In response to concerns about the loss of effectiveness of the community college transfer function, this paper examines the steady decline in rates of minority student transfer from two- to four-year colleges and offers policy recommendations for facilitating transfer and baccalaureate degree attainment. Initial sections review data showing the disproportionately high enrollment of minority college students in community colleges; trends in race and ethnicity in the U.S. population composition; racial and ethnic differences by age and region; and the decline of the transfer function and the rise of vocational curricula at community colleges during the 1960s and 1970s. Next, rates of high school completion, college entrance, and college graduation are examined to illustrate the progress of minorities as they flow through the educational pipeline. Several descriptive and theoretical studies of minority student participation in community colleges are then reviewed, focusing on students' aspirations and findings specific to Hispanic, American Indian, and Black students. The final sections suggest alternative solutions that can promote baccalaureate attainment, including the creation of academic colleges to provide lower-division curricula, the establishment of transfer colleges within community colleges, grants and scholarships for minority transfers, state transfer student monitoring systems, special institutional initiatives, and academic partnership programs. (34 references are included.) (AML)
SALVAGING MINORITY TRANSFER STUDENTS: TOWARD NEW POLICIES THAT FACILITATE BACCALAUREATE ATTAINMENT

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Salvaging Minority Transfer Students: Toward New Policies that Facilitate Baccalaureate Attainment

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To what extent do minority students find viable opportunities to initiate college-parallel studies in community colleges and to ultimately transfer to senior institutions? Currently, this question is receiving increased attention, given the fact that for large numbers of Hispanics, blacks, Asians and American Indians, community colleges are the main entry points to higher education. Figure 1 indicates that of the 529,000 Hispanics enrolled in higher education, 54 percent were enrolled in two year colleges both in Fall 1980 and Fall 1984. About 43 percent of blacks and Asians who enrolled in college attended two year colleges in 1984-85, compared to 54 percent of American Indian college students (El-Khawas, Carter & Ottinger, 1988). While these cohorts may be considered students with which higher education has had the least success, they also represent a large and growing market of the college going population.

Figures 2, 3 and 4 reveal much about the future population composition in this country and about the profile of new students that will be entering the educational system. In Figure 2 population trends graphically portray the dramatic growth of blacks and Hispanics. By the year 2000, blacks are expected to comprise 13.3 percent of the U.S. population and Hispanics, 9.4 percent. Persons of "other races," i.e., Asians, Pacific Islanders and American Indians, totaled 7.1 million in 1985. Chiefly due to immigration, this group grew by 37.5 percent between 1980 and July 1985. Figure 3 portrays age differences among whites, blacks and Hispanics in 1985. Only 21.1 percent of white children were 14 years old or younger, compared to 28.1 percent for black children and
FIGURE 1

Minority Enrollment in Two-Year and Four-Year Institutions: 1980 and 1984

<table>
<thead>
<tr>
<th>Race/Ethnicity of Student</th>
<th>4-year 1980</th>
<th>4-year 1984</th>
<th>2-year 1980</th>
<th>2-year 1984</th>
</tr>
</thead>
<tbody>
<tr>
<td>Liacs</td>
<td>634</td>
<td>472</td>
<td>457</td>
<td>113</td>
</tr>
<tr>
<td>Hispanics</td>
<td>217</td>
<td>255</td>
<td>288</td>
<td>162</td>
</tr>
<tr>
<td>Asians</td>
<td>217</td>
<td>217</td>
<td>124</td>
<td>165</td>
</tr>
<tr>
<td>American Indians</td>
<td>37</td>
<td>37</td>
<td>37</td>
<td>45</td>
</tr>
<tr>
<td>Nonresident Aliens</td>
<td>241</td>
<td>280</td>
<td>64</td>
<td>52</td>
</tr>
</tbody>
</table>

30.5 for Hispanics. A relatively young profile can also be found for persons of "other races." This age profile is expected to continue over the next two decades. Figure 4 provides a view of the regions minority populations are concentrated. Blacks are concentrated in the South (53 percent) and midwest (20 percent). Hispanics are located in the west (43 percent) and south (30 percent). Asians are concentrated primarily in western states. About half (49 percent) of American Indians live in the western states (El-Khawas, Carter & Ottinger, 1988). To be sure, these population trends foretell the future of new student enrollments in the nation's educational system. In the postsecondary arena, community colleges can be expected to enroll disproportionate numbers of minority students, but today there is concern about the extent that the colleges can make higher education a reality for minorities.

The Problem

For about half of minority students, completion of baccalaureate studies is conditioned by transfer from a community college to a four-year institution (Richardson & Bender, 1987). Yet, today there is mounting concern that over the years, the community college transfer function has lost its strength and vitality and that relative to their proportionate enrollment, minority students simply are not transferring in numbers high enough to create optimism that significantly more students will eventually earn bachelor's degrees (Rendon & Nora, 1988; Nora & Rendon, 1988; Richardson & Bender, 1987; Cohen, Brawer & Bensimon, 1985). The warning signs are visibly apparent. Transfer rates often fall lower than 10 percent; some states with high two-year college minority enrollments have reported transfer declines in recent years; the colleges are often accused of providing students with inadequate counseling and substandard academic preparation; student expectations have declined so that higher order thinking skills receive limited attention and there is concern that community college transfer losses are highest in colleges with high proportions of minority students (Rendon, Justiz & Resta, 1988; Bernstein, 1986; Hayward, 1985; Richardson & Bender, 1987; Richardson, Fisk & Okun, 1983; Rouche & Comstock, 1981). The evolution of the community
FIGURE 2


FIGURE 3

Racial and Ethnic Differences, by Age: 1985

FIGURE 4

Racial and Ethnic Differences, by Region: 1980

<table>
<thead>
<tr>
<th>Race</th>
<th>Northeast</th>
<th>Midwest</th>
<th>South</th>
<th>West</th>
</tr>
</thead>
<tbody>
<tr>
<td>White</td>
<td>23</td>
<td>28</td>
<td>31</td>
<td>18</td>
</tr>
<tr>
<td>Black</td>
<td>18</td>
<td>20</td>
<td>53</td>
<td>9</td>
</tr>
<tr>
<td>Hispanic</td>
<td>18</td>
<td>9</td>
<td>30</td>
<td>43</td>
</tr>
<tr>
<td>American Indian</td>
<td>6</td>
<td>18</td>
<td>27</td>
<td>49</td>
</tr>
<tr>
<td>Japanese</td>
<td>7</td>
<td>6</td>
<td>6</td>
<td>81</td>
</tr>
<tr>
<td>Chinese</td>
<td>27</td>
<td>9</td>
<td>11</td>
<td>53</td>
</tr>
<tr>
<td>Filipino</td>
<td>10</td>
<td>10</td>
<td>11</td>
<td>69</td>
</tr>
</tbody>
</table>

college provides some of the clues to why the decline of transfer occurred.

