When compared with university freshmen, students beginning their collegiate studies in community colleges are less likely to attain the baccalaureate. However, after equating for differences in the students' entering abilities, socio-economic background, employment status, on-campus residence, and pattern of attendance, the difference is slight. Because minority-group students are overrepresented in the two-year colleges—they enroll 34% of all White undergraduates, 39% of Blacks, 53% of Hispanics, and 43% of Asians—any differential in progress is magnified for them. A clear picture of the reasons for the difference in baccalaureate attainment is impossible to draw because of the paucity of consistent information about student aspirations and progress. However, the community college environment could be made more conducive to student progress if college policies were modified so that students were encouraged to attend full time, obtain on-campus employment, and otherwise gain greater involvement with their studies and with the college. State policies and inter-institutional agreements regarding curriculum, academic support services, and financial aids could also enhance transfer rates and thus benefit all the community college matriculants who aspire to the baccalaureate. (Author)
Facilitating Degree Achievement by Minorities:
The Community College Environment


Arthur M. Cohen, University of California, Los Angeles
SUMMARY

When compared with university freshmen, students beginning their collegiate studies in community colleges are less likely to attain the baccalaureate. However, after equating for differences in the students' entering abilities, socio-economic background, employment status, on-campus residence, and pattern of attendance, the difference is slight. Because minority-group students are overrepresented in the two-year colleges -- they enroll 34 percent of all White undergraduates, 39 percent of the Blacks, 53 percent of the Hispanics, and 43 percent of the Asians -- any differential in progress is magnified for them.

A clear picture of the reasons for the difference in baccalaureate attainment is impossible to draw because of the paucity of consistent information about student aspirations and progress. However, the community college environment could be made more conducive to student progress if college policies were modified so that students were encouraged to attend full time, obtain on-campus employment, and otherwise gain greater involvement with their studies and with the college. State policies and inter-institutional agreements regarding curriculum, academic support services, and financial aids could also enhance transfer rates and thus benefit all the community college matriculants who aspire to the baccalaureate.
Facilitating Degree Achievement by Minorities:  
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Community colleges, defined as institutions accredited to award the Associate in Arts or Science as their highest degree, are found in all fifty states. Products of the expansion of publicly-supported higher education in the United States in the Twentieth Century, they enroll 4.9 million students, or around 40 percent of all people enrolled in colleges and universities in the nation. Their students have diverse aspirations: one third seek to transfer to senior institutions and eventually obtain baccalaureate degrees; one third seek job-entry skills; 15 percent seek training that will enable them to upgrade themselves in a job or career they already hold; and 15 percent seek neither degrees nor certificates but are attending only for their personal interests. Most of the students attend on a part-time basis, commuting to the institution to take a class or two per term. Most are employed for twenty hours or more per week. In some states the community colleges are marginal institutions, drawing their students from the groups who do not seek higher education but who want some post-secondary experience. In others they are central to the public education system, enrolling 80 percent or more of all people who begin post-secondary studies.

Because the colleges typically have few or no admissions requirements -- in some states an applicant need not even have a high school diploma -- they have attracted sizable numbers of students who would not otherwise consider college-going. They
are readily accessible: in many states a community college is within commuting distance of nearly everyone in the population. Tuition charges are typically lower than they are at the senior institutions. Most of the colleges offer courses in the evenings and on weekends, not only at the central campus but also in numerous branch centers in the cities and suburbs. Many of their occupationally relevant programs can be completed in a year or less. Accessibility and variety are the colleges' guiding principles.

This paper considers the role of the community colleges in facilitating baccalaureate degree achievement by minorities. It traces patterns of students entering community colleges, the environment that the institutions present, and policies and practices affecting the movement of students through the institutions, and it makes recommendations for enhancing the flow. Although it focuses on data and practices particularly concerned with the transfer of minority students from community colleges to four-year colleges and universities, it considers the transfer function as a whole since most institutional activities affect minority and majority group members equally.

The Minority Students

The ethnic minorities are highly represented in community colleges. The institutions enroll 34 percent of all White undergraduates, 39 percent of all Black students attending college, 53 percent of the Hispanics, 51 percent of the American Indians, and 43 percent of the Asians ("Fact File", 1986). Naturally, these enrollment patterns differ from state to state.
depending on the percentage of minorities in each state's population and on the accessibility of the community colleges relative to the state's universities. Hispanic students comprise over 10 percent of community college enrollments in California, New Mexico, and Texas. Black students are highly represented in the community colleges of Alabama, Louisiana, Mississippi, and South Carolina. The percentage of Black community college enrollment is higher than the proportion of Black 18-24 year olds in the population in several states, including Delaware, Kentucky, Ohio, and Missouri. Nationwide, minority group students constitute around one fourth of all community college enrollments.

