The point of view is taken that the issues of open admissions and programs for the disadvantaged can only be resolved if careful consideration is given to the desired objectives of the higher educational system: i.e., should we strive for outcomes that are egalitarian, elitist, remedial or what, and to the long-term implications of these various types of objectives for society. It is also important to recognize that whatever these objectives may be, the existing hierarchical arrangement of higher education institutions may not be the most effective means for achieving these objectives. The paper also raises questions about the relevance of current grading practices, and suggests replacing this system with some other form of assessment that will reveal changes in the students' performance. In addition, an argument is made for greater flexibility in the matter of credits and certification of students. These points are discussed within the general framework of this paper, which also deals with the effects of selectivity as presently practiced, the possibility of racial quotas, and the arguments against open admissions. (AF)
Much of the controversy about open admissions and special programs for disadvantaged students has been unproductive, because the adversaries have tended to talk past each other. Whereas the proponents of open admissions typically speak of the need for equalizing educational opportunities and aiding minority groups, the opponents usually speak of the need for maintaining academic standards and for conserving our dwindling institutional resources. Whether these various objectives are indeed incompatible will be difficult to determine as long as there is no common basis for discussion.

What I should like to do today is to try to discuss some of these issues in the broader context of what the entire system of higher education is trying to accomplish. Some of my arguments will be based on recent results from our research program at the American Council on Education, and others will be mostly a matter of theory or personal opinion. Whatever the validity of these arguments, however, my main hope is to provide a more rational basis for debating the issues.

The Need for a Systems Perspective

One of the problems for any college that is trying to examine its admissions policies is what might be called institutional myopia. The faculty and staff of most individual institutions, even of those that are part of some formal system in a city or state, tend to regard any proposed change in admissions policies only in terms of how it will directly affect that institution. I think it is safe to say that the educational consequences of any change in the admissions policies of a city or state system would be much easier to assess if institutions would make a greater effort to see their own admissions decisions in relationship to the larger system of which the institution is just one part. For example, what is likely to happen to the rejected applicant? Is he likely to go to some other institution? If so, where will he go, and to what educational end? In the same sense, the decision to accept an applicant (assuming he actually enrolls) precludes other alternatives. Where might he have gone if he had been rejected? Would he have fared better in some other type of institution? The point here is that if the institution perceives itself as trying to be of maximum benefit to its constituency, then it must ultimately regard any decision to accept or reject a particular student in light of what would happen to the student if the decision were made otherwise.

The idea of regarding the admissions decisions of individual institutions in this larger context requires what might be called a "systems perspective." Let me try to illustrate this approach with a few charts. To simplify the
argument, let us assume that the principal purpose of the system of higher education is to improve the general level of intellectual performance in our society. Let us assume further that the first curve at the top of Figure 1 (Figure 1-A) represents the distribution of intellectual performance for the total population of potential students that could be served by the system. (I have made the distribution "normal" in shape, but there is no necessary reason why the actual distribution of raw scores in the population could not assume some other shape.) Two major cutting points on this score distribution have been identified: "borderline literacy," at the low end of the continuum, and "Ph.D.-level performance," at the high end. Note that only a very small fraction of the population is performing at the Ph.D.-level prior to entering college but that a substantial proportion is performing at or below borderline literacy (the cross-hatched areas of the distribution above and below those two points are arbitrary; they have been drawn as shown simply for illustrative purposes). The desired educational output -- the goals of the higher educational system, if you will -- can be specified in terms of changes in the characteristics of the distribution. (There are, of course, many relevant student outcomes other than intellectual performance that higher education can influence. I have chosen this particular distribution simply for the sake of example.)

Although an almost infinite number of such changes might be desired, Figures 1-B, 1-C, and 1-D are examples of only three basic types of changes. The solid lines in each of these latter three figures show the desired shape of the distribution after four years of college (the educational objective); the dotted line which is superimposed on each figure shows the same distribution as Figure 1-A: i.e., the potential population before it is exposed to college. The first of these hypothetical changes in the performance distribution (Figure 1-B) involves an upward shift in mean performance only. Note that the population as a whole has improved its performance and that the shape or dispersion of people remains unchanged. One might refer to this as a sort of "democratic" or "egalitarian" plan. Note that, in order to implement this plan, it would probably be necessary to admit all members of the potential population to some form of higher education. Obviously, if certain individuals are excluded from the system, it would be unrealistic to expect them to show improvements in performance comparable to those of the individuals who are admitted. We do not know enough at this point to say if equal increments could be achieved more economically by means of a track system rather than some other type of institutional arrangement, but at least there would have to be some attempt to provide educational opportunities to every member of the population.

