### Round Students and Square Colleges

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In the history of higher education in this country, there have been three major philosophies about who should go to college. The first was aristocratic. In the early history of the country admission to college was determined largely by family status and the ability to pay the tuition. The purpose of higher education was to prepare young people to assume a station in life that was related more to family status than it was to the particular abilities and interests of the student. The symbols of the aristocracy in higher education were private, high-tuition colleges such as Harvard, Yale, and Princeton; and students who were white, upperclass and male. By and large, colleges were designed for the population they were expected to serve.

The challenge to the educational aristocracy was made by advocates of the meritocracy which became the second great philosophy of admissions in higher education. In the merito-

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cracy, colleges were designed to serve students of presumed academic merit. The notion that a college education was an earned right rather than a birthright was new. Admissions criteria changed from the ability to pay the tuition to the ability to show high aptitude for academic work. The meritocracy played down the importance of family and played up the importance of academic achievement, without fully recognizing the close relationship between the two. The symbols of the era were land-grant universities, selective admissions, talent searches, and scholarships. The hero of the meritocracy was the immigrant cobbler's son who was bright and hard working but who had no money and no social position. The rallying cry of the meritocracy was academic excellence, but since the students to be served were selected for their potential for high academic performance, the fit between colleges and students was good. The narrow definition of learning in both the aristocracy and the meritocracy is demonstrated by the perfect logic wherein the richest students attended the most expensive, and therefore presumably the best, colleges of the aristocracy and the brightest students attended the most selective, and therefore presumably the best, colleges of the meritocracy.

Today, we can observe the influence of both of these historical answers to the question of who should go to college. Today the primary determiner of who goes to college is academic ability—as that ability is measured by grades and test scores.

The secondary determiner is socioeconomic background. Most people--educators as well as lay people of the 1970's-- are still fighting the battle of the meritocracy, but that battle has been largely won. Most young people who show high promise for academic work are now in college regardless of race, sex, or socioeconomic background. Although there is considerable regional variation, nationwide almost three-quarters of the students who rank in the upper half of the high school graduating classes are attending college today--even if they rank in the bottom quarter on socioeconomic measures.

This fact moves us into the third great philosophy of college admissions--egalitarianism. The social philosophy of egalitarianism proposes to remove inequalities among citizens. Applied to college entrance it means that everyone should have equal access to educational opportunity regardless of socioeconomic background, race, sex, or <u>ability</u>. The symbols of the era are community colleges, open admissions, financial aid based on need.

In the awkward transition period of the 1960's and 70's reality has not kept pace with our ideals. The last vestiges of the aristocracy linger in the convictions of many, if not most, people that students should pay their way through college. And vestiges of the meritocracy are still quite apparent in the belief of the majority that <u>academic</u> excellence is the goal of higher education and that good students and good colleges are

those with high academic performance scores. The egalitarian philosophy, which we have embraced in spirit, challenges us to accept all students including those whose academic performance is inadequate, and therein lies the rub. Our colleges and our concepts are still largely meritocratic; the students are the children of the new egalitarian age. Thus, we now have round students in square colleges, and the purpose of this paper as well as your conference is to explore the ways in which we can obtain a better fit between students and colleges for the decade ahead.

The greatest single barrier to college admission in the meritocratic 1960's was lack of demonstrated academic ability. America's newest college students are not necessarily black or brown or red; most of them are the white sons and daughters of blue-collar workers. The young people who did not attend colleges in the 1950's and 60's, but who will enter college in increasing numbers in the 1970's and 80's are distinguished not by their color so much as by their past experience with failure in the American school system. As the country continues the move toward increased college access, it is lower-half students who constitute the available reservoir of new students to higher education: poor students academically and--more often than not--poor students financially.

Strangely enough, the influx of low-achieving students into higher education is a fact that has been faced more squarely in practice than in theory. While almost all public

community colleges practice open admissions, and 80 percent of them have faced the reality of this policy by instituting special programs for students who do not have the academic backgrounds for college work, the concept of open-door admissions continues to be controversial. open admissions program of the City University of New York sparked a headline in TIME magazine reading, "Open Admissions: American Dream or Disaster?". Professional journals discuss whether college is for everyone. The Carnegie Commission on Higher Education (1970) treads water on the issue by making a somewhat labored distinction between universal access (which they favor) and universal attendance (which they oppose). National legislators are still dealing with the "talent search" issues so popular in the 1950's as they pass noncontroversial legislation that seeks to "...identify qualified youth of financial or cultural need with exceptional potential for postsecondary educational training and encourage them to complete secondary school and undertake postsecondary educational training". (Public Law 90-575, October, 1968, emphases added.)