The phenomenon of minority group enrollment in community colleges is accentuated in cities with high proportions of minorities in their populations: Chicago, Cleveland, El Paso, Los Angeles, Miami, New York, and Phoenix, among others. The reason is that the community college is a commuter institution, much like the secondary schools and the urban-based universities. By design, a commuter institution draws its students from the surrounding neighborhoods, hence its population typically reflects the ethnic and social class composition of its vicinity. The pattern of neighborhood attendance is revealed also where the community college has several campuses in the same city: at East Los Angeles College 64 percent of the students are Hispanic; at Los Angeles Southwest College 95 percent are Black; and at Los Angeles Pierce College 75 percent are White.

The community colleges receive higher proportions of the students from low socio-economic groups and with lower academic
ability. In 1982, whereas 58 percent of the students from the highest socio-economic quartile enrolled in the senior institutions, only 21 percent enrolled in the community colleges. During that same year 63 percent of the students from the highest academic quartile enrolled in the universities, but only 16 percent enrolled in the community colleges. Clearly the top students go to the four-year colleges and universities in much higher proportion than they do to the community colleges.

These disparate ability levels are reflected in the enrollment of minorities. Among 1982 high school graduates, 19 percent of the Blacks and 10 percent of the Hispanics from the lowest academic-ability quartile enrolled in the universities and 15 percent of the Blacks and 19 percent of the Hispanics from that low-ability group enrolled in the community colleges. But among students from the highest quartile of academic ability, 77 percent of the Blacks and 61 percent of the Hispanics enrolled in the senior institutions and 11 percent of the Blacks and 21 percent of the Hispanics enrolled in the community colleges. (Clowes and others, 1986).

In general, Hispanic students are overrepresented and Blacks underrepresented in the community colleges in proportion to their enrollment in senior institutions. The explanation for this is rather straightforward: Many Black students still attend the traditionally Black institutions in the South, nearly all of which grant the baccalaureate or higher degrees. But the nation has no history of senior institutions designed especially for Hispanics. And by geographical coincidence the Hispanic population is concentrated in the states that have the most
highly developed community college systems: Florida, Texas, Colorado, New York, California, and Arizona.

College Outcomes

Calculating achievement rates for community college students is not nearly as straightforward as calculating student enrollment in general. Most measures of college student achievement center on degrees obtained. The community colleges confer around 450,000 associate degrees per year. Together with the short-term occupational certificates that they award, this yields a ratio of approximately one degree or certificate awarded each year to 10 percent of their student population. What happens to the others? Many transfer to universities short of receiving associate degrees; many enter the labor market without receiving a degree or certificate; many more did not seek degrees when they matriculated and they leave, more or less satisfied with what they attained.

The major issue in considering higher degree attainment is that all students entering community colleges must transfer to four-year colleges or universities before they can obtain baccalaureate degrees. Therefore there is bound to be a shortfall in the number of community college matriculants who obtain baccalaureate degrees when compared with the students who enter senior colleges as freshmen; the very necessity for leaving one institution and entering another would result in a certain amount of dropout. Astin (1982) has traced this shortfall using data from his Cooperative Institutional Research Program (CIRP). Levin and Clowes (1980) used data from the National Longitudinal
Study of The High School Class of 1972 (NLS) and corroborated the realization that initial attendance at a community college was related to a reduced probability of baccalaureate attainment. But having noted that community college attendance is related to a reduced likelihood of baccalaureate attainment leaves many questions unanswered. How many students actually make the transition from community college to university? How many want to? Why do more students not transfer? What happens after they get to the university? What might be done to improve the transfer rates? Which policies and practices differentially affect students from minority and majority groups? These questions are not easily answered because they may be variously interpreted and because the data that may be brought to bear on them are scanty.

There are no reliable national data sets. However, figures from the states where data are collected show that around 5,000 students per year transfer from community colleges to state colleges and universities in Washington, 35,500 from California community colleges to the University of California and the California State University system, slightly more than 10,000 from community colleges to both public and private senior institutions in Illinois, and slightly fewer than 5,000 in Maryland. It is quite unuseful to attempt to extrapolate those data to arrive at a nationwide figure because of the vagaries in counting transfers between states. It is likely that any numbers that are used understate the magnitude of transfer because of the data that are missing.