The next alternative educational outcome is portrayed in Figure 1-C. Here the proportion of students performing at or near the Ph.D.-level has been substantially increased, while the scores of those at the lowest parts of the distribution remain almost unchanged. This type of plan, which is concerned primarily with maximizing the number of very high-performing students, might be characterized as "elitist," in the sense that the greatest share of the resources would be invested in those who are initially high performers. In an elitist system, there is relatively little concern with improving performance on the lowest end of the continuum. This particular type of educational plan has been implicit in the American higher educational system in the past, and even more so in the higher educational systems of Western Europe. Note that it would not be necessary to admit to higher education people at the lowest end of the distribution in order to implement this particular plan.
The third alternative outcome, shown in the last curve of the figure (Figure 1-3), is concerned primarily with minimizing the proportion of low performers. Here the number of persons performing at or near borderline literacy is greatly reduced, but the number of performers at the high end of the distribution changes only slightly. Since it is concerned primarily with eradicating illiteracy, this approach might be labeled a "remedial" plan or possibly a "social welfare" plan. In terms of admissions, it would, of course, be necessary to admit at least the low performers into some form of postsecondary education in order to implement this last plan. However, it would probably also be necessary to invest a disproportionate amount of the higher educational resources in the education of these low performers. This type of resource allocation is, of course, precisely the reversal of what is done now: The highly selective institutions currently spend substantially more per student than do the less selective ones (Astin and Lee, 1971).

In addition to changes in the average performance of people in the population, each of the three alternative models has contrasting effects on the variation in performance within the population. Note that in the elitist model, exclusion of low performing people from the system and massive investment of resources in the education of exceptionally high performers will tend to increase variability. The remedial model, which calls for investing proportionately more of our resources in educating the lowest-performing individuals, will tend to have the opposite effect and therefore decrease variability. It would be interesting to speculate on how such alternative schemes will differentially affect societal problems such as racial tensions.

Some advocates of the elitist plan for higher education would argue that it is essential to invest a disproportionate amount of our resources in the education of the exceptionally bright in order to promote scientific and technological progress. Some of my elitist friends have referred to this approach as the "let's not lose the Third World War" plan. Advocates of the remedial or social welfare plan, on the other hand, might argue that the lowest-performing members of the society represent the biggest drain on the society and, in the long run, the biggest threat to the general welfare of the society. According to this argument, substantially improving the competence of these lowest performers might ultimately have enormous societal benefits by alleviating poverty, crime, and similar social problems.

In short, the three alternative models (B, C, and D of the figure) pose some interesting questions of value for educational planners. Does a given increment in performance at the high end of the distribution have the same value to the society as an equal increment in performance at the low end of the distribution? And what about increments in the middle ranges of the distribution? Of what personal value are given increments to the individuals themselves? Although this is not the place to debate such issues, one thing seems certain: The educational system cannot hope to enhance the performance of individuals at any point on the distribution if it excludes them from the system altogether. Nor can it hope to recruit, retain, and influence the performance of individuals not currently in the system unless it provides sufficient financial support and develops programs appropriately geared to their initial level of performance.
The Most Effective System

Even if it were possible to achieve some degree of agreement on the desired outcomes of higher education, there remains the unresolved question as to what sort of a system is needed to bring about any particular outcome. There are at least two aspects to this question. The first is to understand what kind of a system we already have, and the second is to determine whether there are certain changes which could be introduced to make the system more effective in achieving the desired outcome. Our research program at the Council has been concerned with both of these questions, and I would like to present briefly some of the relevant findings.

First let us look at some of the characteristics of the current system. In our studies of college characteristics, we have determined that one of the most important institutional attributes is the average academic ability of the undergraduates who enroll -- a variable that we call institutional selectivity. Selectivity is highly correlated with an institution's prestige, and with such diverse variables as the faculty-student ratio, the size of the library, faculty salaries, endowment, research contract funds, the amount of academic competitiveness among the students, and even the political orientation of the institution. Selectivity is, in fact, probably the best single measure of the perceived academic quality of an institution.

Table 1 shows how the population of institutions was distributed with respect to selectivity in 1968 (although there can be minor variations from year to year, institutional selectivity tends to be a highly stable institutional trait). The mean aptitude test scores of entering freshman classes have been grouped into eight intervals. In addition, there is a category which includes 854 institutions for which no direct estimate was available; independent research evidence (Astin, 1971) suggests that virtually all of these 854 institutions have very low selectivity scores and can be regarded as falling in the bottom two levels of selectivity.

Note that the distribution shown in Table 1 follows a marked positive skew, with the bulk of institutions scoring at the lowest levels of selectivity and only a few at the highest levels. In fact, when the "no estimate available" institutions are divided between levels 1 and 2, the distribution takes on a "J" shape.

