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**IF COMMUNITY COLLEGE STUDENTS ARE SO POOR
WHY DO ONLY 16.9% OF THEM RECEIVE PELL GRANTS?**

by

Richard M. Romano and Timothy Millard

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Richard M. Romano is Director of the Institute for Community College Research at Broome Community College, Binghamton, NY and an affiliated faculty member of the Cornell University Higher Education Research Institute (CHERI)

Timothy Millard is the Director of Institutional Research and Planning at Broome Community College.

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Draft 6/15/05
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While reexamining a study on community college finance (Romano, 2003), the authors were trying to estimate the family income levels of all students enrolled in credit courses at the nation's community colleges. National data is not available on this question, so we were hoping to use the percentage of students that receive Pell grants as a proxy for lower income groups. Since the number of Pell grant recipients is a readily available statistic, researchers frequently use it as a proxy to indicate the college participation rate of low-income students (see Brown and Clark, 2005 for a recent example). Pell grant rates have also been used as an indirect measure of campus diversity. For instance, a study published in *The Journal of Blacks in Higher Education* reasoned that, since "blacks were more than twice as likely as whites to receive federal financial aid grants... the Pell grant percentage.... provided some clues about racial diversity" (*JBHE*, 2002, p.1).

One might question the use of Pell grants as a measure of campus diversity, but its use as a proxy for income seems to be more logical. In 1999-2000, for instance, 51.7% of the community college students who received them had family incomes of under \$15,000 and only 3.4% of them had incomes over \$40,000 (U.S. Department of Education, 1999-2000). Looking at our own college in upstate New York, which is 92% white and is not in a major urban area, we found that 30.5% of our students received Pell grants in 2002-03. We expected that the rate in large urban areas, where most of the nation's community college students are, would be much higher. To our surprise, we found that the most recently calculated figure from the National Center for Education Statistics showed that the rate was only 16.9% for students enrolled in credit courses for the 1999-2000 academic year. This low rate flies in the face of the accepted premise that, compared with those at 4-year colleges, community college students are more likely to come from underrepresented, low-income populations. The 16.9% implies the opposite.

A query was sent out on a national financial aid listserv posing the question of why the community college percentage was so low. In addition, we conducted a number of semi-structured telephone interviews with financial aid directors from various parts of the country.

The responses from both surveys clustered around the following:

1. The 16.9% figure was simply wrong.
2. Community college students are not so poor.
3. Some students already have a bachelor's degree and are not eligible for Pell.
4. The number of Pell grants in California colleges is very low and that pulls the national average down.
5. Financial aid offices at some colleges or in some states are not aggressive enough in getting students to apply.
6. The large number of part-time, and/or non-matriculated students, reduces the percentage.
7. The financial aid process is too complicated and discourages 2-year college students.

This study attempts to answer the question posed in the title of this article by evaluating these responses using both published and unpublished data from the U.S. Department of Education.

NCES data

The 16.9% figure is calculated from the National Postsecondary Student Aid Study for 1999-2000 (Malizio, 2001) compiled by the National Center for Education Statistics. The original table that contains the number has not been published in any reports but is available from the National Education Data Resource Center (NEDRC) Table Library. The complete table shows the percentage of undergraduates receiving Pell grants by race/ethnicity and sector. Table 1 below is an abbreviated version showing just the Pell grants by sector (type of institution) and the average grant.

Table 1 Percentage of undergraduates receiving Pell grants and average Pell grant for those who received, by sector (1999-2000)*

Sector	% receiving Pell grants (standard error)	Average grant
Public 4-year	23.9 (0.57)	\$2,033
Private 4-year	23.7 (1.10)	2,010
Public 2-year	16.9 (1.06)	1,673
Private for Profit	52.0 (2.50)	2,077

*http://nces.ed.gov/das/library/tables_listings/show_nedrc.asp?rt=p&tableID=319.
Standard errors from Malizio (2001).

NCES could not provide us with the numerator and the denominator used to get the 16.9% figure for the public 2-year colleges. However, we were able to verify that for the academic year 1999-2000, 17.2% of students in public 2-year colleges received some kind of federal grant (Malizio, 2001, Table A). The 17.2% figure includes Pell grants and a very small number of Supplemental Educational Opportunity Grants (SEOG's). Thus, the 16.9% figure for Pell grants seems reasonable. NPSAS is a sample survey but the standard errors are small.