One way of estimating transfer rates is to count the number
of university students whose transcripts show courses taken at community colleges. In states with well-articulated community colleges and public university systems, the community colleges provide significant proportions of the universities' undergraduates; 42% of all undergraduate students in Florida's public universities previously attended community colleges in that state. However, where the community colleges serve a different function or where the universities have clung vigorously to their freshman enrollments, the proportion is much lower; only 17% of the undergraduates in state universities in Kansas are transfers. Where the universities work closely with community colleges in their immediate area they may have more transfers than native freshmen: Arizona State University's student body includes 8,400 who were formerly students in the Maricopa Community College District in Phoenix; and the University of Massachusetts at Boston similarly has a high proportion of community college transfers.

How many students enter community colleges intending to transfer? Many studies done over the years have suggested that around three fourths of the students beginning in community colleges intend eventually to obtain the baccalaureate or higher degree. A survey of students taking classes in 24 urban community colleges in 1983 found 74 percent declaring transfer intent (CSCC, 1985). In 1984 the CIRP found 76 percent declaring intentions of obtaining a baccalaureate or higher degree (Astin and Others, 1985). But these are biased samples. The urban community college study drew its students from among those taking credit classes, using the class section as the unit of sampling,
thus skewing the sample in the direction of full-time students. The CIRP surveys first-time-in-college, full-time freshmen, 90 percent of whom are aged 19 or younger.

The form of the question asking transfer intentions also biases the answers. When a person is asked, "What is the highest academic degree that you intend to obtain?", the suggestion is raised of a goal to be reached sometime during the person's life. Few young people would acknowledge that they never expect to go further in the educational system, that they have closed off life's options. When the question is asked as, "What is the primary reason you are attending this college at this time?", significantly fewer, usually one third, say that they are in college to prepare for transfer or to get a higher degree, while one half say that they seek occupational skills. Most of the latter group expect eventually to gain higher degrees but see job entry as their first aim. In fact, many students mark both "Bachelors" as the highest degree they expect to obtain and "Gaining occupational skills" as their primary reason for attending college at that time. Their responses are perfectly consistent.

Various statewide studies corroborate the figure of around one third of the entrants' transfer intentions. The Illinois Community College Board (1986) found 32 percent of the students in that state declaring transfer intentions, the Maryland State Board for Community Colleges (1983) 31 percent, the California Statewide Longitudinal Study, (Sheldon 1982) 36 percent. These statewide studies drew samples of all entering students, and asked why they were entering college at that time.
Transfer.

How many students actually transfer? The question cannot be answered because the ways of counting transfer vary. Some students attend community college and university concurrently; others start in the university as freshmen, drop out to spend a term or two in the community college, then come back to the university; some take a couple of courses at a community college in the summer after high school graduation and then enter the university; some enter community college, drop out for a period of years, and then enter the university; some finish two years at a community college and transfer to a university in mid-year or out of state. All of the above students would be counted as transfers by some modes of reckoning, none of them by others.

Herein lies the most difficult problem in estimating not only the numbers of transfers but also the effects of community colleges on their students. If a student takes a class or two at a community college and eventually enrolls at a university, the community college cannot reasonably be charged with responsibility for the student's progress. Some analysts attempt to mitigate that problem by counting as transfers only those students who have earned at least 12 units at a community college prior to entering the university. But in many states a transfer student is defined as one who enrolls at a university and checks, "community college", as the institution last attended; no way short of analyzing each student's transcript to tell how long the student was there. One California community college checked the roster of transfers that the university had received and found students with as few as five and as many as 154 units taken.
The number of transfers can be estimated by counting the Associate Degree recipients who move on to universities in the subsequent term. This mode of reckoning yields around 250,000-300,000 students transferring per year. Another 300,000-400,000 university students have taken courses in community colleges at some time during their academic careers. But these figures are only estimates based on woefully incomplete data. A single college may have more or less reliable information but it is impossible to compare with corresponding data from other colleges because of the varying definitions in reporting procedures. The same holds true for statewide studies.

Data on students entering all types of colleges nationwide yield some information but the community college portion of the samples is typically small. Using CIRP data Astin (1983) has calculated institutional effects by controlling for up to 100 variables. He concludes that "a baccalaureate-oriented freshman who enrolls initially at a community college has a 16 percent better chance of becoming a dropout than a comparable student who enrolls at a public four-year college (p. 125.)." However he admits that most of the differential rate is due to the entering characteristics of the students, the fact that few community colleges have on-campus residents, and that community college students tend to work more hours per week and take fewer classes. After equating for students who reside away from home and who work less than twenty hours per week, Astin finds the discrepancy between expected and actual dropout rates among community college entrants drops to 7 percent.