Even as the issue of universal higher education continues to be debated, the practices of open admissions colleges have moved us beyond academic meritocracy into academic egalitarianism. They are here—the new students of the seventies. What do we know about their past learning experiences, aspirations, attitudes, and interests? What experiences can colleges offer that will lead to

self-actualization and the development of human potential?

Are colleges prepared to offer these students a new kind of learning experience that is sufficiently different from what they have had for the past 17 years to make freedom of access to college more than a hollow victory?

To shed some light on these questions, I conducted some research using information from four large national data banks.\*

I vowed not to ask students to fill out more questionnaires until we had utilized the enormous amount of data that already existed on student abilities, attitudes, interests, and aspirations. Thanks to the generous cooperation of my research colleagues across the country who shared their data; and thanks also to financial support from the Center for Higher Education of the University of California, Educational Testing Service, and the College Board, the research project was launched in the spring of 1970.

Since the single most common characteristic of students who are newly entering colleges in the 1970's is low test scores and poor high school records of achievement, "New" students were defined as those scoring in the lowest third of the high school senior population on tests of academic aptitude whereas "traditional" students were considered to be those in the top third--the group that have traditionally been considered "college material".

Nationwide, over half of the students graduating in the lowest

<sup>\*</sup>Data used came from Project TALENT, SCOPE, the Comparative Guidance and Placement Program (CGP) and the Educational Testing Service Growth Study. For this article the data scource will be identified in parentheses following specific findings. The characteristics of the samples plus further elaboration of the findings regarding new students are presented in Beyond the Open Door (Cross, 1971).

third of the high school classes today are planning to continue their education beyond high school.

The four samples that constituted the base of my research were not designed to be comparable; the criterion tests were not the same; the data were collected at different periods between 1961 to 1969; but across the four studies the characteristics of the lowest-third students are remarkably similar. It is thus possible to present a composite profile of the new students that are challenging the traditional practices of higher education. The following capsule profile is abstracted from the complete study released in book form this fall (Cross, 1971).

## Family Background

Two-thirds of the new students are first-generation college students; their fathers have never attended college. About the same proportion of fathers—two out of three—are blue—collar workers. Over half of the group are Caucasians with about a fourth black and about 15 percent other minorities. One of the most persistent misunderstandings of the educational community as well as the broader society is that most "remedial" students are members of minority ethnic groups. It is just not true; the majority of lowest—third high school graduates are white. Most community colleges (64 percent) offering special programs for students who are poorly prepared academically report that fewer than one-fourth of the students enrolled

in such programs are members of ethnic minorities. It is true, however, that the concern about the lack of academic preparation of ethnic minorities is well justified. Black Americans are very much over-represented among the new student population, with about two-thirds of the blacks entering two-year colleges falling among the lowest academic third of the entering students. Mexican-Americans and American Indians are also overrepresented among lowest-third students in community colleges.

It should be recognized, however, that since fouryear institutions cream off the top of the distribution by recruiting the best-qualified minority students a disproportionately large group of poorly-prepared ethnic minorities will be found in the open admissions colleges.

Two other broad misunderstandings about the nature of the new student population should be corrected. First, the new student is more likely to be female than male as we approach universal access—simply because the pool of women who are not going to college is considerably larger than that for men, especially in the lower socioeconomic strata. For example, 75 percent of bright (top quarter) but poor (bottom SES quarter) males are entering college, compared with 60 percent of their equally—able sisters. Second, there is a significant minority of relatively advantaged young people with poor academic records who are beginning to enter opendoor colleges. About one quarter of the youth who constitute

the lowest academic third are the children of fathers who have attended college. Individually and collectively their learning problems are as tragic--their sense of school failure is as pervasive--as those of their financially-disadvantaged peers.

Thus the new student of the 1970's falls into no such common stereotype as a black ghetto male. As we move toward equality of access, new students become the one-third of the high school graduates who are not now continuing their education--predominantly those with a poor academic track record and it's all-too-frequent companion, low socioeconomic status.

