The assumption is made that opportunity means a chance to participate, if one chooses, in the intellectual, economic and personal rewards available most readily through mastering the skills, such as literacy and numeracy, that are important in at least one of the viable cultures that make up the society. Historically, the members of some groups, notably the poor, have seldom had that chance because they have lacked effective instruction in the skills needed to advance within the culture. The issue of access includes a succession of opportunities, with each success making the next one more likely, and each failure a barrier to further progress.

"Student-centered assessment" is proposed as a means of substantially improving the chance of all students to develop as far and as fast as they can. It emphasizes immediate feedback to both the student and the teacher. Examples from the classroom and from the guidance process are used to illustrate this model of assessment. Its implications for admission requirements for higher education are discussed. (Author/BW)
THE WORLDWIDE ISSUE OF ACCESS

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Chairman Gorpus, President Dagot, colleagues and guests:

Education has a special place in this society and in every society, as is dramatized by the growing number of international gatherings devoted to seeking ways to improve it and especially to make its benefits more broadly available to people of all ages and all walks of life.

Education is the chief hope for making of all people the most that we are capable of becoming -- not just at the moment, through the immediate benefit of knowledge, but in all our lives, through the habit of using our minds and the skills needed in solving difficult problems. A precious commodity indeed! Education is both an end in itself and a means to still larger ends. No wonder people everywhere seek its benefits.

But I must pause to recognize that this view is not universally held in any society. I am keenly aware that different people hold divergent conceptions of opportunity, of success, and of how education relates to each of those elusive qualities.

Some people take as a given that at most times, if not all, and in most societies, if not all, the principal function of schooling has been to transmit to children the attitudes and values of the dominant culture and the skills needed to succeed within it.

The transmission of the dominant or majority culture will be identified immediately by some people as basically hostile to opportunity. In this view, opportunity is at an optimum if and when the individual is...
enabled to develop or unfold as a unique person, not stamped in any cultural mold. Teaching is seen as indoctrination. More efficient teaching, then, is seen as more effective domination of the individual by the majority culture. If "opportunity" means the chance to remain independent of the culture, or even protection against being seduced into it, then teaching will mean a diminution of opportunity, and the better the teaching, the less chance the individual will have to find self-fulfillment.

In my paper, I will build upon a different view of education and of opportunity. I make the working assumption that opportunity means a chance to participate, if one chooses, in the intellectual, economic and personal rewards available most readily through mastering the skills such as literacy and numeracy that are important in at least one of the viable cultures that make up the society. Historically, the members of some groups -- notably the poor -- have seldom had that chance because they have lacked effective instruction in the skills needed to advance within the culture. In this view, education is essential to opportunity, and whatever procedures lead to providing children -- especially children of poor families -- with the skills that are basic within the culture are procedures that enhance opportunity. That is my own outlook, from which the propositions I shall put before you are derived.

Today I want to talk about "The Worldwide Issue of Access." In choosing the title, I was well aware that it is ambiguous, since it
invites the question: Access to what? In the United States, most people would immediately assume I was thinking of access to higher education, which is both an important and a controversial topic. It conjures up questions of college entrance criteria and procedures, grades and test scores, obtained at the time of admission to study at the tertiary level, and these are frequently looked upon narrowly as essentially defining the "problem" of access. But this is surely an inadequate view of the situation.

In the first place, we all recognize that each stage of education is linked with every other stage. Access to a higher level depends importantly on success at a lower one, and so the problem of access is pushed down the grade and age scale: one might well say that access to college or graduate school begins with access to kindergarten, and indeed earlier, with access to favorable family circumstances for pre-school development. And so we have to look at pathways to ultimate attainment within the educational system -- pathways that are joined at transition points between successive levels and that largely determine access to higher education, for example, many years before the student approaches the end of secondary education, going back to early learning and the primary grades.

In talking about "The Worldwide Issue of Access" we also have to look at the other end of the scale: the graduation end. In many cases, the reason for seeking to progress to higher levels of instruction is plainly to quality for a better job: to gain the credentials needed for a career rewarded in and by society. And so when we talk about access to further education and a chance at a diploma, we are really talking about a passport to "the good life."
I should like, then, to see the issue of access not as a one-time event but in the broader framework of a succession of opportunities, with each privilege or advantage or success making the next one more likely, and with each rejection or failure a barrier, sometimes insurmountable, to further progress. I should like also to keep before us the fact that we are talking not only about access to more and better schooling but by the same token about access to a rewarding career; not only about educational chances but about life chances as well.