Several analysts have relied on data from the National
Longitudinal Survey of the High School Class of 1972 (NLS) which surveyed a sample of high school seniors and did follow-up surveys in several subsequent years. The sample included 825 students who enrolled initially in 85 two-year colleges. Velez (1985) used the NLS 1976 follow-up, which showed 42 percent of the four-year college entrants and 12 percent of the two-year college entrants completing the baccalaureate, and concluded that where one began college had an important effect on attainment. He also noted that "Living quarters had the largest significant effect on the probability of finishing college" and that "students who had work-study jobs had a 23 percent higher probability of finishing college (p. 197)." Pascarella (1986) used NLS data to calculate student progress after nine years. He found fourteen variables accounting for 17 percent of the variance in persistence and 24 percent of the variance in baccalaureate attainment. Anderson (1981) ran twenty-six variables to find that community college entrants were less likely to persist through the sophomore year. She acknowledged, "It is true that these variables explain only a small proportion of the variance in persistence....[T]he intervening variables included in the models mediated only a small proportion of the effects of college, work and residence." (pp. 13-14).

Single college system studies include Alba and Lavin's (1981) analysis of the students who were shunted to community colleges in the CUNY system after open admissions was effected in 1970. They found that after five years there was no difference in persistence but that senior college matriculants were twice as likely to have received the baccalaureate. However, students in
two of the five community colleges in the system showed no difference in attainment, leading them to conclude, "We do not know what mechanisms in the community-college context helped to produce this impact (p. 235)."

Although the data are scanty and the analyses account for only a small proportion of the variance in baccalaureate attainment, those who seek to make a point blow the difference up to cosmic proportions: "With a far greater body of empirical evidence now available, the fundamental argument may be stated again with ever greater confidence: Far from embodying the democratization of higher education and a redistribution of opportunity in the wider society, the expansion of the community college instead heralded the arrival in higher education of a form of class-linked tracking that served to reproduce existing social relations. To be sure, some individuals who would otherwise have been excluded from higher education have used the community college as a platform for upward mobility.... Yet, such cases to the contrary notwithstanding, the overall impact of the community college has been to accentuate rather than reduce prevailing patterns of social and class inequality." (Karabel, 1986, p. 18). Dougherty (1986) too, while acknowledging that the community colleges broaden access to higher education and to jobs and higher income, contends that they help ensure that people stay in their social stratum, that community college entrants receive fewer baccalaureates, fewer years of education, less prestigious jobs, and poorer paying jobs than students who enter four-year colleges.

These jeremiads are more politically inspired than
empirically founded. The results of studies comparing the success rates of students entering community colleges with those beginning at universities do not warrant the conclusion. Using regression analysis these studies put into the formula student age, ethnicity, prior academic achievement, work status, and all other variables they can accession from available data. And at best they account for around 25 percent of the variance in degree attainment. The remainder probably is due to some combination of institutional environment and characteristics of the students that has not been quantified, as, for example, just why many students who qualify for entry to selective institutions begin at community colleges. Is some underlying lack of commitment to higher education at play?

**Transfer of Minorities**

The difficulty in disaggregating the effects of community colleges from the characteristics of the students who enter them is magnified in the attempts to describe the community colleges' special effects on minority students. In general, students who enter community colleges instead of universities are of lower academic ability, lower socio-economic class, and have lower academic aspirations. The various studies that have attempted to control for those variables frequently also attempt to control for the fact that minority students are more likely to enter community colleges than universities. Here, though, the difference is much greater for Hispanic students than for Blacks, and much less for Asian students; hence the term, "minority student" loses much of its precision. Still, the best estimates suggest
that White students, who comprise 75 percent of community college enrollment obtain 85 percent of the associate degrees; Black students, 13 percent of enrollment, obtain 8 percent of the Associate Degrees; Hispanic students, 6 percent of enrollment, obtain 4 percent of the degrees. The California Postsecondary Education Commission, calculating transfer rates as a ratio of full-time freshmen entering college two years earlier, finds that Blacks comprise 10 percent of the freshmen and seven percent of the transfers and Hispanics comprise 17 percent of the community college freshmen and 9 percent of the transfers. (Overall, a total of 2 percent of the community college matriculants transfer to the University of California and 10 percent to the California State University system.)