Since the 16.9% figure came from the 1999-2000 academic year, we will use that year for the rest of our analysis. For that year the minimum Pell grant was \$400 for full-time students while the maximum was \$3125. In 1999-2000 the nation had 3.8 million Pell grant recipients who received a total of \$8.0 million dollars (U.S. Department of Education, 1999-2000, Table 6). Out of this, 36.4% of all recipients attended public 2-year colleges (ACE, 2003). This is not inconsistent with the 16.9% figure.

Our data

Although information on Pell grants by state is not published by the U.S. Department of Education, we were able to calculate them by merging two data sets. The NCES sent us an unpublished list of every school that enrolled Pell grant recipients in 1999-2000. The data included the type (2-yr. 4-yr. etc.) and control (public, private) of institution, the number of

grants given, the sum of the grants and the average grant per school. The list included everyone from Harvard to the local cosmetology school. In all, it contained 5194 schools. The Office of Postsecondary Education (OPE) then provided us with enrollment figures for all of these institutions as reported in IPEDs data. We merged the two data sets using their unique OPE ID numbers and sorted the institutions by Carnegie classification, isolating only the public 2-year colleges. As anyone who works with this data knows, the schools on the two lists do not always match, because the definition of a community college can be different and reporting procedures can vary among schools and between years. However, the IPEDs enrollment data found matches for all but 158 of the 5194 institutions that were on the NCES list.

The problem of classifying community colleges using varying definitions is an issue for all researchers (McCormick & Cox, 2003). One problem that we encountered is that some states do not report community college data separately but include some, or all, of it in the data on their public 4-year colleges. This is especially a problem in Alaska, and Kentucky but also affected our data in Ohio, West Virginia, New Mexico and New York (CUNY). Since the numbers reported for both Alaska and Kentucky were too small, we eliminated those states from our data. The numbers for all other states were judged to be sufficient to include in our analysis.

In calculating the percentage of students receiving Pell grants for each college, the number of Pell recipients was the numerator and the annual unduplicated headcount of students enrolled in credit courses was the denominator. Overall our Pell numbers seemed accurate, but our enrollment numbers, taken from IPEDs, were not. Since Pell grant data is not available by semester it was important that we have an unduplicated headcount for the entire 1999-2000 academic year. Despite these difficulties, only seven of our community colleges lacked the necessary annual data. Where we could, we found the data on their websites or asked them directly. Additional problems with our enrollment data affected our denominator and caused our final figures on the percentage of students who received Pell grants in 1999-2000 to be slightly over-estimated for a few states and slightly underestimated for others. The states most affected

were Arkansas, Delaware, Illinois, Indiana, Iowa, Louisiana, Nebraska, and North Dakota.

However, using estimating techniques we found that our final results, presented in Table 2, have a margin of error of less than 2 percent. Once the data were cleaned we had 795 colleges or community college districts left, representing all states but Alaska and Kentucky. To this data we added information on the percentage of full-time and the percentage of matriculated students for each college, again taken from IPEDs. Other variables that we thought might be important predictors of the percentage of Pell grants received were the college tuition and the per capita income of each state. Each of these variables is explained below.

Table 2
Percentage of Pell Grants given to public community college students, percentage of matriculated students, percentage of full-time students, average yearly tuition for full-time study and per capita income, by state (1999-2000)