Some observers have likened this institutional arrangement to a kind of track system, where students are grouped into various types of institutions on the basis of their abilities. Although there is some truth in this conception of American higher education, it is perhaps more accurately described as a status system rather than a track system. The "best" institutions, of course, are those in the upper track, the "good" institutions are those in the middle tracks, and the "poor" or "mediocre" institutions are the many small private colleges and two-year colleges in the lowest tracks. That this arrangement represents more a status hierarchy than a planned system of ability tracking is revealed when we consider that the ordering of institutions is clearly in the shape of a pyramid, with a few highly selective "centers of excellence" at the top. Another indication of the status implications of this system is that variability in student ability is closely and inversely related to the level of ability; thus, even the least selective institutions -- those at the bottom of the pyramid -- do not turn away the few bright students who apply. They clearly do not attempt to maintain the homogeneity in student ability that a track system
would require. For that matter, most institutions at the bottom of the hierarchy and virtually all of those in the middle covet the same commodities that characterize top institutions: bright students, highly trained and prestigious faculty, and money. In short, the track system in American higher education is not part of a conscious plan based on educational theory but rather the outcome of a competitive system in which the spoils are drawn from a finite pool of student and faculty talent.

Although some educators have developed elaborate rationales for this hierarchical arrangement of institutions, it is probably safe to assume that the system is perpetuated not for educational reasons but for reasons of competition and status. Professors support selective admissions because they feel that bright students are more fun and easier to teach. Indeed, even within a given institution or within a given classroom, professors probably favor their brightest students. Alumni, legislators, faculty, administrators, and probably a great many students support selective admissions because having only bright students enhances the prestige of the institution. Many college administrators probably support selective admissions because having a good input of highly motivated and talented students will almost guarantee a good output of distinguished and possibly wealthy alumni in years to come. The secondary schools support the track system that results from selective admissions because they see it as a reward or incentive system for motivating their students; teachers and guidance counselors can frequently be heard to tell their students something like, "Study hard so you can get into a 'good' college."

**Effects of Selectivity**

But what are the educational justifications for the institutional hierarchy? Is there any validity to the idea that a hierarchical arrangement will yield a better overall educational outcome than some other sort of arrangement?

Perhaps the most common educational justification for ability tracking is the assumption that the student will develop better academically if he is grouped with students of similar ability. There are, in addition, several important corollary assumptions: (1) that the brighter student needs the stimulation and the competition of other bright students if he is to realize his full potential, (2) that the brighter student will become bored and less motivated if he is grouped with students of lesser ability, and (3) that the less able student will become intimidated and discouraged if he is forced to compete with students of higher ability. Although there has to date been embarrassingly little research which has attempted to test these assumptions, the available evidence suggests that there is little or no intellectual "value added" for students from attending a highly selective college (Astin, 1968; Nichols, 1964; Rock, Center, and Linn, 1970). By the same token, the bright student does not appear to suffer intellectually by attending a college of average or even below-average selectivity (Astin, 1968). Although these studies, which have relied on standardized tests of achievement administered to college seniors, cannot be regarded as the final word on the effects of selectivity on intellectual development, they do suggest that some of our cherished assumptions about which are the "high-quality" institutions need to be reexamined. More important, these findings suggest that segregating students into separate institutions on the basis of their academic ability may not really benefit either the bright or the dull students.
We have also tried to look at the effects of selectivity on the grades that the student receives. In order to explore this question, we employed one-year longitudinal data from a national sample of 26,806 students who entered college in the fall of 1967. Using the student's freshman grade point average as the dependent variable and a variety of precollege measures as predictors in a multiple regression equation, we developed an "expected" freshman GPA for each student based on his precollege data. (As you might expect, the student's high school grades and scores on college admissions tests carried by far the most weight in predicting his freshman grades (Astin, 1971). This expected or predicted GPA was then compared with the student's actual GPA to determine how he performed during his freshman year relative to what would have been predicted from his background characteristics.

Table 2 shows the mean actual and mean expected freshman GPAs for students attending colleges at seven different levels of selectivity. (The top two levels of selectivity -- 7 and 8 -- were combined for this analysis.) If one looks only at the mean actual freshman GPAs, he might be led to conclude that college selectivity has a positive influence, since these actual means go up regularly with increasing levels of selectivity. However, when these means are considered in relationship to the expected or predicted GPAs, a totally different conclusion emerges. Thus, even though the least selective colleges award low grades, these grades are actually higher than would be predicted from the characteristics of their entering students. Similarly, even though the highly selective colleges tend to award relatively high grades, they are not as high as would be expected from the characteristics of their entering freshmen. In short, a given student is likely to get somewhat lower grades if he attends a highly selective institution. Somewhat surprising, however, is the small degree of difference that selectivity makes: only about one quarter of a letter grade difference between the most and least selective colleges.