The fact that the Black and Hispanic students entering the institutions tend to be from lower socio-economic groups, have lower educational aspirations, and have lower academic ability does not deter those who seek dire reasons for the lower attainment. Surely, they say, because fewer minorities receive associate degrees and transfer, there must be a conspiracy against them. If not a conspiracy then at least inadvertent racism. If not inadvertent racism then at least benign neglect. Since more minorities enter community colleges than universities, and since fewer community college matriculants eventually receive baccalaureate degrees, then the community college must be doing something that militates against minority group student transfer. But no one has documented exactly what that something might be.

The major difference between community colleges and universities seems to lie in the pattern of students attending and in the
community colleges encouraging part-time, commuter attendance. While allegations have been made of differential treatment, the data do not substantiate the charge.

**College Environment**

What is the environment in the community college? It is designed for easy access. It makes few demands of those who participate. Student clubs, societies, and government are decidedly marginal. Classes are as likely to be offered in the evening as in the morning. It is not disparaging to say that the community college environment is a cross between the comprehensive high school and the community center. It is certainly quite unlike the selective four-year college with which it is sometimes untowardly compared.

Pace has characterized college environments through the use of College and University Environment Scales (CUES). First refined as an instrument for assessing the environment in senior institutions, CUES rates colleges according to Awareness, Practicality, Propriety, Community, and Scholarship. Since portions of these dimensions relate to features not typical of community colleges, the instrument has been refined to better fit those environments and used to compare their constituents' perceptions of them.

Hendrix (1967) administered the revised CUES to the staff and students in ninety-five community colleges selected to represent location, presence or absence of evening programs and of housing, various curriculum types, and varying full-time and part-time student ratios. He found that students desire a good
scholastic and intellectual environment and a high degree of sociability, whereas the faculty particularly valued serious students. He concluded that the range of difference at senior institutions was much greater than among the community colleges that he studied and that any difference in pattern of environment increases the likelihood of certain institutional objectives being achieved and decreases the likelihood of others.

Guilliams (1971) administered the CUES to counselors and students in a Michigan community college and gave the instrument also to high school counselors from the local area. Findings were that high school counselors' perceptions differed significantly from those of the students, college counselors differed from high school counselors, and students tended to rate the campus lower on all CUES dimensions. CUES was administered to a sample of 300 students at Bronx Community College prior to the implementation of the CUNY open-admissions policy and again to a similar sample after the open-admissions policy had been implemented. A sample of faculty participated in both studies. None of the CUES scales registered significant student changes before and after open admissions, but the faculty showed notably different perceptions, practically all of them in the negative direction. The researchers concluded that, "Assuming comparable faculty samples in 1970 and 1971, there is evidence that the post open-admissions sample of faculty perceived the college environment as being less benign and supportive of students, less cohesive, and as having a diminution of academic and social standards (Bronx Community College, 1972 p. 11)," In short, early on in the move toward open admissions, the faculty felt that the
college was deteriorating.

Other studies have attempted to determine how different groups of students view the environment. DeArmas and McDavis (1981) administered CUES to a sample of White, Black, and Hispanic students in a community college and found significant differences in their perception of the environment. Pierog (1974) administered the Community scale of CUES to a group of students equally divided between those of high and low socio-economic backgrounds and found no significant difference between the groups in their perception of the institution.

Other surveys, using different instruments, have similarly sought to ascertain dimensions of the college environment and the relationships among them and student achievement. Bounds (1977) found that students in certificate and diploma programs had the most positive attitudes toward the college environment while those in the transfer programs had the most negative attitudes. Heck and Weible (1978) surveyed the students in a two-year college in Ohio and found them indicating less than ideal environmental conditions regarding their freedom to ask questions and express opinions in class, accessibility of instructors, academic advisement, and several other academic and social measures of the campus.

Attempts have also been made to assess the relationship between the community college environment and the environment of the surrounding district. Alkin and Hendrix (1967) related community characteristics, financial support for the colleges, and certain output measures such as students completing degrees, transferring, or obtaining relevant employment in attempting to
discern relationships among those characteristics and the outcomes of community colleges in California. They found that around 85 percent of the variation in the percent of students transferring was accounted for by such community variables as the percentage of families with certain income and years of schooling, the age of people in the district, and ethnicity. Higher associate degree completion rates were found in districts with fewer low-income-level families. The authors concluded that since district characteristics are unchangeable, not much variation in outcome is left for input characteristics that are mutable. Alfred (1975) similarly concluded that the impact of a two-year college on its students is related to variables associated more with the community than with the college's own environment.