The Decline of the Transfer Function
Since their inception, two-year colleges offered a curriculum that prepared students to transfer to senior colleges and universities. The transfer program, also known as the college-parallel or the college preparatory program, was the first curriculum to be offered in junior colleges, and the two-year college was identified simply as the first two years of a four-year college. Before 1950, the transfer program overshadowed all other functions (Monroe, 1977). Through the 1950s, approximately 65 percent of students in two-year colleges participated in transfer programs (Lombardi, 1980). However, as the colleges grew and became concerned with providing access and equal opportunity to people with diverse academic, social and racial backgrounds, more functions were added to the colleges' mission. These included occupational programs and post-high school terminal programs for students who sought less than a two-year college preparation to enter jobs or prepare for family living. After World War II, junior colleges became community colleges, and added two more functions. Community services were an array of cultural and educational programs that did not lead to transfer. Remedial studies programs were designed to remedy the weak academic skills of high school graduates.

By the late 1960s and 1970s, multiple functions allowed community colleges to become people's colleges. In the process, they underwent a major philosophical shift from institutions providing a traditional college preparation to flexible colleges which prepared students to find a job, adapt to life and get the most for their money in a short time period, without leaving home and without having to give up a full-time job (Rendon, 1984; Cohen, 1984; Monroe, 1977). Factors contributing to the decline of transfer during this period included: increased enrollments in career and vocational programs; the growth of remedial education; the addition of adult, community and continuing education functions; an increase in the proportion of part-time students and
increased competition from four-year institutions for students who in the past had enrolled in community colleges. Consequently, by 1973 less than 43 percent of students in two-year colleges were participating in transfer programs and by 1980 the proportion had dropped to about 30 percent (Friedlander, 1980). Today, estimates of students who transfer range from 5 to 15 percent, and if present trends continue, it is expected that the number of those in transfer programs may decline to about 3 to 5 percent of total enrollments (Richardson & Bender, 1985).

In an important article tracing the development of the community college and its possible links to social stratification, Karabel (1986, June), asserts that in the early 1980s, the most fundamental change to have occurred in the history of the American community college was the "transformation from an institution primarily offering college-parallel liberal arts programs to one emphasizing terminal vocational programs" (p.21). Table 1 graphically portrays the rise of vocationalism. While the share of associate degrees awarded in arts and sciences declined from 57.4 percent in 1970-71 to 37.4 percent in 1980-81, the share of associate degrees awarded in occupational programs rose from 42.6 percent to 62.6 percent (Cohen, 1984). In 1985 the largest number of associate degrees awarded was in business and management (26.6 percent). The second largest degree area was liberal/general studies (23.6 percent), although approximately three percent fewer degrees were awarded in this area in 1985 than in 1983 (El-Khawas, Carter & Ottinger, 1988).

According to Karabel (1986, June) this rise in vocationalism was due to declining labor markets for graduates of four year colleges, especially in the liberal arts; the leveling off of the process of educational inflation, as evidenced by declines in the proportion of 18 year olds receiving bachelor's degrees awarded; and internal organizational interests of community college administrators who wanted to carve out a distinct niche and identity. Interestingly, while the rise in vocationalism was associated with striking declines in the rate of community college transfers, it also became apparent that vocational curricula sometimes led to transfer into four-year institutions. But whether
### Table 1

**Associate Degrees Conferred by Institutions of Higher Education by Type of Curriculum, 1970-71 to 1980-81**

<table>
<thead>
<tr>
<th>Year</th>
<th>All Curricula</th>
<th>Arts and Sciences or General Programs</th>
<th>Occupational Programs</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number</td>
<td>Percentage of Total</td>
<td>Number</td>
</tr>
<tr>
<td>1970-71</td>
<td>252,610</td>
<td>144,883</td>
<td>107,727</td>
</tr>
<tr>
<td>1971-72</td>
<td>292,119</td>
<td>158,283</td>
<td>133,836</td>
</tr>
<tr>
<td>1972-73</td>
<td>317,008</td>
<td>161,051</td>
<td>155,957</td>
</tr>
<tr>
<td>1973-74</td>
<td>343,924</td>
<td>164,659</td>
<td>179,265</td>
</tr>
<tr>
<td>1974-75</td>
<td>360,171</td>
<td>166,567</td>
<td>193,604</td>
</tr>
<tr>
<td>1975-76</td>
<td>391,454</td>
<td>175,185</td>
<td>216,269</td>
</tr>
<tr>
<td>1976-77</td>
<td>406,377</td>
<td>171,631</td>
<td>234,746</td>
</tr>
<tr>
<td>1977-78</td>
<td>412,246</td>
<td>167,036</td>
<td>245,210</td>
</tr>
<tr>
<td>1978-79</td>
<td>402,702</td>
<td>157,572</td>
<td>245,130</td>
</tr>
<tr>
<td>1979-80</td>
<td>400,910</td>
<td>154,282</td>
<td>246,626</td>
</tr>
<tr>
<td>1980-81</td>
<td>416,377</td>
<td>155,731</td>
<td>260,646</td>
</tr>
</tbody>
</table>


the vocational student rate of transfer is high or low, there appears to be consensus that transfer education has declined substantially during the past 15 to 20 years (Karabel, 1986, June: Lombardi, 1979; Friedlander, 1980; Cohen, Brawer & Bensimon, 1985; Richardson & Bender, 1987; Rendon, Justiz & Resta, 1988).

Yet, while many believe that vocational programs are what community colleges can and should do best, the jury is still out on what happens to students when they seek to enter the labor market. Nonetheless, a few existing studies do not support the view that vocational education is a path to upward mobility and economic security. These studies suggest that community college graduates often cannot secure employment in the fields they were trained, that economic returns are modest and that the most successful training programs place graduates in low status jobs (Pincus, 1980; Karabel, June, 1986).