Since many of the proposed changes in current admissions policies have been motivated by a concern about the racial segregation that typically results from selective admissions policies, it is important to determine if college selectivity has similar effects on the academic performance of students of different races. To explore this possibility, we sorted our sample of 26,806 students into four categories by race and sex, and compared the mean discrepancies between their predicted and actual freshmen GPAs, separately by college selectivity level. The results of these analyses are presented in Table 3. All four groups of students -- black men and women as well as nonblack men and women -- appear to be affected similarly by college selectivity. In each case, selectivity has the same type of negative effect on academic performance that was observed for the combined group. Nevertheless, there are some differential effects of selectivity by race and by sex which are worth noting. In the colleges at the lowest-selectivity level, black and nonblack students alike show discrepancies between actual and expected performance which are very similar. At the higher selectivity levels, however, the blacks perform relatively poorly in comparison with the whites. Since a disproportionate number of blacks attend colleges in the lowest selectivity level (mostly the black colleges), the overall performance of blacks does not differ from that of whites. In the more selective colleges, however, blacks of both sexes appear to perform relatively below their white counterparts. This means that
selective colleges that contemplate recruiting larger numbers of blacks should probably not expect these students to perform at the same level as white students with similar background characteristics.

The data in Table 3 also suggest that selectivity affects the sexes differentially. Women at the lower selectivity levels outperform men, and men at the higher selectivity levels outperformed women. These sex differences appear to apply to both black and nonblack students. What this finding means, in effect, is that the negative effects of college selectivity on the student's freshman grades are more pronounced for women than for men.

Racial Quotas

One alternative to open admissions which has been practiced by many selective institutions is to establish racial "quotas" as a means of integrating the student body. In essence, this practice amounts to the use of double standards of admissions for whites and blacks (and sometimes other selected minorities). While such double standards are probably the most straightforward means of integrating student bodies, there are certain possibly undesirable side effects which should be taken into account. For example, in contrast to a simple policy of open admissions, the use of double standards will tend to accentuate differences between the races in academic ability and past performance. The reason for this is that the pools of black and white applicants already differ -- substantially in many institutions -- in their past academic achievements and in their performance on tests of academic ability. Simply applying a merit criterion at admissions, without regard to race, will have the effect of admitting proportionately fewer blacks than whites, although those blacks who are admitted will not differ appreciably from the whites in terms of academic ability and past performance. However, if double standards of admissions are employed, the criteria for admitting blacks will have to be lowered, and, as a result of the consequent decline in the number of places for whites, the criteria for admitting whites will be raised. The net result of these lowered criteria for blacks and raised criteria for whites will be to produce a class of entering students in which the correlation between race and ability is accentuated. If the criteria for blacks are reduced substantially (or eliminated altogether, as in the case of some institutions), the resulting freshman class will include a substantial number of blacks (if not the majority) whose level of academic preparation is substantially below that of practically all of the white students who are admitted. Since the subsequent academic performance of these black students is almost certainly to be below that of most whites, the potential for increased racial tensions and racial hostility is very great.

One possible advantage of open admissions, in contrast to double standards of admissions, is that the students who enroll at the institution will not form ability dichotomies related to race. On the contrary, a substantial number of nonblack students will enroll whose ability and past performance is comparable to that of the typical black student. In this sense, then, a policy of open admissions has less potential for racial conflict once the students are admitted than does a policy of double standards which is implemented solely in order to increase the proportion of minority students enrolling at the institution.
Opposition to Open Admissions

The most carefully considered arguments against either open admissions or
double standards of admissions for disadvantaged students center around the question
of academic performance. Perhaps the most persuasive promoter of such arguments is
my colleague Julian Stanley of Johns Hopkins University. Stanley has presented an
extensive treatise on this subject in a recent issue of Science magazine.2 Briefly,
his argument runs somewhat as follows: Since high school grades and test scores
predict college grades just as well for disadvantaged students as they do for
advantaged students, disadvantaged students who are admitted under special criteria
will tend to perform below regularly admitted students. If the argument is
extended to the open admissions concept, Stanley would be concerned that students
with relatively poor grades and low test scores who elect to attend a previously
selective institution under an open admissions policy are likely to do poorly
academically. Under these circumstances, the argument goes, why subject such
students needlessly to the humiliation, frustration, and disappointment that will
accompany their academic failure?

In examining such arguments it is important to grant several points from the
start. First, if previously selective institutions opt for open admissions or for
double standards of admissions without also establishing special educational
programs for their less qualified students, the academic performance of these
students will be below par and their failure rate somewhat above that of other
students. But since grades and test scores are far from perfect predictors of
academic performance, only a few of the specially admitted students are likely to
fail completely, and a few will also perform outstandingly. What proportion these
"few" will be of the total specially admitted group is primarily a matter of how
large the discrepancies are between their test scores and grades and those of other
students. Second, if the specially admitted students are selected on the basis of
race or economic criteria without regard for their past performance in high school
or scores on tests of academic ability, we must face the fact that the more
selective the institution, the larger these discrepancies in academic performance
are likely to be.