State	% on Pell	% Matric	% Full Time	Average Tuition	Per Capita Income
NV	8.40%	39.29%	17.01%	\$1,211.00	\$28,883.00
CA	9.02%	70.00%	27.89%	\$317.00	\$29,818.00
OR	9.15%	64.59%	34.82%	\$1,587.00	\$26,192.00
MI	9.40%	70.61%	28.55%	\$1,741.00	\$27,886.00
IL	9.61%	91.54%	32.18%	\$1,499.00	\$30,274.00
AZ	9.74%	45.75%	26.72%	\$902.00	\$23,738.00
CO	9.75%	62.71%	26.52%	\$1,553.00	\$30,225.00
KS	10.35%	59.61%	33.45%	\$1,308.00	\$26,312.00
WI	10.39%	65.44%	35.83%	\$2,107.00	\$26,863.00
RI	11.21%	76.70%	31.90%	\$1,746.00	\$27,813.00
WA	12.15%	46.27%	47.59%	\$1,649.00	\$29,783.00
UT	12.20%	78.49%	41.33%	\$1,497.00	\$22,335.00
HI	12.60%	91.37%	43.68%	\$1,051.00	\$26,658.00
CT	12.64%	70.54%	26.02%	\$1,895.00	\$38,506.00
WY	13.37%	65.64%	43.76%	\$1,320.00	\$25,960.00
VA	13.46%	63.07%	29.08%	\$1,139.00	\$29,208.00
MD	14.30%	74.31%	32.09%	\$2,260.00	\$31,860.00
NC	15.15%	74.03%	40.14%	\$778.00	\$25,314.00
NH	15.86%	61.53%	29.69%	\$3,744.00	\$30,690.00
NJ	16.66%	80.33%	45.83%	\$2,155.00	\$34,666.00
TX	16.76%	83.30%	37.38%	\$890.00	\$26,266.00
MN	17.02%	89.21%	47.47%	\$2,372.00	\$30,127.00
PA	17.20%	91.36%	36.30%	\$2,117.00	\$27,971.00
FL	17.58%	76.68%	35.24%	\$1,333.00	\$26,560.00
TN	17.93%	72.96%	46.04%	\$1,315.00	\$24,722.00
MO	17.93%	78.13%	33.16%	\$1,441.00	\$25,815.00
MA	18.23%	76.14%	39.10%	\$1,927.00	\$34,482.00
OH	18.64%	71.78%	38.73%	\$2,374.00	\$26,725.00
OK	18.66%	84.11%	39.80%	\$1,239.00	\$22,576.00
NM	19.18%	71.99%	35.89%	\$824.00	\$20,920.00
ME	20.12%	68.32%	42.37%	\$2,592.00	\$24,220.00
IA	20.58%	84.55%	53.57%	\$2,056.00	\$24,945.00
NE	21.28%	89.00%	44.33%	\$1,369.00	\$26,663.00
NY	21.70%	83.01%	50.12%	\$2,554.00	\$32,620.00
IN	21.71%	NA	60.38%	\$2,125.00	\$25,682.00
AR	22.79%	72.50%	46.88%	\$1,068.00	\$21,191.00
DE	23.10%	92.24%	38.21%	\$1,616.00	\$29,625.00
ID	23.24%	75.35%	46.28%	\$1,253.00	\$22,387.00
MT	25.65%	94.42%	56.33%	\$1,955.00	\$21,511.00
VT	26.53%	67.53%	13.47%	\$2,846.00	\$25,514.00
GA	26.82%	91.83%	45.22%	\$1,366.00	\$26,522.00
WV	26.96%	NA	64.44%	\$1,592.00	\$20,720.00
ND	28.25%	NA	74.09%	\$1,891.00	\$23,053.00
SC	28.30%	85.59%	42.87%	\$1,343.00	\$22,903.00
AL	28.48%	87.29%	49.91%	\$1,486.00	\$22,706.00
MS	30.36%	NA	66.47%	\$971.00	\$20,180.00
LA	33.54%	92.80%	54.82%	\$912.00	\$22,292.00
SD	41.68%	NA	84.77%	\$2,752.00	\$24,491.00

Column 1 lists the states in ascending order from the lowest percentage of Pell grants received to the highest, excluding Alaska and Kentucky.

Column 2 is calculated by dividing the unduplicated annual headcount for each college into the yearly total of Pell grants recipients, including all full-time and part-time students (n= 795). College totals were then summed to get state averages. This is our dependent variable.

Column 3 is the percentage of students in credit courses who are degree seeking (matriculated). These numbers were calculated using college level IPEDs data (n=629). Where summed data for a state was judged to be too small or was not available we indicated "NA". For this variable headcount data was only available for the fall 1999 semester and not the full year. We would assume that the fall and annual percentages would not be significantly different. Since non-matriculated students are not eligible for Pell grants, we theorized that this would be a good predictor variable. We expected that as the percentage of degree seeking students increases, the percentage of students receiving Pell grants would also increase. Our analysis confirmed this relationship.

Column 4 is the percentage of students who are full-time. Again, this figure is based on the fall headcount only (n=753). Despite the fact that part-time students have been eligible for Pell grants for some time, we theorized that this would also be a good predictor because it is assumed that as students pay more tuition for more credit hours, they are more inclined to apply for financial aid. As a predictor variable, we would expect that as the percentage of full-time students increases, the percentage of students receiving Pell grants will also increase. Our analysis confirmed this relationship.