Thus, the criticism of transfer programs and vocational curricula is double jeopardy for community colleges. It appears that not only has the transfer function been reduced to a very low priority on many two-year college campuses, but that vocational programs may lead to low-level, dead end jobs that perpetuate a stratified class structure, with minorities and the disadvantaged occupying the bottom stratum. Reversing this situation will require a major breakthrough in revitalizing the transfer function, attracting students to transfer programs and stopping the drainage of students as they flow through the educational pipeline.

The Educational Pipeline Revisited

Rates of high school completion, college entrance and college graduation rates provide a portrait about the progress of minorities as they flow through the educational
pipeline. Because a major rupture in the pipeline is believed to be occurring at the community college level, it is important to examine the progress of minorities as they flow through the pipeline.

**Pre-college Casualties**

Table 2 reveals that the white proportion of high school graduates has steadily increased from 1971 to 1985. Interestingly, the proportion of white high school graduates increased from 82.2 percent in 1981 to 83.6 percent in 1985, despite a decrease in the total population of white 18-24 year olds during that same period, and a decrease in the number of whites completing high school. Blacks and Hispanics also show increases in the proportion of high school graduates over the period in question. However, these increases have not kept pace with the dramatic population growth of blacks and Hispanics. Between 1971 and 1985, the black population of 18-24 year olds grew by 77 percent. The comparable figure for Hispanics was 60 percent. Yet, the proportion of black high school graduates during this same period increased by only 13.2 points and for Hispanics, 11 points. Consequently, whatever modest gains blacks and Hispanics made in terms of high school graduation may account for sheer growth in the universe of 18-24 year olds, as opposed to an increased propensity for these cohorts to stay in school.

In fact, high dropout rates have been recorded in urban centers. While the national dropout rate for Hispanics is now about 37 percent, in New York city, the rate is as high as 80 percent. The rate in Miami is 32 percent; Los Angeles, 50 percent and San Antonio, 23 percent (National Commission on Secondary Schooling for Hispanics, 1984). According to census data, only 44.8 percent of the Mexican origin population and 53.8 percent of the Puerto Rican population have completed four years of high school or more (U.S. Department of the Census, Bureau of the Census, 1987, August). Nationally, about 24 percent of blacks are dropping out, but the dropout rates are believed to be higher in a majority of low high school retention states located in the
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Total:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total population 18-24-y.-olds</td>
<td>23,668</td>
<td>26,919</td>
<td>28,965</td>
<td>27,122</td>
</tr>
<tr>
<td>Number completing high school</td>
<td>18,691</td>
<td>21,677</td>
<td>23,343</td>
<td>22,349</td>
</tr>
<tr>
<td>Number enrolled in college</td>
<td>6,210</td>
<td>7,182</td>
<td>7,575</td>
<td>7,537</td>
</tr>
<tr>
<td>H.S. graduates as a percentage of total</td>
<td>79.0%</td>
<td>80.5%</td>
<td>80.6%</td>
<td>82.4%</td>
</tr>
<tr>
<td>College entrants as a percentage of 18-24-yr.-old H.S. graduates</td>
<td>33.2%</td>
<td>33.1%</td>
<td>32.5%</td>
<td>33.7%</td>
</tr>
<tr>
<td>College entrants as a percentage of 18-24-yr.-old population</td>
<td>26.2%</td>
<td>26.7%</td>
<td>26.2%</td>
<td>27.8%</td>
</tr>
<tr>
<td><strong>White:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total population white 18-24-y.-olds</td>
<td>20,533</td>
<td>23,119</td>
<td>24,486</td>
<td>22,632</td>
</tr>
<tr>
<td>Number completing high school</td>
<td>16,693</td>
<td>19,045</td>
<td>20,123</td>
<td>18,916</td>
</tr>
<tr>
<td>Number enrolled in college</td>
<td>5,594</td>
<td>6,276</td>
<td>6,549</td>
<td>6,500</td>
</tr>
<tr>
<td>H.S. graduates as a percentage of total</td>
<td>81.3%</td>
<td>82.4%</td>
<td>82.2%</td>
<td>83.6%</td>
</tr>
<tr>
<td>College entrants as a percentage of 18-24-yr.-old H.S. graduates</td>
<td>33.5%</td>
<td>33.0%</td>
<td>32.5%</td>
<td>34.4%</td>
</tr>
<tr>
<td>College entrants as a percentage of 18-24-yr.-old population</td>
<td>27.2%</td>
<td>27.1%</td>
<td>26.7%</td>
<td>28.7%</td>
</tr>
<tr>
<td>Percentage of the total 18-24-yr.-old population</td>
<td>86.6%</td>
<td>85.9%</td>
<td>84.5%</td>
<td>83.4%</td>
</tr>
<tr>
<td><strong>Black:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total population Black 18-24-y.-olds</td>
<td>2,866</td>
<td>3,315</td>
<td>3,778</td>
<td>3,716</td>
</tr>
<tr>
<td>Number completing high school</td>
<td>1,789</td>
<td>2,239</td>
<td>2,678</td>
<td>2,810</td>
</tr>
<tr>
<td>Number enrolled in college</td>
<td>522</td>
<td>749</td>
<td>750</td>
<td>734</td>
</tr>
<tr>
<td>H.S. graduates as a percentage of total</td>
<td>52.4%</td>
<td>67.5%</td>
<td>70.9%</td>
<td>75.6%</td>
</tr>
<tr>
<td>College entrants as a percentage of 18-24-yr.-old H.S. graduates</td>
<td>29.2%</td>
<td>33.5%</td>
<td>28.0%</td>
<td>26.1%</td>
</tr>
<tr>
<td>College entrants as a percentage of 18-24-yr.-old population</td>
<td>18.2%</td>
<td>22.6%</td>
<td>19.9%</td>
<td>19.8%</td>
</tr>
<tr>
<td>Percentage of the total 18-24-yr.-old population</td>
<td>12.1%</td>
<td>12.3%</td>
<td>13.4%</td>
<td>13.7%</td>
</tr>
<tr>
<td><strong>Hispanic (2):</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total population Hispanic 18-24-y.-olds</td>
<td>1,338</td>
<td>1,551</td>
<td>2,052</td>
<td>2,221</td>
</tr>
<tr>
<td>Number completing high school</td>
<td>694</td>
<td>862</td>
<td>1,144</td>
<td>1,296</td>
</tr>
<tr>
<td>Number enrolled in college</td>
<td>179</td>
<td>309</td>
<td>342</td>
<td>375</td>
</tr>
<tr>
<td>H.S. graduates as a percentage of total</td>
<td>51.9%</td>
<td>55.6%</td>
<td>55.8%</td>
<td>62.9%</td>
</tr>
<tr>
<td>College entrants as a percentage of 18-24-yr.-old H.S. graduates</td>
<td>25.8%</td>
<td>35.2%</td>
<td>29.8%</td>
<td>26.5%</td>
</tr>
<tr>
<td>College entrants as a percentage of 18-24-yr.-old population</td>
<td>13.4%</td>
<td>19.9%</td>
<td>16.6%</td>
<td>16.9%</td>
</tr>
<tr>
<td>Percentage of the total 18-24-yr.-old population</td>
<td>5.6%</td>
<td>5.7%</td>
<td>7.1%</td>
<td>8.2%</td>
</tr>
</tbody>
</table>