Stanley cites a good deal of evidence which suggests that tests of academic
ability predict as well for disadvantaged students as for advantaged students. If
anything, they seem to overpredict slightly for disadvantaged students. While our
own research data at ACE would support these same conclusions, I do not feel that
the predictive validity of admissions criteria is necessarily relevant to the
basic issues.

To defend selective admissions on the grounds that aptitude tests and high
school grades predict performance is perhaps to miss the main point of education.
Even if students learned absolutely nothing as a result of their courses in
college, these tests would have the same predictive "validity." Indeed, if we were
to administer college admissions tests to high school seniors, put them in a state
of suspended animation or cold storage for four years, then thaw them out and give
them a set of final examinations, the college admissions tests would still have
"validity" in predicting performance on the final examinations. The point here is
that the predictive validity of college admissions tests and high school grades

---

2 J. C. Stanley, "Predicting College success of the Educationally Disadvantaged,"
may be, to a large extent, irrelevant to the educational objectives of the institution. To be sure, if it could be demonstrated that the "value added" by virtue of college attendance is greater for the high-scoring than for the low-scoring student, one might argue more cogently that college admissions tests are appropriate criteria for selecting college students, but the available evidence clearly does not support such an assumption.

Perhaps the most important hidden assumption underlying the prediction argument is that the student's grade point average is a reflection of what he has learned. Indeed, the concept of "flunking out" students is based on the assumption that students who get low grades are not "profiting" from their educational experience. There is, however, little evidence to support this assumption, and some recent evidence actually contradicts it. One of the most provocative studies that I have run across in recent years was reported recently by John Harris (1970) of the Institute of Higher Education at the University of Georgia. This study involves the administration of the College Level Examination Program (CLEP) General Examinations to freshmen when they first entered college. In order to measure gains in intellectual performance, the same battery was readministered after the students had completed their first six quarters of academic work. Students were then sorted into several comparison groups on the basis of the academic grades they had received in various courses. The groups were then compared to determine if grades were related to differential changes on the CLEP. As it turned out, virtually all groups showed significant positive gains on the CLEP, indicating that some learning was taking place regardless of the student's course grade. In certain fields, the course grades appeared to be reflecting the amount learned. For example, students with the highest grades in physical science courses showed substantially larger gains on the CLEP natural science test than did students with poor physical science grades. A similar result occurred with grades in history courses and gains on the CLEP social science -- history test. In both of these instances, however, even students with grades below C showed significant gains on the CLEP. In other fields, however, the situation was quite different. For example, students who obtained D or failing grades in mathematics courses actually showed slightly higher gains on the CLEP mathematics test than did students who received A or B grades. Students with D or failing grades in English literature showed larger mean gains on the CLEP English test than students in any other grade category.

Although Harris' study was conducted at one small Southern college and clearly needs to be replicated, his findings could have profound implications both for admissions and for grading practices in higher education. Is it possible that grades are a poor reflection of a student's progress? Is it possible that college grades simply rank the students in the same relative manner as their high school grades and test scores do and fail to reflect what they are actually learning? Is it possible that many students who are "flunked out" are in fact showing significant progress, although at a lower relative level of performance than students who receive high grades?

It is probably a serious mistake to assume that, by admitting students who would previously have been excluded from the system, we should necessarily expect them all ultimately to catch up with the other students; this is a matter of individual capacity and motivation. The criterion for determining whether an educational program is effective, however, should be that the student continues to show progress and to acquire skills and knowledge that are of value either to himself or to the society. In other words, the decision to retain a student in an educational program should not be based only on his ability to reach an arbitrary performance standard within some specified period of time, but rather on whether he continues to show significant progress and growth.

Some critics of open admissions argue that abandonment of traditional meritocratic criteria in admissions will make it impossible for colleges to continue to perform their "selecting and sorting" function. There seems to be little question that colleges have traditionally performed such a function. By excluding the less able people at the point of admissions, colleges can be reasonably sure that the products they turn out four years later will be of reasonably high quality. Plunking out those admitted students who later perform poorly provides added insurance that the high calibre of the graduate will be maintained. The more stringent the initial selection criteria, and the more severe the grading practices that are applied to those who are admitted, the higher the quality of the product at the other end.