### Past Educational Experience

Moving through the American school system is a very different experience for top- and bottom-third students, and the gap between the academic performance of the two groups widens in absolute as well as relative terms as they proceed through school (Coleman, 1966; Cross, 1971). Most students who graduate from high school in the top-third of the class have been successful students all the way through school. Bottom-third students, on the other hand, have spent their formative years not simply in the bottom-third, but often worse yet, moving toward the lowest-third. Data collected over a period of five years from American teenagers (ETS Growth Study) show that out

of every 100 top-third high school juniors, 87 were already in the top-third on national norms in the seventh grade, but for 100 lowest-third high school juniors only 52 had been in the lowest-third in seventh grade while 45 had been in the middle-third. It is not just a question of failing to show progress that frustrates the poorer students; the threat of dropping ever lower in the hierarchy of conventional schools is very real indeed. Because attrition is academically selective, an average student in elementary school has a better chance of dropping to below-average status among the more selective group of high school graduates than he has of improving his relative position. Why shouldn't lowest-third seventh graders learn to fear failure instead of expecting success? Holt (1970) presents a colorful description of the anxiety present in most American classrooms. When he asked elementary school children how they felt when the teacher asked them a question and they didn't know the answer, one boy "spoke for everyone" when he said in a loud voice "Gulp!".

I asked them why they felt gulpish. They said they were afraid of failing, afraid of being kept back, afraid of being called stupid, afraid of feeling themselves stupid. Stupid. Why is it such a deadly insult to these children, almost the worst thing they can think of to call each other? Where do they learn this? (p.63).

One of the unintentional lessons learned by students who start their school careers handicapped by the lack of

verbal and other academic skills is that failure is always reaching out to envelop them. The picture is not unlike that of a strong and a weak swimmer thrown into downstream currents above a waterfall. The strong swimmer soon swims to calm waters and begins to focus attention on how fast he can swim, while the weak swimmer is dragged into such swift currents that his only concern is to keep himself from going over the waterfall. In the language of psychology, the strong swimmer becomes achievement-motivated while the weak swimmer becomes fear-threatened. Future learning is structured differently for the two swimmers. And the effects are clearly evident by the time young people graduate from high school. Whereas a certain minority of young people confess that school makes them nervous, the proportion of lowest-third high school seniors admitting that they often feel nervous, tense, or shy in class is almost double that for top-third students--38 percent to 21 percent (SCOPE data).

# Attitudes and Values

New students to higher education have measureably different perspectives on life and on learning from those held by traditional college students. While the attitudes of young people are usually attributed to home environments, students who are similar to each other on academic measures

(top-third or bottom-third) are more likely to share common attitudes about school-related topics than are students who are similar to each other on socioeconomic measures (blue-collar or white-collar). For example, half of the new students score in the top-third on a scale measuring passivity compared with one-fourth of the traditional students (SCOPE data). Not only do new students mark questionnaires in a manner that reveals an inclination to be passive in learning situations, but those who work with them rank "lack of effort, has quit trying" as the major obstacle to learning for new students--rating it above poor home background, poor schooling, or low intelligence (Cross, 1971). Psychologists studying failure-threatened personalities (Atkinson & Feather, 1966; Seligman, 1969) have attributed the observed passivity to fear. And some of the attitudes of new students make good sense when viewed in the context of their school-failure experiences. Students who have learned through experience that failure in school is a more likely outcome than success seem to say, "If I don't try very hard, I can't fail very much."

Another characteristic that distinguishes new students from college students of the past is the lack of interest in intellectual pursuits. On all types of measures--leisure time activities, interest scales, hobby preferences, personality measures, or self-ratings of ability--new students

express a preference for noncognitive activities. For example, on the Intellectual Disposition Scale of the Omnibus Personality Inventory, (OPI) marked differences occur between top-third and bottom-third high school seniors, with 59 percent of the traditional college students scoring in the top-third on this scale of intellectual and scholarly interests compared with only 16 percent of the new students (SCOPE data). There are a few students who make low scores on traditional tests of academic ability who express an interest in scholarly ideas, but not many. There should be no surprise in the rather close relationship between school success and interest in school work. The present state of knowledge doesn't answer the question of whether lack of success results in lack of interest or whether lack of interest causes school failure, but by the time youngsters reach 17 and 18 years of age, it is reasonably certain that a self-defeating cycle of passivity and academic failure is well established.