**NOTES**

(1) Since these high school completion rates were calculated by adding the numbers of individuals in this age group enrolled in college as of October of that year and the number of high school graduates not enrolled in college, these rates include individuals who enrolled in college without receiving a high school diploma or a GED. Several states do not require entering junior college students to have a diploma or GED. Therefore, these high school completion rates will be slightly higher than figures that do not include this relatively small population.

(2) Hispanics may be of any race.

**SOURCES**


southeast, where blacks are concentrated (Hodgkinson, 1986). In Alaska 54 percent of
Alaskan Natives do not graduate from high school, compared to about 40 percent of

Testimony provided before the Carnegie Corporation Quality Education for Minorities
Project National Resource Group suggest that institutions have much to do with why
minorities do not stay in school. The factors included: 1) differential tracking. Students
are often channeled away from activities which foster inquiry and creative thinking
skills and toward activities which require obedience, deference and routine and
mechanical learning; 2) segregation into minority schools. In Chicago 87 percent of
black children attend racially and economically isolated schools. These are
characterized by crowded classes, limited resources, teachers with fewer advanced
degrees and with degrees from less selective colleges, as well as teachers who are
new, inexperienced, low yield or outside their teaching field; 3) lack of identification
with counselors and teachers. Children need to identify with people who add a "human
touch," who make the child feel welcome and who accept the child's culture; 4) poor
attitudes and low expectations from teachers. The mindset is that students can't learn,
and kids are often written off as dumb, ignorant and unready; 5) lack of support
systems. Early in school some teachers kill kids' curiosity and spirit of learning; 6)
unclear goals. Often students do not understand the connection between what goes on
in school and in real life. Often youngsters come out of school with no skills. Others
still in school see this and get disappointed; 7) feelings of failure. Community leaders
explained that students dropped out psychologically first; then they stopped trying; 8)
undefined values. These ambiguities often lead to drugs, gangs and violence; 9)
problems at home; 10) lack of parental involvement. Schools have not provided the
mechanisms to help them to get involved; 11) a curriculum that does not include
minority perspectives. This is especially true in the case of American Indian and
Alaskan Native student populations.

Getting to College
Disproportionately high losses for minorities occur in the transition from high school to college. Table 2 reveals that for whites, the proportion of college entrants increased from 1981 to 1985 despite decreases in the number completing high school. For blacks and Hispanics, the reverse trend is true. Between 1981 and 1985, the proportion of black college entrants dropped from 28 percent to 26.1 percent, and Hispanics dropped from 29.8 percent to 26.9 percent. These losses occurred even in the face of increases in the overall number completing high school. A study by Critfield and Paul (1987, Fall; 1988 Winter) which assessed changes in educational opportunities for minorities in metropolitan Chicago, Los Angeles, Atlanta, Houston and Philadelphia sheds additional insight into these perplexing trends. The data indicated that blacks and Hispanics had decreasing proportions of their 12th grade or high school graduate group enrolling in four-year institutions. Similarly, community college enrollment data showed black enrollments rising and falling and Hispanic enrollments rising steadily for the most part. However, when high school enrollment data was included in the analysis, the proportion of high school blacks and Hispanics enrolling in two-year institutions dropped in all but one instance. Thus, the regional and national trend appears to be that of decreasing higher education enrollment for blacks and Hispanics (as a percentage of their high school enrollment) and increasing higher education enrollment for whites (as a percentage of their high school enrollment) in spite of the fact that high school enrollments for whites are declining for whites and increasing for blacks and Hispanics.

Disturbing trends are also noted for American Indians. A recent study (Harris Tijerina & Blemmer, 1987, Fall; 1988, Winter) documented that proportionately fewer Indians have enrolled in college after 1972. These declines have occurred even though the birth rate of American Indians is quite high, given that the average age of the population is 16.

Making college an attractive option for minorities is a critical challenge for the nation's educational system, especially at a time when a larger number of high school graduates is producing a smaller number of college students. Possible contributors to
this access decline are diminishing financial aid opportunities, lack of relationship between a college degree and a good job, poor high school counseling, lack or preparedness for college, higher university admissions standards and the recognition that a college degree no longer guarantees access to a high level job. Further, many minorities exhibit a naivete about the costs, benefits and consequences of a college education, and their parents may not be able to provide appropriate information since they themselves did not attend college. Further, it may be that many minority graduates will get a job after high school graduation and defer entering postsecondary education to a later date. Of course, many minorities may be finding military service an appealing way to advance their education, particularly in the high tech areas. Likewise, it may be that national trends of policy declines with respect to minority concerns, indifference and the growth of institutional racism may be taking their toll on minority students (Rendon, Justiz & Resta, 1988; Hodgkinson, 1985).

**Completing College**

Another way to examine the matter is to look at the educational pipeline in 1985, as portrayed in Figure 5. In that year, about one-third of the white high school graduates enrolled in college, compared to one-fourth of blacks and Hispanics. Dramatic discrepancies may also be noted in the share of undergraduate, graduate and first professional degrees earned. Compared to whites, minority students appear to be earning minute proportions of college degrees, and in fact this snapshot of the pipeline reveals decreasing minority representation at each higher level of degree attainment, with minor exceptions in first professional degrees earned.