Graduate and professional schools and employers have come to rely heavily on the undergraduate colleges to perform this sorting and selecting function. If the initial selection criteria used by the baccalaureate recipient's school are stringent enough (the Ivy League colleges, for example), a prospective employer or graduate school can virtually ignore any other information about the candidate and still be reasonably confident that he is bright and highly motivated. That this selecting and sorting function has proved to be useful is difficult to argue. What has not been considered, I think, is how the college's educational function is affected when it also accepts responsibility for selecting and sorting. For example, when a college fails to admit a student, or when it chooses to discharge a student whose grades are poor, the possibility of having any further educational impact on the student is precluded. By selectively screening out the lower-performing student in this fashion, the institution is implicitly taking the position that the education of these students is not a worthwhile enterprise.

But what of the necessity for selecting and screening by colleges? Is there really any necessary reason why higher education, rather than some other agency in our society, must perform this role? If one tries to put himself in the position of an employer, who is not interested in education but only in finding the most talented persons, what difference should it make as to whether a student attended a particular college? What would really seem to matter is the candidate's level of competency at the time of graduation. Note that reliance on undergraduate admissions criteria freezes students in their relative order of performance at the time of graduation. Not only is such information outdated and therefore of limited value to the employer or graduate school, but it also penalizes the "late bloomer" and gives unfair advantage to those students whose initially high performance in high school goes downhill during the college years. As long as there is sufficient information available at the time of college graduation (as revealed in such things as
interviews, recommendations, performance on the Graduate Record Examination, and so forth), undergraduate admissions information from at least four years earlier would seem to be of limited value and possibly even misleading. In short, it would seem that the "sorting and selection" function of undergraduate admissions practices is of dubious value to employers or to graduate and professional schools. As long as those who recruit baccalaureate degree recipients continue to utilize their own screening criteria, "sorting and selecting" appears to be a feeble justification for continuing the practice of selective admissions at the undergraduate level.

It is sometimes said that a policy of open admissions will inflict new educational burdens on colleges and universities that they are "not equipped to handle." Such arguments ignore the fact that several of the largest state systems of higher education in the United States have for many years been operating what is essentially a policy of open admissions. Moreover, there are several hundred private institutions that have traditionally enrolled students in the lower ability ranges -- students who in many respects closely resemble those who would come into the system under a program of open admissions. For that matter, many of the great state universities in the United States have been able to accommodate students at all levels of ability without any apparent ill effect. Such institutions have, to be sure, instituted a kind of track system within their curricular programs, but the fact that the programs have operated within a single institution has blunted many of the social and political problems that result from an institutional hierarchy based on selective admissions. Accommodating a wide range of student ability within a single institution can be accomplished by establishing curricular programs similar to the "ungraded primary" system found in many elementary schools. Confining these programs to a single institution also facilitates easy and rapid transfer of students across and within various curricular tracks.

An argument that is commonly used to support the concept of selective admissions is that academic standards are somehow determined by admissions standards. If such were indeed the case, it would not be necessary for colleges to award grades or degrees or even to assume any responsibility for educating the student: The colleges would simply be talent scouts and certification agencies for business, industry, and the graduate and professional school. Academic "standards" ordinarily refer to the absolute level of performance that the student is required to exhibit in order to be certified (i.e., to pass courses, and to earn degrees). Consequently, the college is free to set any performance standards it wishes, independent of the abilities of the students it admits. Educators who might be concerned about "maintaining academic standards" should probably put their support behind the idea of national certification examinations. This concept has already been adopted at the secondary school level with the use of national examinations such as the American College and the College Entrance Examination Board tests. There would seem to be no valid reason why colleges and universities could not adopt similar national standards and thereby ultimately eliminate the necessity for awarding grades and degrees.

Perhaps the strongest argument in favor of a program of open admissions is that selective admissions is one sure way for colleges to avoid any responsibility for educating the student. If only the brightest students are admitted...
at one end, then the high quality of the final product at the other end is virtually guaranteed. What happens in between -- the quality of the educational experience itself -- need not be of concern since the secondary schools are suitably impressed with the college's high admissions standards, and the employers and graduate schools are suitably impressed with the "high quality of the graduate."

Converting to a program of open admissions imposes certain new responsibilities on the institution. One obvious responsibility is that the institution must develop educational programs that are geared for students in the lower ability ranges. While many unselective colleges have already developed such programs, the more selective ones may be forced to undergo certain severe transitions in faculty and curricula before they can adequately deal with students in the lower ability ranges.

A less well-recognized problem for any institution that moves to open admissions is that the responsibilities for matching students and colleges is placed much more in the hands of the student. Under traditional selective admissions criteria, institutions can avoid the problem of "mis-matches" by eliminating what they consider to be the "unqualified" students. However, if the admissions decision is removed from the institution and placed in the hands of students, then the institution bears greater responsibility for assisting prospective applicants to make informed choices. One obvious mode of assistance would be to provide the population of prospective applicants with definitive information about the academic demands and requirements of the institution.

