</table>

**ADJUSTED TRANSFER RATE 31.0%**
This seemed a more realistic transfer rate for the college, albeit more flattering. I wondered why the Transfer Assembly did not include the subtraction of those who remain enrolled at the college in the formula. Jones (1991) states that one limitation of the Transfer Assembly's approach is the tendency to undercount the transfers because of issues such as these. The Transfer Assembly's definition may be more useful for community colleges if the definition is revised to factor out those students who remain enrolled after the four-year cut-off.

Another concern I had was the lack of identification, at the entering point, of numbers of students who intend to transfer. Cohen (1990b) states that one should not use only members of a cohort who identify transfer as a goal; he states that data on student intentions are unreliable. Browner (1991), however, suggests that the calculation of transfer should use only members of a cohort who intended to transfer as the denominator. If information on student intentions is unreliable and if students frequently change their goals during their postsecondary years, but having such information would improve our efforts to measure transfer rate, would it not be in everyone's best interests to search for a better way to measure student intentions? Thus my lack of complete satisfaction with the Transfer Assembly definition began.

I participated in the Transfer Assembly again in 1991. I decided to utilize the State Council on Higher Education as my means to gather the data. I ran into a variety of complications with this approach, as well. First, the Council did not feel they had the resources to do such a task for me, even though the institution has the most complete database. I finally asked the Community College System Chancellor to intervene in my behalf, which he did. My data arrived immediately before the Assembly deadline, but there were some severe limitations with this method.
In my first year, I was able to report students' transfer destinations. With the Council data, I received no indicators of transfer locations. I have since requested this information, but it has not yet been delivered. Also, with the Council data, there is no way to factor out repeat transfers. This may have contributed to the higher transfer rate for the 1986 cohort. The following tables report the 1986 cohort findings based on the Kentucky Council on Higher Education data.
### Table IV
1986 First-time Freshmen

<table>
<thead>
<tr>
<th>Ethnic Group</th>
<th># in original cohort</th>
<th># who earned 12 or more hours</th>
<th>% of original cohort</th>
</tr>
</thead>
<tbody>
<tr>
<td>African American</td>
<td>220</td>
<td>98</td>
<td>44.5</td>
</tr>
<tr>
<td>Hispanic</td>
<td>1</td>
<td>1</td>
<td>100.0</td>
</tr>
<tr>
<td>American Indian</td>
<td>24</td>
<td>4</td>
<td>16.6</td>
</tr>
<tr>
<td>Caucasian</td>
<td>1,426</td>
<td>766</td>
<td>53.7</td>
</tr>
<tr>
<td>Asian</td>
<td>8</td>
<td>2</td>
<td>25.0</td>
</tr>
<tr>
<td>Other</td>
<td>16</td>
<td>5</td>
<td>31.3</td>
</tr>
<tr>
<td></td>
<td><strong>1,695</strong></td>
<td><strong>876</strong></td>
<td><strong>51.7%</strong></td>
</tr>
</tbody>
</table>

Once again, Hispanics and Caucasians were the most likely ethnic groups to earn the requisite 12 or more credit hours. The American Indian ethnic group however, the least likely group to earn 12+ hours, dropped sharply from the 1985 cohort.
Table V
1986 cohort

<table>
<thead>
<tr>
<th>Ethnicity</th>
<th># in cohort with 12+ hours</th>
<th># who transferred to a baccalaureate institution</th>
<th>% of cohort with 12+ hours who transferred</th>
</tr>
</thead>
<tbody>
<tr>
<td>African American</td>
<td>98</td>
<td>26</td>
<td>26.5</td>
</tr>
<tr>
<td>Hispanic</td>
<td>1</td>
<td>0</td>
<td>0.0</td>
</tr>
<tr>
<td>American Indian</td>
<td>4</td>
<td>2</td>
<td>50.0</td>
</tr>
<tr>
<td>Caucasian</td>
<td>766</td>
<td>233</td>
<td>29.1</td>
</tr>
<tr>
<td>Asian</td>
<td>2</td>
<td>0</td>
<td>0.0</td>
</tr>
<tr>
<td>Other</td>
<td>5</td>
<td>5</td>
<td>100.0</td>
</tr>
</tbody>
</table>

876                256

TRANSFER RATE 29.2%

In this cohort, both Asians and Hispanics experienced poor rates of transfer, but once again the statistics are misleading because of the very small number of individuals who remained in the cohort. American Indians, Caucasians, and F1 VISA students had the highest transfer % rates, and African Americans experienced a 10% increase in transfers.
Another factor made Council data less useful to me; because the Council gave me aggregate numbers and nothing student-identifiable, it was not possible for me to check the college's files to see how many of the students in the 12+ cohort may be still enrolled at Jefferson. I was, therefore, unable to duplicate the statistical processes that showed the effect of removing from the cohort students who may still be enrolled in the college. My hunch is that this process would result in a similar increase in transfer rate to that of the 1985 cohort.