Poor minority degree completion may be attributed to factors which include: 1) the poor quality of education received at early stages in the pipeline; 2) campus racism and overall institutional quality; 3) differential tracking in schools which leads minorities to spend fewer years studying academic subjects that prepare them for college; 4) isolation; 5) lack of faculty role models; 6) lack of student/faculty contact; 7) minimal social and academic integration. The consequences are devastating. Of the 1980 high
Figure 5. The Educational Pipeline in 1985

18-24 yr. old High School Graduates

<table>
<thead>
<tr>
<th>Ethnicity</th>
<th>College Entrants as Percent of 18-24 yr. old High School Graduates</th>
<th>Earned Bachelor's Degrees</th>
<th>Earned Master's Degrees</th>
<th>Earned Doctorates</th>
<th>Earned First Professional Degrees</th>
</tr>
</thead>
<tbody>
<tr>
<td>Whites</td>
<td></td>
<td>83.6</td>
<td>85.3</td>
<td>74.1</td>
<td>89.0</td>
</tr>
<tr>
<td>Blacks</td>
<td></td>
<td>75.6</td>
<td>5.9</td>
<td>3.6</td>
<td>4.3</td>
</tr>
<tr>
<td>Hispanics</td>
<td></td>
<td>62.9</td>
<td>2.7</td>
<td>2.1</td>
<td>2.7</td>
</tr>
<tr>
<td>American Indians</td>
<td></td>
<td>60</td>
<td>.4</td>
<td>.4</td>
<td>.3</td>
</tr>
</tbody>
</table>

"Statistics in Higher Education."
school seniors who attended college, 28 percent of American Indians, 31 percent of blacks, 28 percent of Mexican Americans, 42 percent of Puerto Ricans and 26 percent of white students had dropped out by February 1984 (Wilson & Justiz, 1987, Fall; 1988, Winter).

More importantly, there is concern that disappointing retention and transfer rates in the community college sector, where minorities are concentrated, contribute to leakages further down the line. This is a critical concern given that increasing poverty rates, the tightening of college admissions standards and changing financial aid policies are making community colleges not only the most affordable, but the most viable, and often only option available to pursue a postsecondary education.

According to a report issued by the Commission on the Higher Education of Minorities (1982): "The single most important factor contributing to the severe underrepresentation of Chicanos, Puerto Ricans and American Indians is their extremely high rate of attrition from secondary school. The second most important factor is their greater than average attrition from undergraduate colleges (particularly community colleges)," p.17. However, this indictment against community colleges does not take into account the realities of large part-time student enrollments, high student mobility and that less than half of all student do the "correct" thing of graduating "on time." Some minorities who are considered dropouts may in reality be stopouts who have chosen to do something else before resuming their studies (Hodgkinson, 1986). Nonetheless, the large share of minorities who are enrolled and will continue to enroll in community colleges raises a critical issue. Unless community colleges can raise the numbers of minority students who persist and transfer far above historic levels, there will not be a significant increase in the numbers of minorities earning undergraduate and graduate degrees. To illuminate what is happening to minorities at the community college level, the next section reviews the most current research about the minority two-year college experience.
Access in Jeapordy

Given the differential representation of Hispanics, blacks and American Indians in community colleges, it is important to question to what extent the colleges have assisted minority students to make progress toward the baccalaureate. Several studies, descriptive as well as theoretical, provide some insights with regard to minority student participation in community colleges.

Aspirations

One should begin by emphasizing that despite declines in priority given to the transfer function, it is apparent that minority students do have transfer aspirations. For example, in a national study of urban community colleges with large black and Hispanic enrollments, more than 74 percent of students sampled expressed a desire to obtain a B.A. or higher at some time in their lives (Bensimon & Riley, 1984). Similarly, a study of six community colleges located in Texas, Arizona and California (Rendon, Justiz & Resta, 1988) with large Hispanic student enrollments, found that students were interested in and committed to transferring. Specifically, the study indicated that 87 percent of Hispanic students and 94 percent of whites has plans to transfer to one or more four-year institutions. Half of the students planned to transfer after receiving an associate and one-fourth planned to transfer before earning an associate. Further, nearly three-fourths of students thought transferring was important and over 60 percent felt transferring was more important than getting a job. In another study (Richardson & Bender, 1987) urban community college faculty and counselors estimated that 40 to 50 percent of entering students had transfer aspirations. But perhaps more important than assessing how many students initially intend to transfer is what happens to Hispanics, blacks and American Indians after they enroll in a community college, for there is concern that enrolling in a two-year college may have a negative effect on minority students.
Hispanic Students

As a whole, Hispanic students rely heavily on two-year colleges for access to higher education, but generally exhibit low transfer rates. A comprehensive study examining the transfer function in community colleges with large Hispanic enrollments in Texas, Arizona and California (Rendon, Justiz & Resta, 1988) revealed a number of barriers that impede the transfer process. Interviews with faculty, counselors and administrators highlighted student-centered barriers, which included: a lack of motivation and academic preparation; unfamiliarity with the costs and benefits of the higher education system; unwillingness to leave community and families; difficulties meeting timelines; lack of family involvement in education; having to work to help the family survive; initiating education by selecting small, seemingly attainable goals; not knowing they were capable of earning degrees; not understanding the consequences of changing programs and financial pressures, among others. At the community college level, there was some faculty resistance to advise students or to deal with students with basic skills problems. Moreover, despite numerous interventions such as remedial programs and assessment practices, community college staff expressed frustration that many programs had failed to help students, and that remedial students often took 3-4 years to earn an associate degree.

In general, the same study revealed that community college articulation with senior institutions was weak, in terms of exchanging data about transfer students and comparing curriculum and expectations. College catalogs were often a poor source of information about transfer and there was concern that minority students often got channeled into vocational-technical tracks. Further, students faced multiple barriers at senior institutions. These included paperwork involved in application forms, costs such as tuition and moving, assessment policies, impacted programs with limited space and varying university general education requirements. Further, community college staff expressed concern that universities often did not accept transfer courses and university faculty were often unwilling to negotiate curriculum changes.
The same study included a student survey which provided information about why Hispanic and white students might not be transferring. According to student responses, the least encouragement to transfer came from community college faculty, counselors and the registrar's office. Indeed, only one-third of the students felt community college teachers had encouraged them to think seriously about transferring. On the other hand, it was interesting to note that while students rated their academic and career preparation experiences very positively, felt that the community college offered excellent information on transfer opportunities and knew that they could get assistance about transferring from faculty and counselors, for the most part students were not involved in counseling or academic-related behaviors. The vast majority did not participate in academic or career counseling or in meetings with four-year college recruiters. Further, about half never or rarely made appointments to meet with faculty, over 60 percent never or rarely asked faculty for advice and over 50 percent never or rarely asked faculty for additional references or for help with writing skills (Rendon, Justiz & Resta, 1988).