Another OPI scale that shows large differences between top- and bottom-third high school seniors is one that is not directly related to school work or to study habits. The Autonomy Scale is a measure of authoritarianism, and on it, new students reflect a stereotype associated with blue-collar backgrounds. The items on the Autonomy Scale represent an especially good example of some of the issues

around which the town-gown polarization has developed. Some of the attitudes that traditional students have most vociferously disavowed are held by substantial numbers of new students. Examples of some scale items are, "I am in favor of strict enforcement of laws no matter what." "It is never right to disobey the government." "More than anything else, it is good hard work that makes life worthwhile." On the Autonomy Scale new students express the attitudes of the broader public as opposed to those of students and faculty on more traditional college campuses. Fiftyeight percent of the new students show an inclination to respect the authority of American institutions and to agree with statements that make virtues of hard work and determination, in contrast to 15 percent of the traditional students (SCOPE data).

Young people holding the attitudes of "middle America"--a term frequently used in a pejorative way by intellectuals--may well find intolerance on traditional college campuses for their values and even for their backgrounds. Novak (1971) has written eloquently and angrily of the "relentlessly missionary" zeal with which liberal educators seek to "enlighten" those whose values differ from their own. "Why" Novak asks, "do the educated classes find it so difficult to want to understand the man who drives a beer truck, or the fellow with a helmet working on a site across the street

with plumbers and electricians, while their sensitivities race easily to Mississippi or even Bedford-Stuyvesant."

Since among today's college administrators and faculty members there are few former remedial students, the problem of developing sensitivities to new students of the seventies is monumental.

What is the mission of higher education with respect to new students? Is it as simple as providing "remediation" until they are motivated and academically ready to learn what we have been teaching for generations to traditional college students? At present most liberal educators do indeed regard it as their mission to correct the "deficiencies" of new students, which really means making new students over into the image of traditional students, or better yet, into images of themselves. Perhaps the most-irritating aspect of the conversion attempt is the well-meaning, condescending kindness which is used to assure new students that except for their "deprived" backgrounds, they too could be more like most college professors.

Almost all special programs presently offered new students can be classified under three major headings. There are remedial courses to correct academic "deficiencies", counseling programs to correct motivational "deficiencies" and financial aids to correct financial "deficiencies." The point is not that such programs are not necessary (although I

question the methods and emphases of some), it is rather that they are not sufficient. To date, we have devoted no major attention at all to seeking out and capitalizing on the strengths of new students. When community colleges were asked to rank the goals of special programs for new students in order of importance, they gave "to prepare students for regular college work" top priority. Thus, even the colleges most nearly designed for new students fall victim to the notion that the task is to convert new students into acceptable candidates for traditional higher education. "Success" of the program is almost invariably measured in terms of retention in traditional colleges and grades in traditional courses. Justifiably, perhaps, we take pride in the rather small number of new students who make it in our system; we close our eyes to what, if anything, we've done for the overwhelming majority who experienced just one more failure in the American school system. Is anyone looking at the youngsters whose last excuses for not making it are removed by a benevolent society? What really happens to those who are given tutoring, counseling, money, and opportunity and still don't succeed in the American dream of a traditional college degree? If our task is not to convert new students to our version of the educated man or woman, what alternatives are there? What do new students say they want from education?

### Educational Interests

At this point, let the reader ask himself how he reacts to a college described as follows:

At this college there are many good students who try to get top grades. Professors expect them to study a lot, but frequently are willing to discuss such things as current world affairs and other serious topics outside of classes. The students enjoy going to concerts and lectures given on campus.

Does this sound like a succinct description of a desirable college? Not to new students, it doesn't. Only nine percent selected it as the college they would most like to attend (SCOPE data). More popular were descriptions that emphasized friendliness and vocational preparation. The friendly campus was first choice for 45 percent of the new students. As a matter of fact, it was very popular with top-third students too, with 61 percent favoring it. It was described as follows:

At this college there are many activities and students are encouraged to take part. The professors go out of their way to make sure that new students understand the classwork, and everyone is friendly on the campus.

While this easy-going non-threatening environment has a high appeal to young people of all levels of ability, the hard-working vocational model has special appeal for new students—and is not very popular among traditional students. Thirty—seven percent of the bottom-third students and 15 percent of the top-third expressed first preference for a college described as follows:

At this college students are preparing for a particular job or career. They are mostly interested in courses which train them for occupations they have chosen. Many of the students are working part-time to pay for their education.

Superficially at least, this description describes most community colleges. Since community colleges do serve large numbers of new students, it must be admitted that we are making some progress in providing for the expressed wishes of new students of the seventies. There is, however, considerable evidence that most community college faculty members continue to stress the most traditional aspects of their colleges (Cross, 1970).