Column 5 is the average annual tuition. Statewide averages were used in the state regressions but actual tuition changes and mandatory fees for each college were used in our college level regressions. As a predictor variable, we would expect that states with low tuition will also have a low percentage of Pell grant recipients. Our analysis did not confirm this relationship.

Column 6 is the per capita income. As a predictor variable, we would expect that in lower income states more students would qualify for Pell grants. Our analysis confirmed this relationship.

Regressions

Using the percentage of Pell grants received by students as the dependent variable, we ran two sets of regressions; one using the state level data (n=48), shown in Table 2, the other using college level data (n=795).

Table 3
State level regression analysis of Pell grant percentage on predictor variables
(n=48)

Variable	B	SE of B	t	Sig.
Constant	.088	.075	1.176	.247
% Matriculated	.197	.067	2.942	.005
% Full-time	.146	.097	1.504	.141
Per capita income	- 4.48E-006	.000	-3.527	.029

$$R^2 (\text{adj.}) = .433$$

Our analysis showed that the percentage of matriculated students and the percentage of full-time students had a moderate level collinearity problem. The correlation between these two variables was .563. This means that we could not distinguish the effects of one variable from the other on the dependent variable. The ideal solution to this problem would have been to obtain more data but that was not possible with a finite number of states. This problem was mitigated once we moved to college level data. Thus, for our state level regressions we have included both variables in the model. In addition to these variables, the state per capita income was a statistically significant predictor of the percentage of students in the state receiving Pell grants. The average state tuition was not significant and was left out the equation. Our analysis of the individual college data for all 48 states reduced the collinearity problem and resulted in all of our independent variables being highly significant.

Table 4**College level regression analysis of Pell grant percentage on predictor variables
(n= 795)**

Variable	B	SE of B	t	Sig.
Constant	-.078	.016	-4.8664	.000
% Matriculated	.120	.021	5.659	.000
% Full-time	.417	.028	14.685	.000

R^2 (adj.) = .358

When running the individual college data, we left out the per capita income because we did not have these figures for the districts that the colleges served. Had these figures been available, we would expected them to show that Pell dollars flow to the lowest income districts, just as our statewide data showed. The level of tuition at each college was also left of out the equation because it was not significant. However, the importance of matriculation and full-time status as predictors of Pell grants was reinforced in this model.

What have we learned?

The initial stimulus for this research was the belief that the percentage of Pell grants given to community college students nationally could be used as a proxy for measuring the percentage of low-income students who attended the community college. However, statistics released by NCES indicated that only 16.9% of these students taking credit courses at community colleges received Pell grants. A query as to why this percentage was so low resulted in seven hypotheses that we sought to test. Let's look back at the seven most typical responses to our query and see what our data has revealed.

Responses 1&2 (inaccurate data)

The 16.9% appears to be wrong, but unlike our respondents, who felt that it was too low, our analysis shows that it is too high. The original data set sent to us by NCES contained 5194 schools. When we sorted these by Carnegie classification we got 1071 schools identified as public 2-year colleges. Once we added the annual headcounts and eliminated some obvious duplicates we were down to 914 colleges, with all 50 states represented. Dividing the number of

Pell recipients by the number of students yielded 17.1 %, close enough to the NCES rate of 16.9% to make us think that we were on the right track. However, both the numerator and the denominator contained data on colleges like the University of Alaska and the University of Kentucky that report community college data as part of their public 4-year colleges. Since it was not possible to separate associate degree seeking students from the rest we eliminated those colleges from our data set. Once the data was cleaned for this and a few other problems, we were working with only 795 colleges or community college districts. This yielded a rate of 13.8% of community college students receiving Pell grants in 1999-2000. We are forced to conclude that the NCES rate is not accurate. Whether either rate is a good proxy for the percentage of lower income students attending community colleges is a question that we will address below.

Response 3 (some students have a bachelor's degree)

Students enrolled at a community college who already have a bachelor's degree would generally not be eligible for Pell grants. If this were a significant number it would lower the national Pell grant percentage. We do not have very accurate measures of these "post-baccalaureate reverse transfers," but our best estimate is that it might be as high as 15% of our annual headcount (Townsend, 1999). One might speculate that most of these are not low-income students. However, if we take this 15% of students out of the denominator, the percentage moves from 13.8 to 16.3. This is not an important difference, but to make a fair comparison with public 4-year colleges, we would need to subtract the same type of students from their denominator as well. We do not have an accurate measure of the number of students going for a second bachelor's degree, but it seems unlikely to be as high as 15%.