These findings suggest that while most students plan to transfer and think transfer is important, they are not taking advantage of services that could facilitate transfer. This lack of academic integration is coupled with limited social integration. Few students saw faculty outside of class, participated in extracurricular activities, had informal conversations with faculty or participated in freshman orientation. Variables measuring student predisposition to transfer revealed similar inconsistencies. While the majority of students planned to apply for transfer to at least one institution and generally had positive perceptions about transferring, their transfer behavior was limited. Few students sought information about transferring from the counseling office, community college faculty, four-year institutions or community college faculty. Instead, it appeared that students were getting assistance from friends who planned to transfer or had already transferred (Rendon, Justiz & Resta, 1988).
Finally, the study (Rendon, Justiz & Resta, 1988) included a faculty survey which provided evidence that most faculty were not involved in a close working relationship with students and that faculty/student interactions were minimal. Further, faculty expectations of students were quite low. Faculty over-relied on objective tests and minimally involved students in activities that required higher order thinking skills, making it doubtful that transfer students would be able to compete with native four-year college students who had been exposed to these activities. Also, most faculty were not involved helping students to transfer, nor were they involved in activities designed to facilitate the transfer process.

In another study, McCool (1984) conducted a multiple regression analysis on factors which were hypothesized to influence Hispanic student retention in two-year institutions. The researcher found that number of credit hours completed, identification of positive and negative reasons for withdrawal, experience perceptions and goal selection affected students' ability to achieve educational objectives.

A recent study of Hispanic students enrolled in six community colleges in Texas, Arizona and California (Nora & Rendon, 1988), provides additional insights. Findings revealed that students with high level of commitment to attending college and to attaining their educational goals had applied to more four-year institutions, sought more information about transferring from counselors, faculty, friends, four-year institutions and community college catalogs. They also had high levels of social and academic integration. Further, students who exhibited high levels of social and academic integration tended to have positive attitudes about transferring and to exhibit transfer related behavior. However, ethnic origin was not found to be related to any of the factors in the study.

In another study, Nora (1987b) found that Hispanic students entering college with high levels of institutional and goal commitments had high levels of academic and social integration and consequently, high levels of retention. A separate study (Nora 1987a)
revealed that Hispanic community college students who received high levels of noncampus and campus-based financial aid were enrolled in more semesters, earned more semester hours and received some form of college credential. Moreover, Hispanics who received high levels of campus-based resources earned high grade point averages.

American Indians

With their own system of 27 tribally controlled community colleges (25 in the U.S. and 2 in Canada), American Indians also rely heavily on two-year colleges for access to higher education. Yet, this group has received very limited research attention. Nonetheless, a few descriptive studies illuminate some of the factors that influence the progress of Indians in two-year colleges.

A study (Mendoza & Samuels, 1987) at Glendale Community college (Arizona) revealed that faculty mentoring had a positive impact on American Indian student retention, and that the risk of attrition was greatest for first time minority students who did not apply for financial aid. At Mesa Community College (Arizona) 94.2 percent of American Indians expressed concern about financing their education with about half working either full or part-time (Mc Intosh, et. al., 1987).

It is also apparent that tribally controlled community colleges provide an alternative method of educational services to Indian students. Indian colleges are focused on Indian philosophy and history, which are believed to add to a student's sense of self worth and belief that they are capable of making academic progress. In a study of Montana's tribally controlled community colleges, 94.7 percent of students were somewhat or very satisfied with tribal colleges. Among students who left before completing their educational goals, home responsibilities was the most frequently cited reason, followed by personal problems and insufficient financial resources (Wright, 1986).
Black Students

In general, black students also depend heavily on community colleges, but to a lesser extent than Hispanics and American Indians. Yet, their participation in transfer programs is important, given that transfer students add to the pool of blacks with potential to earn bachelor's degrees. In a study of blacks and white students from the 1972 National Longitudinal Study (NLS) data set, Levin and Clowes (1986) found not only that low aptitude blacks were overrepresented at four-year schools compared to two-year schools, but that for blacks of all aptitude levels, "...those who initially attended a two-year college were significantly less likely to complete their planned four years of college work during the four years subsequent to high school graduation, compared to those who initially attended a four-year college" (p.190).

In a study of transfer students enrolled in nine universities (Richardson & Bender, 1987), it was noted that black students were older than members of other racial groups and that they were the last to decide about transferring, suggesting the importance of counseling and identifying transfer students at an early stage. More than one in five blacks decided to transfer after leaving the community college, and only about one-third made that decision before arriving at the community college. In contrast, about one-half of Hispanics and whites knew they were transferring before entering the community college.

Of blacks who transferred, nearly three out of every four students lost some credit. Those blacks who lost most credits were the last to decide about transfer. In comparison to other ethnic groups, blacks significantly were more likely to have been C students. Further, the study revealed that blacks tended to enter non-science fields. The researchers noted that: "The fact that black students reported the least loss of grade point average reflected their lower grades before transferring, the fields they entered, and the number who transferred to universities with a predominantly minority
student body" (p.150). Interestingly, the study noted that a majority of students transferred without benefit of direct contact with professionals from either their community college or university. Thus, loss of credits seemed more a function of lack of institutional and state interventions than of race (Richardson & Bender, 1987).

In a separate study of urban community colleges (Cohen, Brawer & Bensimon, 1986), it was shown that students who appeared to be indifferent or disengaged from the academic and social system of the college were unlikely to develop high transfer attitudes and behaviors. Further, the study showed that black and Hispanic students (relative to Asians and whites) were less likely to exhibit high transfer predisposition. According to the researchers, "this finding may reflect a failure of community colleges to recognize that initial transfer predisposition among these students is lower than for other groups and that institutional climate conditions may inhibit the type of enrollment in the academic and social systems most likely to induce an increase in transfer predisposition" (p. 187).