Other researchers have sought relationships between intra-institutional environments and college outcomes, particularly student retention and dropout. Harrower and others (1980) interviewed various groups of students (Black, Hispanic, veteran, mature women, traditional, nontraditional, and former) asking why some students stay in college while others drop out. Findings were: most students agreed that the better students tended to get more help from the faculty; mature women, Blacks, and veterans felt a lack of caring; Blacks and mature women worried about finances, in particular the paucity of on-campus jobs; women and Hispanic students saw the financial aid office as understaffed and discriminatory; faculty play a key role in student retention through their attitudes toward teaching and their caring or not caring about student success. McEldartan
similarly found that the faculty attention to teaching and the courses themselves are the primary alterable variables in the college, much more influential than the counseling offices and the career centers (1986).

One line of study of college environments has taken researchers into the institutions where they spend time visiting classrooms and talking with staff and students. Using this observational technique in a community college in Arizona, Richardson and others (1983) found the staff placing few demands for students to read and write. London (1978) spent several months in a community college in Massachusetts, concluding that the institution supported the limited aspirations of its blue collar student population. Weis (1985) studied a community college in the northeast with a predominately Black student population and found the students reproducing their own community culture within the institution. In her analysis she reported that students are not passive recipients of an education; instead they mediate and transform school values based on their own class, gender, race, and goals. The culture they produce mitigates the effect that the school can have on them. The students want to remain members of their own community even while they learn the codes of a new, school-based culture. The supportive network of family and friends contrasts with the individual attainment available in the college. The two desires conflict, with students embracing and rejecting the college at one and the same time. "Paradoxically the individual must place himself or herself outside of networks that enable survival in order to attempt survival in the cultural mainstream (p. 126)."
These various analyses of the community college environment affirm that the community college is not like a traditional institution with a faculty dedicated to inquiry, students committed to study, and a sequestered enclave that supports both. Nor is it like the community itself where argot changes rapidly, personal support groups dominate behavior, and irrationality may be more influential than intellect. The college is somewhere between. The staff may want all their students to succeed but they dare not stray too far from the core academic model of literacy and rationality. The students dare not, or perhaps cannot, break from their own culture; three or four hours per week in class cannot overcome the influence of job, friends, family, and a lifetime of behavioral norms.

**State Policies.**

The community college reflects the mores of its district, but it is also a product of the state. State policies and funding formulas in large measure determine patterns of curriculum, student access, and eventually student outcomes.

Kintzer and Wattenbarger (1985) studied state policies as they relate to the movement of students between community colleges and universities and found varying policies between states or between colleges in the same state resulting in inconsistent expectations for students, loss of credits by students who do transfer, and such reconcilable but irritating procedures as different institutional calendars. They found formal, legal policies in eight states where the legislature or the systemwide governing board spells out details regarding the
movement of students between institutions: Florida, Georgia, Illinois, Massachusetts, Nevada, Rhode Island, South Carolina, and Texas. These regulations specify the curriculums and examinations that shall be accepted by all units in the system. Important to such regulations are a common calendar and course-numbering system along with interinstitutional committees to consider the necessary details.

State system transfer policies not written into law were in effect in around twenty states, particularly where the universities and the community colleges were under the same organization, such as in Hawaii and Kentucky. Other states with general policies had intersegmental agreements in which one institution agrees to recognize the general education core and to give full credit for courses taken and grades earned. Not incidentally, the highest transfer rates have been in the states where the regulations are strictest.

States in a third category had only general policies affecting transfer, usually voluntary agreements achieved between institutions. These types of agreements, negotiated between the staff of the single sets of institutions, appear in around fifteen states. Kintzer and Wattenbarger noted that in the prior fifteen years the number of formal state articulation or transfer agreements had not increased substantially.

The states could do much to improve transfer rates. The experience of states where particular attention has been paid to developing interinstitutional relationships reveals what can happen: common course numbering, common calendars, mandates that universities accept community college credits at full faith, and
revised funding formulas that reward community colleges for offering sophomore-level classes even when enrollments are low would do much for the transfer function.

Recommendations

The various researchers, policy makers, and groups studying either the transfer function of community colleges, the movement of minority students through the educational system, or both, have made recommendations intended to smooth the flow of students from one type of institution to another. Most of them recognize that the only way to improve the transfer rates for minorities is to stimulate the community colleges and the universities to attend to the transfer function in its entirety. They also recognize that the numbers are deceptive: there are too many ways of counting transfers and the percentage of students transferring is particularly difficult to calculate (Cohen, 1979). That percentage would go up if the colleges reduced the intake of students who are not likely to transfer as, for example, requiring that all students either matriculate in a degree program or stop taking classes for college credit. This would have the effect of reducing the denominator so that the transfer ratio would increase even if the absolute number stayed the same.