Responses 4 & 5 (states differ)

Low tuition states- As Table 2 shows, states do differ and colleges within each state also differ. California is the lowest tuition state and has one of the lowest Pell grant rates. The experience of California (CA) always strongly influences national community college data because it is so large. In the fall 2000 semester, 5.7 million students were enrolled in credit

courses at the nation's community colleges. Approximately 1.4 million of these, or just about 25 percent, were in California (NCES, 2003 Table 198).

Since tuition rates are so low in CA, it is possible that a large number of low-income students were not eligible for Pell grants, or would have received so little that they did not bother to apply. This would clearly drag down the national average. Perhaps a similar pattern can be detected in other low-tuition states such as North Carolina or Texas, which are also assumed to enroll large numbers of low-income students. When we removed California from our numbers it raised the national percentage from 13.8 to 15.4. Certainly a noticeable impact, but not enough to explain the gap between the public 4-year and the public 2-year rate shown in Table 1. In fact, our regression analysis suggests that tuition does not seem to explain any of the differences among the states in the number of Pell grants given. Only seven states had average annual tuition rates below \$1000. Two of them, CA and AZ, had Pell grant rates below 10% but TX, NC, NM, LA and MS were all above our 13.8% national rate. The high Pell grant rates in Mississippi and Louisiana are probably due in part to their low per capita income (see Table 2).

Low effort states- We had also speculated that states may differ with respect to the help that they give students in applying for financial aid. Perhaps low tuition states are less aggressive in assisting students, or perhaps rural colleges find that they do not have the resources to properly staff their financial aid offices. A wide range of possibilities exist here and with our regressions explaining less than 50% of the differences between states, there is plenty of room left for this variable to be a strong predictor. Unfortunately we have not been able to test for this using our data. We do note, however, that a recent dissertation found a wide range of differences in the financial aid process at the California community colleges (MacCallum, 2004).

In California, colleges might have an ideological, but certainly little financial, incentive to process financial aid because enrollments are expanding rapidly and the tuition paid by students does not stay with the colleges (see Romano, 2003 for more on this). According to MacCallum (2004), colleges with poorly staffed financial aid offices were found to be highly

correlated with the low number of Pell grant recipients and with poor student retention. This suggests that a low financial aid effort in some states and colleges might help explain some of the low national Pell grant rate for community college students.

On the other hand, the low Pell grant rate in California might be explained by the generous state financial aid system. Giving a student a Cal Grant requires less paperwork than applying for a Pell grant. Perhaps other states with generous state aid packages have lower Pell grant rates. This is true for Illinois but not for New York and Pennsylvania which have high Pell grant rates. We will not explore this question further but additional research needs to be done in this area.

Response 6 (nature of the student body)

Part-timers- The nature of the student body under examination here is the impact of being a part-time and/or a non-matriculated student. Part-time students are eligible for Pell grants and this status, per se, should not be given as a reason for the low 16.9% (or more accurately 13.8%) that we are examining. However, grants to part-timers are reduced, and it is likely that part-time students, some of whom attend at night, on weekends, or in small satellite centers, have less access to information about financial aid than do full-time students. It is also possible that even with perfect information, students may not be enticed to go through the laborious process of applying for a grant when the reduced part-time Pell award can be as low as \$200. When confronted with the multitude of “tax-like” forms required of applicants, along with the verification of income requirements, many students simply skip the process altogether. We have no way of testing for this but we do note that the percentage of full-time, full-year public 2-year college students receiving Pell Grants in 1999-2000 was 31.7%, compared to 14.2% of the part-time students (NCES, 2003, Table 322). Our regression analysis, on both the state and the college level, confirmed that full-time status was a good predictor of the number of Pell grants awarded.

The NCES data in Table 1 shows that the Pell grant rate of 2-year and 4-year public colleges were 16.9% and 23.9% respectively. We also know that, for the fall 1999 semester, only 36.2% of the 2-year public college students were full-time, while the percentage for the public 4-year colleges was 78.2% (NCES, 2003, Table 178). Although we cannot say with any precision just why part-time students receive fewer Pell grants than full-time students, we do know that the high ratio of part-timers at the community college drags down their overall percentage. A more accurate comparison between the two types of colleges would adjust for the differences in the part-time, full-time ratio. When we adjust the denominator for this, the Pell grant rate for the community colleges goes up from 13.8% to 23.8%, the same as the rate for the public 4-year colleges.