Summary

While more race/ethnic specific research, especially that of a theoretical (as opposed to descriptive) nature is needed to substantiate the effect of enrolling in community colleges, the studies cited above provide important clues toward a better understanding of the educational experience of minorities in two-year colleges. Certainly, one must consider the socio-economic background of these students. In particular, being naive about the world of higher education, having attended inferior schools and lacking financial resources can combine to have a devastating impact on students, both in selecting clear, viable options and having the monetary resources to continue academic studies. How community colleges can reverse or at least reduce the socio-economic limitations of students remains a challenge. Most studies attest to the fact that community colleges are keenly aware of the students they serve, want to do a better job to prepare them for
the future and are constantly trying and testing new policies and practices, though they have yielded mixed outcomes. The fact that minorities have a difficult time staying in college and attaining their educational goals is not simply a matter of race or ethnicity. It is also a matter of what institutions and states do to promote student academic progress.

Certainly, enough evidence is available to document that institutions have serious gaps in their educational service delivery, as evidenced by limited student/faculty interaction, and lack of mechanisms that engage students in the academic and social fabric of the college, as well as policies that promote high expectations and facilitate higher order learning skills. Similarly, states have been caught in a wave of a policy decline with regard to minority issues and could be doing more with regard to promoting intersegmental collaboration and facilitating the transfer of credits among the sectors. The fact that the colleges are tailored to accommodate stopouts does more to perpetuate ruptures in the pipeline than to promote the smooth flow of students among the sectors. One wonders if minority students stop out because they really don't want to continue college at the time or because no one has taken the time to explain the benefits and consequences of staying in college, as well as to design a suitable financial aid package (grants and work-study) that encourages full time attention to studies as well as increased contact with the institution. Stopping out may indeed be a good deal for many students, but if disproportionate numbers of minorities start stopping out, the effect on the pool of minorities qualified to complete baccalaureate studies can be devastating. Further, if the transfer function continues to decline, minorities will be left with no visible alternative to initiate an education leading to a bachelor's degree. To improve the participation of minorities in higher education, nothing short than a major breakthrough in salvaging baccalaureate opportunities for students is needed.

**Toward New Policies that Facilitate Baccalaureate Attainment**
As discussed earlier, over the years, two-year colleges have responded to changing social and economic conditions by modifying their mission and by adopting new policies and strategies that can best address student goals and needs. As the nation prepares to enter a new century and accommodate growing numbers of special populations, this is a particularly critical time for two-year colleges to re-assess their mission and programs. The weight of the evidence derived from empirical research suggests that minority students are finding limited opportunities to transfer in community colleges. This may have occurred because the colleges have adopted too many functions and assigned less importance to transfer education.

Yet, for minority students, the community college represents a pivotal institution. This is especially true for Hispanics who, unlike blacks, do not have a set of historically black colleges they can turn to to complete a four-year education. American Indians, with their own network of tribally controlled two-year colleges may also be expected to turn to these colleges to initiate baccalaureate studies. Moreover, blacks residing outside the south and northeast, where black colleges are not available, can also be expected to swell two-year college enrollments. These students will turn to community colleges, as they have in the past, in search of opportunities for upward academic and social mobility. Thus, much is at stake for students who can only connect to the world of higher education by enrolling in a community college. New minority populations will require an institutional type that is strongly geared toward baccalaureate studies, but at the same time can accept students regardless of college admissions scores, have low tuition, be located close to home and provide them with small classes and opportunities for close faculty contact. The present system of public two-year colleges is not adequately set up to deliver this type of education. With a broad, diffuse mission that includes too many functions, it is clear that community colleges cannot be "all things to all people," and at the same time deliver a high quality education that facilitates student transfer to senior institutions. If the role of policy is to make institutions do what is needed or to create new institutions if what is needed has not been provided, then it is time for new policies that create devices to facilitate minority student progress toward
the baccalaureate. To this end, the following represent alternative solutions that can promote baccalaureate attainment which merit careful consideration, particularly in states with high numbers of minority populations.

**Academic Colleges**

In 1892, William Rainey Harper, president of the University of Chicago and early pioneer in the two-year college movement, made a commendable effort to effect change in higher education. Harper secured approval from the Board of Trustees of the university to create a lower division to be called the academic college. Harper wanted to relieve the university of the lower undergraduate years and wanted to improve educational opportunities for many students who would never complete a four-year college education (Monroe, 1977).

The concept of the academic college (with some modifications) represents an idea whose time has come, especially in states where the proportion of the minority population will exceed 30 percent by the year 2000. In these states, open door academic colleges can be created whose dominant function would be to prepare students to take the first two years of college work that would prepare them for transfer. States should examine their higher education system to determine how academic colleges can be created with minimal additional costs and resources. States should also review their demographic profile to determine strategic locations for these colleges. For example, academic colleges can be created in a number of ways. Weak four-year colleges could be transformed into academic colleges. Struggling liberal arts colleges might continue to survive as academic colleges. Some of the state's community or technical colleges might be converted into academic colleges.

Academic colleges would be expected to develop a close affiliation with feeder high schools and with colleges and universities who would receive transfer students. It is conceivable that academic colleges would be involved in 2+2+2 arrangements. Potential transfer students would be identified early in high school and channeled
toward an academic track. After high school graduation, these students would enroll in courses related to their major which would be accepted for transfer credit at the senior institution. Carefully planned articulation arrangements between academic colleges and senior institutions would ensure not only the successful student transition, but the meshing of general education requirements, course expectations and curriculum specifications. In time, academic colleges would be recognized as the institutional type to attend if students wanted a viable alternative to initiate a low cost, college based education leading toward the baccalaureate.

Transfer College Within a Community College

Some states might wish to consider the concept of creating a transfer college within a community college. In this arrangement, existing community colleges with large concentrations of minority students would assign transfer education a high priority. A transfer college would be created with selective administrators, faculty and counselors. Students in this college would enroll in a Transfer Honors Programs, cluster learning communities of students with similar majors. Elements of this program would be close student/faculty contact, high expectations, peer support and networking opportunities, student incentives, internship experiences and parental involvement, among others. With the assistance of Faculty Transfer Mentors and counselors, students would be assisted to select appropriate coursework, complete all requirements to transfer to a chosen senior institution and assisted with every phase of the transfer process. A Transfer Center staffed with transfer counselors and paraprofessionals in the content areas would serve as the central location for students to get academic assistance as well as to get help with selecting majors, courses and potential senior institutions to which students could transfer.