The form of opposition to open admissions which is perhaps dearest to the hearts of administrators concerns the costs of developing special programs for less prepared students. It is sometimes argued that the limited resources of the selective institution will be "squandered" and the existing program "diluted" if less well-prepared students are admitted. There seems to be little question that additional resources will be required if colleges are to develop programs appropriately geared to such students. However, it seems likely that many highly selective institutions could institute certain practices which might free up funds to invest in programs for the less high-performing student. For example, is it really necessary for each of the highly able and highly motivated students who goes to such institutions to spend the traditional four years of undergraduate study in order to complete the baccalaureate degree? Some institutions are already employing methods of acceleration such as the Advanced Placement Examination and the College Level Examination, but the extent of use of such tests is a drop in the bucket compared to their potential use with highly able students. In short, it seems likely that many of these students who now spend four years to obtain the baccalaureate degree could, with judicious placement and counseling, greatly accelerate their progress, thereby freeing up institutional resources to be devoted to those students whose undergraduate education should be more protracted. One possible way of introducing greater flexibility in the time spent by each undergraduate would be to employ certification by examination in place of the usual series of courses and credits. Certification by examination would make it possible for each student to progress at his own rate and, to a large extent, would obviate the need for course credits and grades.
Summary

In closing, I would like to stress my belief that the issues of open admissions and programs for the disadvantaged cannot be resolved without a more careful consideration of the desired objectives of the higher educational system: Should we strive for outcomes that are egalitarian, elitist, remedial, or what? What are the long-term implications of these various types of objectives for the society?

I have also tried to point out that, whatever our objectives may be, the existing hierarchical arrangement of institutions in American higher education may not be the most effective means of achieving these objectives. There is some hope, I think, that ongoing research on institutional impact will soon provide better clues as to how existing institutions and systems of institutions can be changed to make them more effective.

I have raised certain questions about the relevance of current grading practices, primarily because there is evidence that grades may be reflecting not what students are learning, but merely how they are performing relative to one another at some point in time. Under these circumstances, we may be well advised to consider replacing our current grading system with some other form of assessment which will reveal changes in the student's performance. As long as the student continues to show evidence of progress and growth, one can make a case for retaining him in the system, regardless of how he performs relative to others.

I have also argued for greater flexibility in the matter of credits and certification of students. If institutions can be made sufficiently more flexible both in their programs and their requirements, it would be possible to permit the new student to enter at his current level of performance and to progress at his own rate. Educational resources which would be conserved by accelerating the progress of the more able and advanced students could thus be used to support the more protracted education of many students who might enter under a program of open admissions. In this way, we free the high performer from the four-year lockstep of traditional undergraduate education and relieve the less well-prepared student of the burden of unrealistic and unreasonable expectations.
Concurrent General Session II
Tuesday Morning, March 16

References

Astin, A. W. "Undergraduate Achievement and Institutional 'Excellence'."

Astin, A. W. "College Impact on Student Attitudes and Behavior." Paper
presented at the Annual Meeting of the American Educational

Astin, A. W. Predicting Academic Performance in College. New York, New York:
The Free Press, forthcoming.


Harris, J. "Gain Scores on the CLEP - General Examinations and an Overview
of Research." Paper presented at the Annual Meeting of the
American Educational Research Association, Minneapolis, March,
1970.

Nichols, R. C. "Effects of Various College Characteristics on Student
Aptitude Test Scores," Journal of Educational Psychology, 1964,
55, 45-54.

Rock, Donald A., Centra, John A., and Linn, Robert L. "Relationships Between
College Characteristics and Student Characteristics." American

Stanley, J. C. "Predicting College Success of the Educationally Disadvantaged."
Figure 1: Hypothetical distribution of intellectual ability in the population of entering college students (a), and three possible outputs of the higher educational system expressed in terms of changes in the shape of the distribution (b, c, & d). (Originally presented in Astin, A. W., "Measuring Student Outputs in Higher Education," from The Outputs of Higher Education: Their Identification, Measurement, and Evaluation, Western Interstate Commission for Higher Education, July 1970, pp. 75-83.)
### Table 1
Selectivity Levels of Higher Educational Institutions,* 1968
(N = 2,319)