Degree seeking- We were also able to examine the effect of the matriculated vs non-matriculated nature of the student body. Our college and statewide data were taken from IPEDs and is probably less accurate and less complete (n=629) than the other figures in Table 2. However, regressions confirm that being matriculated is a strong predictor in explaining the differences between states and colleges in the number of Pell grants awarded.

In order to receive a Pell grant students must be matriculated. Nationally, it is estimated that about 15% of the credit students in the community college are not matriculated for a degree, while for the 4-year public colleges it is estimated that a little over 5% of the undergraduate population is not matriculated. Since the 2-year colleges have a higher percentage of non-matriculated students than public 4-year colleges, we seem to have found another reason for the low Pell grant rate for the 2-year sector. Clearly, many of the “non-matrics” are also part-time students, but we are not able to separate the two types of students within the enrollment data that we are using. However, if we were to adjust the 2-year rate to that of the 4-year colleges, it would make the comparison between the two more meaningful. Reducing the denominator for this factor would make the community college rate rise from 13.8% to 15.4%.

It is tempting to adjust the community college denominator for all of the factors we have examined thus far. That is, in comparing the community college with the 4-year public colleges, we could adjust the annual unduplicated headcount number for the greater number of part-time, non-matriculated and already degreed students. This would require some double counting, but as our regressions indicate, not all students overlap from one category to the other. Assuming no double counting, it would raise the community college Pell rate from 13.8% to 41.9%.

Response 7 (process too complicated)

In order to receive a Pell grant, students must fill out the multi-page FAFSA federal application form that contains up to 130 questions. Perhaps the process for applying is too complicated and results in an artificially low number of recipients at the community college level. Over the past few years the U.S. Department of Education has tried to simplify the process, but the problem still remains. As part of the process of reauthorizing the Higher Education Act, Congress mandated a study of the current system of processing financial aid. On January 23, 2005 the blue ribbon advisory committee issued its final report (ACSFA, 2005). The report suggests a number of cost-free ways to disentangle the students aid process and increase the number of low-income applicants to college. At several points the report highlights factors that are pointed in the direction of the typical community college student. One example is the

harsh treatment of student earnings from work. Penalized at a taxation rate of 50 percent, even low levels of student earnings quickly translate into small increases in income that, in turn, mean lower awards the following year. [students] work longer hours in order to limit borrowing, only to find higher expenses the following year, but lower grant aid to meet them- a Catch-22 that can force them to work even longer hours at the expense of academic pursuits, enroll part-time, or drop out all together (ACSFA, 2005, p. 6-7).

Given the complexity of the current system, it is not surprising that some qualified applicants do not apply for financial aid or attend college. Aside from the students who are discouraged from applying to college all together, a recent study by ACE (King, 2004) showed that half of the enrolled undergraduate students had not filed the FAFSA form for 1999-2000. The major reason for not filing is that the students and/or their parents believed that their income was too high to qualify for an award. This is certainly true for most of the non-filers. However, ACE estimates that 20 percent of the non-filers were from low and moderate-income groups. As Table 5 shows, the non-filers were more likely to attend the community college than other types of institutions. For the public 2-year college, 67.4% of the students did not even ask for federal financial aid.

Table 5 Percentage of Undergraduates Who Did Not File an FAFSA for 1999-2000 by Attendance Status and Institution Type

Type of College	ATTENDANCE STATUS		
	Full-Time (%)	Less than Full-Time (%)	Total (%)
Public 2-year	46.2	76.5	67.4
Public 4-year	33.5	60.1	42.3
Private 4-year (not for profit)	22.8	59.0	32.9
Private (for profit)	10.8	22.6	13.3

For the community college, the non-filers are concentrated among the part-time students. It seems very likely that at least some of these would qualify for Pell grants if they filed, but we have no way of estimating how much that would raise the percentage receiving such grants. It is certainly possible that some, or perhaps many, community colleges could be more proactive in informing and assisting students with the financial aid process (see responses 4 and 5 above).