The most recent sets of recommendations have emanated from projects funded by the Ford Foundation under its Urban Community College Transfer Opportunities Program, as reported by the Center for the Study of Community Colleges (1985), Donovan and others (1987), and Richardson and Bender (1987). They are summarized in this section, along with recommendations that Astin (1983) has
made. Most of the recommendations refer to the policies that affect the movement of students between institutions or to the practices presumed to be influential in enhancing transfer awareness among the staff and students within institutions.

Some of the extramural policy recommendations include those that states should effect. A major recommendation is that state-level policies should be made more formal so that students who do desire to move from community colleges to universities find places available for them. This type of guaranteed admission at the junior level does much to stimulate transfer, especially when a university redirects many of its applicants for the freshman class to the local community colleges. Other state-level recommendations include building common student bases so that it is possible to track students through all the states' higher education institutions and gain better information on student flow; requiring that community colleges include between fifteen and thirty transferable units in all programs and that the universities accept these units at full credit; and effecting a system of rewarding colleges that effect higher transfer rates.

Interinstitutional connections can also be made stronger if the staff within both sets of institutions work together to identify and encourage transfers. These interinstitutional connections are operative not only between community colleges and universities but also between community colleges and secondary schools. They include visits and faculty exchange between institutions, dual admission or advanced placement of students, and a variety of coordinated student support services, including advisement and financial aid. Also in the interinstitutional arena are
collecting information on intentions from entering students, alerting the institution to which they are likely to transfer, and identifying the characteristics of successful transfers so that the information may be fed back to the sending institution.

The communication between staff members in different institutions has come in for a particular share of attention. Recommendations include: meetings between counselors and faculty members across institutional lines; course articulation agreements to minimize loss of credit; effecting a big brother or big sister arrangement so that former students act to inform and stimulate current students; checking course content and rigor to enhance parallelism; and building a financial aid consortium so that students who matriculate at community colleges with intentions of transferring can see just how financial aid packages will carry them through the community college and on into the university. This latter recommendation stems from the finding that lack of information about financial aid availability at an institution is a frequent cause of students' failing to make the bridge.

Many recommendations consider the community college environment itself. Within the colleges much can be done to change the climate so that transfer receives high priority. These recommendations include:

- Student testing at entry and mandatory placement in classes in which the instruction is cast at their level;
- Exit testing so that a data base is built on what students have learned;
- Honors programs in which the better students are given a considerably enriched environment;
- Increased employment of staff members from minority groups;
- University courses offered at the community college so that students in effect obtain advanced placement.

Some of these recommendations are designed to be simply effected at minimal expense:

- Including a special section in the college catalogue showing students how they can package courses and obtain continuing information about transfer requirements;

- Preparing special information packets and distributing them to all students indicating transfer intentions;

- Sending lists of potential transfers to the universities in the area so that early contact may be made by the receiving institutions;

- Designating responsibility for transfer to a high academic officer;

- Forming special transfer committees and task forces;

- Emphasizing the employment of full-time staff members to teach transfer classes and, where that is not feasible, conducting training sessions regarding transfer for the part-time faculty members;

- Conducting special orientation sessions for potential transfer students;

- Building more writing and independent research assignments into the curriculum in all programs;

Many recommendations are designed to gain greater student involvement with the college. The campus designed for commuters suffers in comparison with a residential institution because its students have considerably less contact with the college. As a way of mitigating that marginal contact, community colleges have been encouraged to move toward:

- Establishing week-end or week-long retreats for students anticipating transfer;

- Organizing more cultural and social events designed to keep people on campus;

- Enforcing required faculty office hours and regular conferences
between students and advisors;
- Organizing student study and peer support groups;
- Making more on-campus employment opportunities available for students;
- Organizing tours of universities and obtaining free or discounted tickets to university cultural events.

Note again that practically all these recommendations relate to transfer for all students; they are not peculiar to the advancement of minority students.

Conclusion
In contrast to their counterparts in universities, most students who enter community colleges probably have a lower commitment toward traditional collegiate studies that lead to the baccalaureate. Within the colleges they find fewer demands for concentrated involvement with their institution. While not actively hostile toward transfer, many of the colleges' practices seem to encourage them to attend in ways that do not foster progression toward a degree. Students who want to fulfill graduation requirements with minimal effort may select only those classes with the fewest reading and writing assignments. Students with undistinguished prior academic records are often required to take remedial courses that do not carry transfer credit. Classes offered in the evening and/or away from the main campus encourage students to attend part time while they are working. These policies have resulted in a drop in, drop out student population; in a maximum of access and, according to traditional measures, a minimum of attainment.