Perhaps there really are other models of postsecondary education that are as challenging, as important to society, and as rewarding to the participants as the traditional college that was designed for students who excel in traditional academic subject matter by educators who excel in the same things. It is high time to balance our preoccupation with how well prepared new students are for the colleges with some real concern about how well prepared we are for the new students of the seventies.

Specifically, what can educators do to smooth the transition into the seventies? First, I suggest that we take a hard look at the modifications we seem to be willing to make to accommodate the needs of new students in the seventies. For the most part, we have assigned student personnel administrators the task of adjusting new students to old colleges. you doubt the truth of that sweeping indictment, ask yourselves where major changes have occurred in colleges in the last ten years. It is not in the classroom which can be characterized today as it was 100 years ago--a professor imparting information through the fairly inefficient and ineffective method of lecturing. By contrast, admissions, financial aids, and counseling have all seen the introduction of major new programs designed to meet the needs of new students. On most campuses, remedial courses and study skills centers are also established as peripheral to the curricular core of the educational effort. There is nothing wrong with these so-called compensatory measures except for their one-sidedness. The unspoken assumption seems to be that students can be changed but that institutions cannot. The beauty of providing for the needs of new students through noncurricular measures is that it expresses the proper concern for the "adjustment problems" of new students while leaving the traditional content and methodology of higher education virtually untouched.

Am I suggesting then that we abandon our efforts in behalf of compensatory programs at the level of higher education? I am not, but I am urging that equal time, equal talent, and equal money be devoted to fundamental institutional change to meet the needs of new students. This is especially important in assuring a new segment of the population equality of educational opportunity, but changes are also needed in order to meet the new needs of traditional college students everywhere.

Since I am often critical of university students for their over-developed talent for criticism and their under-developed sense of responsibility for suggestions of what to do about the mess the world is in, let me offer a specific proposal.

The fundamental premise upon which my proposal for student development is based involves an expanded definition of the functions of education. One function is to develop at least minimal competencies in the basic academic skills necessary for effective functioning in an increasingly sophisticated society. This we are trying hard to do. The second function, however, is to provide the opportunity for each individual to achieve a sense of competence and self-worth through accomplishment. In the long run, it is much more important to student development to provide the experiences that come from

doing something really well--the self-discipline, the practice, the glow of accomplishment, the recognition from one's peers--than it is to prepare a remedial student to do barely acceptable work in English literature.

I believe that we must broaden the curriculum beyond the narrow dimensions of the academic disciplines and that we must expand the learning environment beyond the confinement of the classroom. We must make it both possible and necessary for individuals to take pride in high levels of achievement. Excellence becomes possible through centering our attention on the strengths of individuals; it becomes necessary through demanding high standards of performance. Our mistake in the past has been to emphasize the content of learning while permitting great variation in performance. Everyone must read <u>Silas Marner</u>, we say, but we recognize that some will do it better than others. Suppose we recognized another priority and permitted maximum variation in the task to be performed but held all to high standards of achievement?

I maintain that human development at any age takes place in the presence of two essential ingredients—high motivation and high challenge. To put it briefly, personal development is maximized when the individual wants very much to do something that he is not quite sure he can do. It is under these conditions that we really learn about oursleves and our capacities.

And, tragically, these conditions are largely lacking for poor and mediocre students in the traditional school system--which is to say, that potent experiences for personal development are lacking for the majority of students. A few people are turned on by the pursuit of knowledge in the library or by the struggle to master an abstract concept in mathematics, but not everyone is. There seems no logical reason why we should be so loyal to the rigidity of a curriculum imposed by the academic disciplines with the express purpose of preparing research scholars. As most of you know, college grades show almost no relationship to performance on the job or to satisfaction or happiness in life. About the only thing that grades really predict fairly well is ability to perform at about the same level of competency under similar conditions, i.e. good grades in high school are indicative of good grades in college.

Students--traditional as well as new--are distressed with the irrelevancy of the curriculum to the pressing social problems of today. Why shouldn't students who are stimulated by working with other people develop those interests and sensitivities into a skill that gives them a feeling of self-worth and high competence while providing society with a greatly needed talent? The educational emphasis on the fullest possible development of the best talent one has; the emphasis on learning new things and using new skills, is higher education in the best sense

of the term--higher quality of performance instead of higher levels of abstraction.