One obvious lesson this study teaches us is that we must be careful in comparing 2 and 4-year college data on financial aid. Yet, so much of the data released by the U.S. Department of Education still deals with a student population that is more typical of the 4-year than the 2-year college (Dellow & Romano, 2002). For instance, an important recent report released by NCES

(Choy, 2004) on how students pay for college, uses only data on full-time, full-year undergraduates who are financially dependent on their parents. Two-year and 4-year college students are compared, despite the fact that such a cohort represents only 12% of the public 2-year vs 43% of the public 4-year undergraduate population (Choy, 2004, p.5).

In summary

Is the Pell grant rate a good proxy for the number of low income students who attend the community college?—The answer is No. Both the NCES rate of 16.9% and our recalculated rate of 13.8% are too low because the denominator used in the calculation is too high. To make a more accurate comparison with similarly situated students at public 4-year colleges, we would need to adjust the denominator for the relatively larger number of part-time, non-matriculated, and post-baccalaureate students enrolled at the community college.

When we adjust the rate for the number of part-time students, our community college Pell grant rate jumps from 13.8% to 23.8%. If we include the students who already have bachelor's degrees the percentage moves up to 26.3%. If we were able to exclude only the non-matriculated students from the denominator, the Pell rate would jump from 13.8% to 15.4%; and if we added all of these factors together and subtracted them from the denominator, the rate would jump to 41.9% (compared with 23.7% at public 4-year colleges). But as we have stated, it would not be accurate to keep adding these numbers to what we subtract from the denominator because a lot of double counting would be taking place. That is, probably most of the non-matriculated students are also part-timers; and some or all of the already degreed students are the same ones who are part-time and non-matriculated. An educated guess of the duplicates would give us a rate that is perhaps double that of the one we have calculated. Thus, we estimate that the 13.8% turns out to about 28%. This is slightly higher than the public 4-year college rate of 23.9% but is a more accurate rate to use when comparing community college students with similarly situated students at the public 4-year colleges.

Our analysis has not contradicted the common assumption that the community college is more likely to attract low-income students than public 4-year college. It has however, led us to the conclusion that we cannot use the Pell grant rate to determine, with any degree of accuracy, the percentage of low-income students nationally who are attending the community college at any given point in time. However, within a given state, looking at the Pell grants rate does seem to highlight the colleges enrolling the lowest income students. Thus, the Pell grant rates may be a better proxy of the relative family income levels of students among colleges within a state than it is in comparing one state to another or in comparing the 2-year to the 4-year college students.

Community college family incomes

If we cannot use Pell grants to estimate the percentage of low-income families that attend community colleges, what can we use? As we have pointed out, no national income data exists on this question although most of the indirect information that we have indicates that students at public 2-year colleges are poorer than those at public 4-year colleges. That is, they are more likely to be minority students, to be first generation college students, to come from single parent families and to come from and non-English speaking dominant families.

A recent study by Adelman using survey evidence compiled by NCES in the Beginning Postsecondary Longitudinal Study, 1995/96-2001, is also instructive. Looking at traditional age students (age 20 or less), Adelman, shows that 28.6% of students (1994) attending 4-year colleges have family incomes below \$30,000, as opposed to 37.1% for the same cohort of students who attended the community college (Adelman, 2005, Table E-1). In addition, Adelman's data shows that the percentage of young students entering community colleges from the lowest SES quintile rose from 44% of the high school class of 1972 to 54.9% of the high school class of 1992. In contrast, the percentage of the same age cohort of students who entered 4-year colleges with family incomes in the lowest quintile fell from 41.7% for the class of 1972 to 32.2% for the class of 1992 (Adelman, 2005, Table 10, p.33). Since the 4-year college data in this study includes both public and private colleges, we would expect that the income spread

between public 2-year and public 4-year colleges to be even greater. It should be noted however, that these figures are for beginning students just out of high school and do not represent the majority of community college students.

While the family incomes of traditional-age students who first enroll at the community college seem to be lower than that of the similar age cohort that enters public 4-year colleges, we may not be able to say the same for older students. It may well be that part-time older students who are working, have incomes that are too high to qualify for financial aid. Many in this group may be living “on the margin” but working and living at home makes them ineligible for financial aid. Improving access and success for these students will require changing the financial aid eligibility requirements and simplifying the application process. Accepting the recommendations of the Congressional Advisory Committee that has just studied this issue would be a step in the right direction (ACSFAs, 2005).

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