In general, degree attainment and transfer have been less a
concern in community colleges because of the importance that the college leaders have placed on other functions. For the past twenty-five years occupational education that leads to direct employment has been high on the priority list; in at least twenty percent of the associate degree-granting colleges in the nation, those typically designated as technical institutes, it ranks well ahead of transfer. The open door, the drive for access, the belief that the college should provide something for as many of its constituents as possible, the funding formulas that reward the institutions for high enrollments also militate against policies that might strengthen the transfer function.

For most of the students who begin higher education in the community college, the university freshman class is not an option; hence to say that the community college treats its students differently from the university makes for interesting but useless comparisons. Furthermore it is not possible to duplicate the university environment in a community college. No community college has a library with a million or more volumes, a faculty employing a sizeable number of research or teaching assistantships, or a selective admissions policy that ensures a student peer group of high academic achievement.

The question of whether community colleges are beneficial to minority student degree attainment is unresolved. If sizeable percentages of minority students would not attend any college unless there were a community college available, then community colleges have certainly helped minorities; no one can get a degree unless they begin college somewhere. If the presence of a convenient community college discourages minorities from
attending senior institutions, then for those students who wanted degrees the college has been detrimental. But that holds true only where a senior institution is an available option, certainly not the case for most community college matriculants.

The community colleges' emphasis on occupational studies has been blamed for the students' failure to transfer but the charge is not warranted because more students transfer from occupational programs than from so-called transfer programs. In fact, one apparent resolution of the dilemma faced by students who wish to be prepared for immediate employment while at the same time not foreclosing their options for further study, is in emphasizing the occupational programs that also carry transfer credit, such as those in the health and technology fields. The area of community college education that is out of step is the nondirective education that leads toward neither immediate employment possibilities nor toward successful transfer. This type of instruction, typically placed under the rubric of remedial or developmental education, has the disadvantage of being open-ended; students cannot perceive a value in learning literacy with no visible payoff. A higher attention to strong academic supports for students in courses that carry transfer credit is the more useful option.

Where transfer links have been built between institutions in the same community, some notable effects have been achieved. Arizona State University and the Maricopa Community College District began articulating programs in 1983 and by 1987 had twenty-seven two-plus-two programs designed for students to take their first two years at the community college and then move on to ASU. Joint
Curriculum committees meet regularly and in many areas joint registration and financial aid packages have been effected. There is no institutional policy to divert freshmen from the university to the community college, but the advisors tend to recommend that students begin at the community college because they know that these interinstitutional programs are in effect.

In other states transfer is being stimulated by building sophisticated transfer centers within the community college. Staffed by knowledgeable counselors and faculty members, these centers provide information about transfer, coordinate visits by university faculty members, arrange to transport students to the university for visits and events, provide sample tests and textbooks so that students can anticipate university coursework, arrange appointments for students to meet with university financial aid officers, and stimulate the collection of information about transfer opportunities. California has recently funded such transfer centers at around one-fifth of its colleges. Furthermore, the University of California is being stimulated to reduce its proportion of freshmen and sophomores and to redirect qualified students to community colleges with the guarantee that they will be admitted as juniors when they complete their lower division programs. Since this effort comes just when the demographics of the state show more minorities in high school and in the community colleges, it bodes to have a positive effect on minority student transfer.

Baccalaureate degree attainment for students entering community colleges cannot be brought to parity with that for students entering universities. The colleges have a number of
functions; sending students on to the university is only one of them. However, for most students who begin at a community college, the university was not a feasible alternative. For that reason alone, changes in the college environment should be made. Seeking those that are at once feasibly arranged and most beneficial to transfer leads to agreements between pairs of proximate institutions, wherein the university and the community college work together at all levels to ease the transfer process: building two-plus-two curriculums, diverting freshmen, effecting joint financial aid packages, and so on. State policies that have similar intent have a more generalized impact and are, of course, more difficult to erect because of the political processes involved. In between are a vast number of modest efforts, here a committee to work on a new brochure, there a special orientation program for potential transfer students. Overall, the community colleges of the nation seem to be moving toward strengthening their transfer function. As they do, their sizeable cohorts of minority students will undoubtedly benefit.
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