<table>
<thead>
<tr>
<th>College Selectivity Level</th>
<th>Corresponding Range of Student Mean Scores</th>
<th>Institutions</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>SAT V + M</td>
<td>Number</td>
</tr>
<tr>
<td></td>
<td>ACT composite</td>
<td>Percent</td>
</tr>
<tr>
<td>6</td>
<td>1320 or higher</td>
<td>27</td>
</tr>
<tr>
<td></td>
<td>30 or higher</td>
<td>1.2</td>
</tr>
<tr>
<td>7</td>
<td>1236-1319</td>
<td>43</td>
</tr>
<tr>
<td></td>
<td>28-29</td>
<td>1.8</td>
</tr>
<tr>
<td>6</td>
<td>1154-1235</td>
<td>85</td>
</tr>
<tr>
<td></td>
<td>26-27</td>
<td>3.7</td>
</tr>
<tr>
<td>5</td>
<td>1075-1153</td>
<td>141</td>
</tr>
<tr>
<td></td>
<td>25-26</td>
<td>6.1</td>
</tr>
<tr>
<td>4</td>
<td>998-1074</td>
<td>342</td>
</tr>
<tr>
<td></td>
<td>23-24</td>
<td>14.7</td>
</tr>
<tr>
<td>3</td>
<td>926-997</td>
<td>331</td>
</tr>
<tr>
<td></td>
<td>21-22</td>
<td>14.3</td>
</tr>
<tr>
<td>2</td>
<td>855-925</td>
<td>273</td>
</tr>
<tr>
<td></td>
<td>19-20</td>
<td>11.8</td>
</tr>
<tr>
<td>1</td>
<td>854 or lower</td>
<td>281</td>
</tr>
<tr>
<td></td>
<td>18 or lower</td>
<td>12.1</td>
</tr>
<tr>
<td>No Estimate Available</td>
<td>854**</td>
<td>796</td>
</tr>
<tr>
<td></td>
<td>19**</td>
<td>34.3</td>
</tr>
</tbody>
</table>

*Includes all institutions listed in Part 3 of the 1968 edition of the U.S. Office of Education's Education Directory, except those institutions that require prior undergraduate credits for admission.

**Estimate of the average test scores of students entering institutions in this category, based on evidence reported in Astin (in press).
Table 2

<table>
<thead>
<tr>
<th>Level of Selectivity</th>
<th>Number of Colleges</th>
<th>Number of Students</th>
<th>Mean Actual Freshman GPA</th>
<th>Mean Expected Freshman GPA</th>
<th>Actual Minus Expected Freshman GPA</th>
</tr>
</thead>
<tbody>
<tr>
<td>1a</td>
<td>20</td>
<td>2,156</td>
<td>2.44</td>
<td>2.32</td>
<td>+.12</td>
</tr>
<tr>
<td>2</td>
<td>12</td>
<td>1,088</td>
<td>2.49</td>
<td>2.31</td>
<td>+.18</td>
</tr>
<tr>
<td>3</td>
<td>27</td>
<td>3,536</td>
<td>2.51</td>
<td>2.47</td>
<td>+.04</td>
</tr>
<tr>
<td>4</td>
<td>45</td>
<td>7,030</td>
<td>2.56</td>
<td>2.55</td>
<td>+.01</td>
</tr>
<tr>
<td>5</td>
<td>26</td>
<td>4,280</td>
<td>2.55</td>
<td>2.62</td>
<td>-.07</td>
</tr>
<tr>
<td>6</td>
<td>21</td>
<td>3,714</td>
<td>2.63</td>
<td>2.71</td>
<td>-.08</td>
</tr>
<tr>
<td>7 &amp; 8</td>
<td>28</td>
<td>5,002</td>
<td>2.75</td>
<td>2.84</td>
<td>-.09</td>
</tr>
</tbody>
</table>

\(^a\) Includes "unknown" selectivity.

\(^b\) Based on prediction formula utilizing 19 student input variables (R = .58).
Concurrent General Session II  
Tuesday Morning, March 16 .  

Table 3  
Mean Actual Minus Mean Expected Freshman GPA's of  
Black and Nonblack Students as a Function of College Selectivity Level

<table>
<thead>
<tr>
<th>College Selectivity Level</th>
<th>Men</th>
<th>Women</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Nonblack</td>
<td>Black</td>
</tr>
<tr>
<td>1&lt;sup&gt;a&lt;/sup&gt;</td>
<td>+ .09</td>
<td>+ .05</td>
</tr>
<tr>
<td>2</td>
<td>+ .17</td>
<td>- .04</td>
</tr>
<tr>
<td>3</td>
<td>+ .03</td>
<td>- .07</td>
</tr>
<tr>
<td>4</td>
<td>+ .00</td>
<td>- .06</td>
</tr>
<tr>
<td>5</td>
<td>- .09</td>
<td>- .22</td>
</tr>
<tr>
<td>6</td>
<td>- .08</td>
<td>- .18</td>
</tr>
<tr>
<td>7 &amp; 8</td>
<td>- .06</td>
<td>- .33</td>
</tr>
</tbody>
</table>

<sup>a</sup>Includes "unknown" selectivity.