I believe that opportunities for these types of experiences may be provided best through a project approach to learning. My proposal would involve the completion of one project each year by each student. Students would be encouraged to select a project central to their abilities and interests. Some students who are highly verbal and find great satisfaction in working in the library might elect the traditional task of preparing a paper on some topic of interest to them. Others who experienced their greatest satisfaction in working with people might choose to integrate textbook sociology with an action-oriented program in the community. Still others might feel that their greatest interest and talent lay in the fuller development of nonverbal abilities. Their projects might emphasize the creation of things--using metal, electronics, optical lenses or musical notes.

For learning projects, students would select two appropriate advisors—at least one to be an on-campus educator. The other advisor might be an adult of recognized competence in the area. The proprietor of the local stereo-component store might team with an engineering professor to advise and evaluate the quality of a piece of electronic equipment designed and built by a student. An elementary school teacher and a professor

of education might be the best advisors for a tutoring project involving ghetto children. A professor of architecture and the director of housing might work with a girl who wished to develop new concepts in student housing. A dean of students might well team with a professor of psychology to work with a group of students interested in on-campus tutoring programs for low-achieving students.

Such an apparently simple proposal has many implications. First, it would provide a link between the classroom and the application of knowledge. This is an especially important attribute for sociallyconcerned students who grow restless and bored in the traditional classroom--a condition that robs them of the motivation and the challenge to excellence that are essential for self-development. Second, it builds upon the repeatedly-demonstrated fact that individual differences do indeed exist. To attempt an egalitarianism based on a scheme that forces all people to achieve along a single dimension, seems to me sheer folly. In anv such hierarchy, it is inevitable that some will always be above-average while others will always be below-average. We must seek equality in high development of diverse talents rather than in highly diverse performance of unidimentional talents.

Third, my proposal to capitalize on strengths instead

of emphasizing weakness, implies that we can help students to identify their unique strengths and that we can design appropriate educational experiences that will lead to the fullest possible development. This is a bit more complicated. It means in all probability that we need new efforts in testing, guidance, and research. shows that many new students traveling through the school system at the bottom of the class have grown so accustomed to thinking of themselves as "below average" people that they will have a difficult time assessing their strengths. New instruments and new emphases in guidance will be required. The counseling school of thought that seeks client insight to self-knowledge through probing backgrounds for psychological trauma in infancy or through understanding the origin of poor relationships with father or through any other means that assumes that the purpose of counseling is to focus upon mental illness rather than mental health, must be turned around to emphasize the healthy aspects of one's environment that might furnish the basis for unique strengths. If poetic talent lies in suffering, then we might argue that an emphasis on past sickness and suffering is an appropriate developmental activity, but for the average college student, the sickness or weakness or deficiency school of counseling is an inadequate and frequently damaging approach to self-actualization.

Obviously, any concept such as the one I have proposed would require the committment and the cooperation of the entire educational community. Counselors must find new ways to help students identify and develop their best talents. Teachers must be willing to work with students on a one-to-one basis as the student assumes major responsibility for one important, if not the important aspect of his education. Students must be willing to demand of themselves their highest level of achievement. Administrators must be willing to depart from the safety of doing what prestige institutions are doing--concentrating on the preparation of the elite few for graduate studies and research scholarship. Adults in the community must be willing to help in the education of their young people to the creative use of their talent. It won't be easy. But it is time now to look hard at the central mission of higher education—the education of young people. I don't think that tinkering with the machinery that keeps the traditional curriculum running will furnish adequate power to propel us into the decades ahead.

#### REFERENCES

- Atkinson, J. W., & Feather, N. T. A theory of achievement motivation. New York: John Wiley & Sons, 1966.
- Carnegie Commission on Higher Education. A chance to learn:
  An action agenda for equal opportunity in higher education. New York: McGraw-Hill, March, 1970.
- Coleman, J. Equality of educational opportunity. Prepared for the U.S. Office of Education. Washington, D. C.: Government Printing Office, 1966.
- Cross, K. P. The role of the junior college in providing postsecondary education for all. Trends in postsecondary education. Office of Education, Washington, D. C.:
  Government Printing Office, 1970.
- Cross, K. P. Beyond the open door: New students to higher education. San Francisco: Jossey-Bass, 1971
- Holt, J. How children fail. New York: Dell, 1970.
- Novak, M. White ethnic, <u>Harper's Magazine</u>, September, 1971, pp. 44-50.
- Seligman, M. E. P. Can we immunize the weak? <u>Psychology</u> Today, June, 1969.