It may simplify matters if we look at the question of access chronologically, as the individual grows up and proceeds through the system. Because I think it will illustrate the issues well, I should like to look at some of the complexities and interlocked conditions in the seemingly simple notion of access to college.

The first rule for success if you are to win in this game is: choose your parents carefully. This audience needs no documentation of the close relation between the socioeconomic status of parents and the school readiness of their children—and, indeed, the inequalities in the social backgrounds of people holding the more attractive versus the less attractive jobs in this nation, in my own, and indeed in every other country I know about, no matter what its philosophy. These disparities are rooted deep in the economy and the society, and I have no easy formula for removing them. But let us at least not help create them or magnify them by our educational policies, as I fear we often do.

I shall draw my illustrations chiefly from practices in my own field of assessment. It has often been held that measurement or testing or assessment serves primarily to reward those whose home circumstances
have given them the greatest material advantages and familiarity with the culture. The results of assessment therefore support the more rapid advancement of middle- and upper-class children to higher levels of instruction, reinforce the stratification of society, and serve to perpetuate the poverty cycle rather than to break it. This is, in fact, a role that measurement has often played in education. The next question, therefore, is: can we design and apply assessment in education expressly to play the opposite role of breaking rather than reinforcing the cycle of opportunity? How should measurement be used and interpreted if it is to promote opportunity rather than restrict it?

It is clear that a remodelled system of testing, evaluation or assessment, all by itself, cannot guarantee equal attainments by all students. No one suggests that equal experience is going to lead to equal performance in either athletic or academic activities. To begin with, the quality of the teaching and the curriculum are critical. Moreover, the expectations of parents and children and the organization of society exert powerful influences that are slow to change. But the process of change toward the broader attainment of success must begin at several places, and the issue today is how measurement or assessment can contribute to realization by all students of their full potential.

There are, I submit, a few principles in the design and use of assessment in education that can improve substantially the chance of all students to develop their skills as far and as fast as they can and will develop them. I shall use the term "student-centered assessment" to sum up the concept that I shall describe and that I advocate.
What does this mean specifically? I shall mention two characteristic applications of student-centered assessment: in the classroom, where it is integrated with instruction, and in the guidance process.

Student-centered assessment emphasizes immediate feedback to both the student and the teacher in the classroom in the course of instruction: the "formative evaluation" that Benjamin Bloom has written about in the context of mastery learning. There are two important attributes to this kind of measurement. The first is that it is used to improve learning rather than simply to keep score. The second is that it deals with an immediate follow-up to an observed condition, a short-range action rather than a long-term prediction. I am talking here about diagnosis, area by area, and short-range prescription of instruction related to the next unit of work for which the child is prepared. This integration of measurement with instruction offers great potential for maximizing learning. It provides the way to capitalize on rapid learning by allowing the successful student to keep moving while, for a student who is having difficulty, allowing the detection of problems in skill acquisition early enough to allow their correction.

Let me underscore the short-range nature of the immediate classroom feedback and next assignment that is available through integrating teaching and testing. This is important. It contrasts sharply with the all-too-common practice of using measurement information as a basis for what are, in effect, long-term predictions. I believe that most of our worst mistakes in the application of measurement arise from assuming that the results form a proper basis for irreversible decisions. Children are dynamic organisms, capable of rapid change and development, responding
often in unexpected ways to new experience. For that reason, use of IQ scores, for example, to place children in fast or slow tracks at an early age is generally bad practice for several reasons, but mainly because our school systems typically lack the flexibility to keep up with changes in the child.