Implications

The Transfer Assembly has been active in challenging colleges across the country to assess their transfer rates to determine how effectively the colleges' transfer functions are working. This is a laudable effort. Conclusions drawn by a two-year participant no way detract from the excellent efforts of Arthur Cohen and the Assembly. The definition developed by the Assembly is precise, the data relatively easy to gather, and the results, while not comparable across colleges, do give colleges some measure upon which to determine if they are serving well students who wish to transfer. The definition does, however, raise some issues that require attention.

1. Vaala (1991) states that students "move on or transfer because they feel they are ready for the university. One consideration the definition of transfer needs to consider is the number of students who, even after four years at the college, have not reached a point of readiness. That such students exist does not mean the college is not attending to its transfer function, but may very well attest to the quality of the college's efforts. One simple way to determine which students fall into this category is to check the cohort for students who remain enrolled at the college. Including this simple
process in the formula for determining transfer rate would eliminate the controversy over how many years we should allow for the community college student to complete a program. If we include the removal of individuals from the cohort who have not transferred but remain enrolled at the college, it no longer matters whether our cutoff point is four years or ten years. We’re working with a more precisely defined cohort.

A revised formula might be:

\[
\frac{\text{# of transfers after four years}}{\text{# of first-time freshmen with 12 or more credit hours - non-transferred but still enrolled at the college}} = \text{transfer rate}
\]

Such a small adjustment in the transfer rate computation would eliminate a considerable amount of controversy.

2. The work of the Transfer Assembly is best completed by direct contact with four-year institutions through some electronic means such as an ASCII file. Most baccalaureate institutions, both public and private, were cooperative with this effort and willing to share student-specific data for these kinds of students. Student-specific data permits the researcher to prevent students who have transferred to more than one institution from being counted more than once in the transfer statistics. Student-specific data also permit the kind of analysis required of the revised calculation method described above.

3. We need parallel studies done in which transfer rates are computed in two ways for the same cohort. As yet, I am not able to do such studies because Jefferson does not gather information on student intentions when they enroll. But parallel studies could
be completed that compute transfer rates based on an entering cohort who stated transfer as a goal and based on the Transfer Assembly definition. My hunch is that such studies would likely yield transfer patterns that would not be much different. Whatever the results of such studies, they would put to rest the conflict over the characteristics of the appropriate cohort to use as the computation's denominator. If such studies lead to the use of a cohort that identifies itself as wanting to transfer, then we need to focus some energy on developing more reliable ways to record student integration.

4. Finally, the Transfer Assembly provides limited information on rates of transfer using only the characteristic of ethnicity. For Jefferson, this has been a wonderful place to start, but having a little information has only whet our appetites for more. Do females transfer more readily than males or vice versa? Do undecided students take longer to transfer than do students who declare majors early in their college work? What about student age? Financial Status? A host of other variables could help to shed light on the effectiveness of transfer missions and help colleges to develop new programs where needed to improve their transfer functions. But these analyses are ours to do if we use student-specific data bases to determine transfer rate. Once we know who moved on and who did not we can use our own databases to learn about any of these patterns.

I remain encouraged by the Transfer Assembly's efforts. A slight adjustment in the computation could make the formula more palatable to community colleges and put to rest a considerable amount of controversy, however. My hope is that the experiences shared here will in some way influence practice in positive ways. Ultimately, our ability to measure our own effectiveness can only benefit the students we serve.
REVISED FORMULA FOR CALCULATING TRANSFER RATE

\[
\frac{\text{Number of first-time freshmen who earned at least 12 credit hours in four years and who transferred to a baccalaureate institution}}{\text{Number of first-time freshmen who earned at least 12 credit hours in four year}} \times 100 = \text{transfer rate}
\]

- Number of cohort who did not transfer but were still enrolled at the college
REFERENCES