Middle College
The Middle College High School represents an exciting and innovative concept which was initiated at La Guardia Community College in New York. The Middle College, an alternative high school at the two-year college, recruits only high risk students. Students attend Middle College in the tenth grade and take the next three years of schooling at the college site. About 85 percent graduate and 75 percent go on to college at La Guardia or elsewhere. Components of the model include: 1) students go to high school on a college campus; they don't have to graduate from high school to go to college; 2) classes are small; 3) counselors and teachers know students on a personal basis; 4) nobody fails; when students don't pass a course there is no grade and the course is repeated; 5) tutoring is available before and after school in every course, every day; 6) students spend one-third of their time working outside school on unpaid internships. The success of this model indicates that at risk students are capable of learning and can be helped to move forward with their academic careers.

In addition to the above, states should give serious consideration to supporting the following measures:

1. **Grants and scholarships for minority transfer students.** Financial aid sufficient to help students survive without taking a full-time job that reduces time spent on studying should be made available.

2. **State Transfer Student Monitoring System.** More effective means to track the flow of transfer students among the sectors are needed for two basic reasons: 1) to understand student college enrollment patterns and 2) to ascertain the academic progress of students after they complete the transfer process. For example, a student's social security number could be used to track enrollment. In Texas a new system was recently implemented requiring senior institutions to send back transcripts of transfer students to community colleges so that they could determine if students were making satisfactory academic progress.
3. **Institutional Incentives.** State agencies should consider awarding special incentives to community colleges which demonstrate extraordinary success retaining minority students and facilitating successful transfer. For example, states can create grants to colleges which can document student progress and the effectiveness of measures that promote minority student retention and transfer. The state of New Jersey is doing some of the leading work in this area, where funding formulas take into account an institution's previous year's progress.

4. **Academic Partnership Programs.** Efforts that promote intersegmental collaboration among the K-12 system, community colleges and senior institutions should receive state support. Coordinated action that can arrest the leaks in the pipeline are needed at every juncture. For example, in 1985, the California legislature created the California Academic Partnership Program (CAPP). The CAPP promotes academic partnerships between postsecondary and secondary institutions to improve student academic preparation. The legislature provided funding so that curriculum enhancement model projects and diagnostic testing projects could be established throughout the state.

5. **Research on Students.** State agencies should conduct longitudinal studies of students as they flow through the educational pipeline. Studies which disaggregate data by gender and ethnicity are needed to assess student retention rates at each institutional level, student transfer rates and student achievement (degrees earned, GPAs, etc.) Data should be collected to document the factors that impede or enhance the flow of students throughout the educational pipeline. States should also begin to ask hard questions and require community colleges to document why minority student retention and transfer rates are so low and what they intend to do to remedy the situation.

6. **Reform Assessment.** On a yearly basis, states should assess and evaluate the effectiveness of new reforms such as high school graduation and college admissions
requirements, as well as test policies and their impact on minority student populations.

Clearly, states can take a proactive role to assure that its citizens are afforded full access to educational opportunities, and a number of models are already in place throughout the country that can serve as the basis for effecting new reforms.

**Interim Steps**

Some steps outlined above can be accomplished within a short range of time, and others will take longer to implement. In the interim, the following steps can be instrumental to states and institutions who wish to move forward implementing plans to increase minority retention and transfer rates in the two-year college sector.

1. **FIPSE Grants.** A special category of FIPSE grants can be created to allow community colleges to develop new and innovative strategies that enhance minority student retention and transfer. Start up grants for states wishing to implement the academic college concept might also be part of this special funding category.

2. **OERI Research.** Unfortunately, community colleges have not been popular targets of research, and are perhaps the most misunderstood institutional type in postsecondary education. A new funding priority for educational research at Office of Educational Research and Improvement (OERI) can be to enable states and institutions to collect data about the mobility and academic progress of community college students. Further, research is needed to document the effects of attending community colleges in terms of educational outcomes and long-term economic returns.

3. **Targeted Foundation Funding.** Private foundations can be instrumental assisting states and community colleges to develop programs and strategies that enhance minority student progress toward the baccalaureate.
4. Conference of Community College Researchers, Practitioners and Policymakers. At present, the relationship between researchers who study community colleges and two-year college practitioners is tenuous. Community colleges are often the victims of "negative" research findings, and the transfer function in particular has been controversially studied. Consequently, it is no secret that community college practitioners do not trust researchers who tend to study the colleges with a monolithic mindset about how students enroll and complete programs of study in higher education. Policymakers often misunderstand the role, scope and functions of community colleges. Now is an opportune time for community college researchers, practitioners and policymakers to convene, discuss and react to research findings, and to use what is known about the colleges to effect reforms. Research and practice must be brought together in a concerted effort to improve the quality of education for minority students.

5. Demonstration Sites. In order for community colleges to effect reforms, it will be necessary for demonstration sites to be set up in selective institutions throughout the country. Special funding will be required to allow the colleges to test and evaluate new concepts, to replicate models and to disseminate them to other institutions for replication.

Conclusion

To a large extent, access has lost much of its meaning for minority students, for the decline of transfer translates to a decline in access. This decline is exacerbated when viewed in the context of diminishing high school graduation and college entrance rates, as well as minute college completion rates for minority students. If any postsecondary institution can play a pivotal role salvaging baccalaureate opportunities for minority students in the next decade, it will be the community college. To do so will require a new vision of what community colleges can and should do for minorities, as well as new policies that can help the colleges move forward in accommodating the educational goals of new students. By the next decade, two-year
colleges will have to make a critical decision as to what extent they wish to become terminal or transfer institutions. The answer will be carefully watched by legislators concerned with how to best spend tax dollars targeted at minority student populations; by foundations concerned with reversing the ghettoization of minority youth and by minority policymakers who will make recommendations as to which institutions can give students better returns on their financial and time investments. If community colleges want to re-gain their legitimacy as viable members of the academic community; if they want to receive increased public support; if they want to prosper by providing viable baccalaureate opportunities for minority students, then the answer is clear. They must work vigorously to revive and restore the vitality of the transfer function.
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