It is worthwhile to dwell on this example for a moment, since it illustrates some of the problems inherent in a frequent use (or misuse) of assessment. First, it builds a general tracking procedure — fast or slow, for all subjects — on an overall global measure of IQ, ignoring the fact that abilities and achievements are specific, not general, and students move forward at different rates in different areas of learning. Second, it confuses the observation that the person has not yet developed very far or fast with the inference that the person cannot develop far or fast given appropriate encouragement and help. As a result, insofar as initial opportunities are unequal and later opportunities are predicated on earlier successes, inequalities are cumulative. Thus the assessment system can be used to reinforce social stratification, especially since early performance is a function of home environment and intellectual stimulation outside of school. And the cycle of poverty continues, with children of people whose opportunities were limited having a hard time breaking into the fast track and the ensuing privileges of further opportunity. The best defense against this pernicious effect is the use of measurement only for short-range decisions as to the next learning task in the same classroom instructional unit, rather than as a basis for generalized placement that quickly rigidifies into tracks that are hard to modify and hence become, de facto, long-term assignments.
The same principle of emphasizing short-term rather than long-range predictions applies with even greater force to the other area in which student-centered assessment can contribute to educational opportunity. That area is guidance. Here the principal aim should not be to identify for the student, at an early age, his or her best ultimate niche in education or in a career. Rather it should be to help the student plan each successive educational step with a view toward keeping open as many options as possible.

I am talking about a system of assessment that is the antithesis of "tracking." Let me contrast it with an all-too-common scenario. In this well-known traditional model, middle-class parents begin coaching their pre-school children at home in order to get them into the "best" nursery schools or kindergartens, which are in turn the avenues to the most favored and successful elementary schools. These lead naturally and easily to middle schools offering enriched programs, and finally -- mirabile dictu -- the children with the good start turn up in the best colleges, graduate schools and careers.

We are unlikely to see any change in the behavior of parents in all this as the educational system is comprised of schools that vary widely in quality and as long as we educators persist in our predisposition toward oversimplified notions of intelligence, in our habits of long-term prediction from assessment, in our traditions of rigidity in instructional grouping, in the inflexibility of our transfer policies, all of which lead inexorably to the answer that access at the end of the line is highly predictable solely on the basis of favorable access at the beginning. Surely this is an outgrowth of inequities embedded in our economic and
social systems over which we as educators may rightly feel we have little direct influence. We could shrug our shoulders and say the problem is caused by our inability to make all schools equal. But just as surely the problem is a product of educational policies that we can and do control, whether or not we are conscious of their effects.

Given the critical nature of these early determinants of access to higher education, the familiar debates about the relative importance of the immediate criteria for admission at the end of secondary school seem less critical than they may appear to observers preoccupied with the event of acceptance rather than with the train of circumstances that operate to define the pool of applicants and to put some of them well ahead of others in the competition.

To cite an illuminating statistic: in the United States today the proportion of Black and Hispanic high school graduates who go on to college is essentially the same as the proportion of White high school graduates who enter college. But this statement masks a significant difference. Many more Black students drop out before they ever reach the end of secondary school, and so the proportion of the age group -- the population subgroup -- of Black or Hispanic youngsters going to college is substantially below the proportion of the same White age group who go on. The minority students leave secondary school before graduation in much greater numbers than do the majority students. In effect, access is being determined by retention rates in Grades 9 through 11 much more than by admission criteria applied in Grade 12.

Of course there is much to be said about the admissions criteria themselves: the test scores, the school grades, the personal references,
the interviews and so on. This is the area in which I have spent most of my professional life, and so you will perhaps believe me when I say I think it is of some importance; but our time is short; the arguments are familiar, and I'd like to look briefly at the other end of the worldwide issue of access: that is, access to a job in one's chosen field after graduation from college.

The variations on national policies of job access seem endless, but let me illustrate four principal types: first, the laissez-faire system of the United States; second, the predestined career system of the Soviet Union; third, the intermediate system of West Germany which might be called the recognized specialist system; and fourth, the undifferentiated degree qualification system of countries too numerous to mention. Each of these different job access systems, which can also be thought of as college exit systems, will work best if it is coupled with a matching degree of control over the college process, or who gets into college and into which field of study.

In colleges in the United States, the students enter virtually any field of study they may elect, with very few exceptions such as medicine or law where there is a shortage of places. What they do when they graduate is entirely up to them and to their efforts to find employment related to their studies. Nobody has guaranteed them a job in their area of specialization, and many a trained economist or historian is working as an editor of children's books or even as a taxi driver. This is what I call the exit system of laissez-faire, sometimes with a vengeance, with the field of study entirely up to the students who constitute the supply of talent in any field and quite independent of the employers who define the demand.
In the Soviet Union, with its predestined career system, the person who graduates as an engineer or economist is employed under that title. There is a kind of social contract linking education and career. Accordingly, it becomes exceedingly important to accept for higher studies only as many engineers or economists as can be utilized as such after graduation, although obviously the match can seldom be perfect.

Somewhere in between is the West German system which does not guarantee the emerging economist a job in his or her field of study but does, I have been told, recognize the certified expertise of the graduate by providing certain benefits scaled to the individual's field of accomplishment. Thus an engineer who is unable to find employment in that field qualifies for better unemployment compensation, for example, than does a would-be plumber who is also unemployed. This system which I have termed the recognized specialist system would seem to call for a system of partially controlled admission by field or discipline which is midway between the laissez-faire system of the United States and the predestined career system of Russia.

The system that I have referred to as undifferentiated degree qualification is one that insists that in order to be admitted to a certain level of employment -- for example, a given Civil Service rank -- a person must have a college degree. The field of study makes little or no difference. A specialist in Oriental Art may be employed as a beginning bureaucrat provided he or she has the requisite bachelor's degree, and later promotion will perhaps depend mainly on being able to cite the degree and a stipulated number of years of experience on the previous job. Here the number of entrants to a particular field of study is less
critical than some reasonable control of the aggregated, undifferentiated supply of people with the degree qualification.

Thus the entrance policy that makes sense for a country depends heavily on the exit policy that it has adopted, and the linkage between educational access and career access may be tight or loose. But in every country the linkage is there, most people in the society know it, and most of them plan their educational strategies accordingly, depending on the clarity of their perception, their financial circumstances, and the value they place on a prestigious career for their children.

I have been speaking as if education were carried on in an older tradition of continuous attendance to some point of graduation with no further instruction in the individual's future. But today, of course, recurrent education or continuing education has changed that circumstance. More and more older people, already employed, are seeking ways to extend their education outside the classroom or outside of what used to be considered normal hours of schooling through correspondence or TV or night school. Again, we can, through our educational policies, affect access dramatically by how much effort we put into making such non-formal or non-traditional arrangements available to people eager for second chances or successively enhanced careers:

To begin a summing up: "The Worldwide Issue of Access" often seems so deeply embedded in a nation's total economic and political circumstances that the educational community has only a limited role to play. Partly, that is true. But I submit there are some important steps that educators have it largely within their power to take.
First, we can mend our ways in the earliest years of schooling and on through the middle school. By this I mean we should see children as highly differentiated, plastic, dynamic organisms, growing at different rates in different skills. We should integrate measurement with instruction, as a basis for short-run decisions. We should remember that students respond to opportunity, and fling away misguided ambition to indulge in long-term predictions or prescriptions for people. And we should place our emphasis on formative evaluation, diagnosis and planning of next steps, rather than on certification or summative evaluation. These emphases will succeed only if we couple with them a dedication to greater flexibility in our policies of instructional grouping and transfer as children grow and change in their own individual ways.

We need to recognize that the most effective way to increase the representation of rural and poor students in college is to make sure those with academic abilities and interests take the appropriate pre-college subjects and stay in school until they graduate. The schools can emphasize this approach, and the colleges can give significant help through an active program in cooperation with the schools. Such a program would substitute active terms like "talent identification" and "outreach" for passive concepts like "admission" and "access," and could do wonders in opening new doors for children of poverty.

At the stage of admission, I think we need a diversity of types of institutions and curricula to match the variety in student interest and preparation if access is to be meaningful to the student's own aspirations and abilities. And since access, broadly defined, is as much a matter of staying in as it is of getting in, we need a variety of support systems...
available in the college, especially for the beginning student whose background is less well attuned to an academic environment than that of his peers.

At graduation and thereafter, we can seek to educate employers to the futility of certification systems that are unrelated to demonstrated capability to handle the demands of a career in a particular field. That means we must work with government and private sector agencies to try to harmonize entrance and exit policies. In _laissez-faire_ systems like that in the United States, we can provide students with infinitely better information than they now have about anticipated career opportunities in different fields, that the "free market" system of selecting one's own curriculum can be based on reason rather than a capricious process of choice. And we can exert greater efforts in the area of recurrent education, to make formal study opportunities more available at unconventional times and places, to provide courses by television and other off-campus techniques, and to provide means by examination or other assessment methods to allow students to demonstrate and be recognized for their accomplishments.

Many of these steps are ours to take. If we succeed, in any country, we will have made enormous strides toward ameliorating or solving some of "The Worldwide Issues of Access."