Looking to the future

BY WILLIAM BENNETT BIZZELL

It must be obvious to all of us that higher education will undergo many important and fundamental re-adjustments within the next few years. Education cannot escape the changing social and economic situation that is so apparent on every hand. The fact is, educational adjustment is under way already. The most notable example is that at Chicago. While it is not apparent that the new Chicago plan will work out completely in practice, there is every reason for believing that the net result of this comprehensive experiment in higher education will not only profoundly change the educational policy of that institution, but it will definitely influence educational policies in colleges and universities throughout the nation.

I am optimistic enough to believe that the economic depression will not last always, but it seems certain to last long enough to force a complete reappraisal of educational organization and policy in every institution in the country. Those institutions of higher learning that are most completely dominated by inertia will be compelled by financial necessity to survey the efficiency of its machinery and to scrutinize the validity of its objectives. If I am correct in this assumption, the economic depression cannot be regarded as an unmixed evil. There is, undoubtedly, need for a thorough reexamination of the entire structure of educational organization and policies in this country.

A new synthesis of knowledge

The fact that financial resources will be inadequate to maintain our educational institutions on the present basis will necessitate a thorough study of the whole plan of departmentalization in our educational institutions. There has been a wide-spread belief among educators for quite a while that departmentalization had gone too far. This tendency has greatly increased the overhead in our educational institutions and resulted in fractionizing the scope of knowledge. Subject-matter that is naturally closely related has been scattered among departments until students pursuing these courses have found it difficult to understand the relation between these elements.

While I know the peril of assuming the rôle of prophet, I think there are sufficient signs of the times to justify the prediction that within the next few years we will see a decided tendency toward a new synthesis of subject-matter in the curricula of our institutions and a closer coordination and a better adjustment between departments. There is no question that such a program would effect economies in expenditures for education and promote scholastic accomplishment.

The tendency toward a new synthesis of subject-matter has already been reflected in the introductory survey courses which have been offered in many colleges and universities in recent years. These courses have cut across the lines of departmental differentiation. They have been given various designations, such as survey courses, orientation courses, or cultural courses. The University of Chicago has given such a course for several years in the field of the natural sciences using as a textbook, *The Nature of the World and of Man*, which was compiled by several members of the faculty. The course in Columbia University is on contemporary civilization. There have been some objections to these courses on the ground that they are superficial; but, on the whole, they have probably done much to stimulate intellectual interest on the part of the student and to give some comprehension of the scope of the field of knowledge.

Natural levels of learning

A more significant tendency in American education is that of recognizing differentiation more definitely on the basis of intellectual levels. The junior college movement, for example, has reflected a tendency in some of our institutions of higher learning to divide the work of the liberal arts college into two divisions. There is ample justification in our educational situation for this plan of organization, but this plan can only be justified on the following bases:

1. In the first place, the work of the first two years is to be characterized by instructional methods similar to those followed in high school instruction, and the subject-matter of the courses offered is to be largely in the nature of orientation courses involving the principal factors of modern civilization and comprehending generally the entire scope of knowledge.

2. In the second place, the completion of the junior division shall be definitely the turning point in the student's intellectual career. It involves, of course, the closest possible articulation of the
junior division with the high school and as definite a break between the junior-senior college levels as now exists, theoretically, between high school and the freshman year in college.

The logic of this program requires the college to discard completely all formal admission requirements. A withdrawal from an accredited high school and the substitution of entirely new measures of intellectual progress for existing artificial standards, such as credits, grades, semester hours, etc.

3. In the third place, the logic of this plan of reorganization implies that most professional courses shall begin at the junior college level. A professional career involves much more than the mere capacity to assimilate a definite course of instruction. It involves personality, natural aptitudes, character, and in many cases initiative, good judgment, and perseverance. It would require nothing short of omniscience for professors to determine the capacity of students for a professional career without an intimate contact extending over a period of years. Most of us know from experience that often two years is too short a time to determine a student's qualifications for success in a particular vocation.

It should be observed, also, in passing that this plan of organization places a much larger responsibility on the teaching staff. It implies that teachers must know their students more intimately; that they must be more directly responsible for character development than they have been in the past; and that they must have training not only in the subject-matter of instruction, but in the technique of measuring aptitudes and determining mental capacities. In my judgment, it is at this point that college professors today are largely failures. Most of them have been so bent on getting a certain body of facts across to the students that they have failed utterly in developing the student's mental and moral qualities. But the reorganized college of the future will put this larger responsibility upon every man and woman who teaches, and success or failure will be determined not merely by ability to develop and measure aptitudes as by ability to impart knowledge.

Revision of college standards

The work of the Commission on Institutions of Higher Education of the North Central Association reflects the disposition of educators everywhere to test out educational policy by actual facts. This commission in recent years has concerned itself with questions of standards. It will be recalled that in the early days of standardization of educational efforts in this country many of the norms that were set up were arbitrary and superficial. But educators have become increasingly critical of some of the standards and the agitation for more definite justification for these standards has become increasingly persistent.

"The climax to these questions and dissatisfaction," says President Homer P. Rainey in the North Central Association Quarterly for June, 1931, "one year ago resulted in the appointment of a Committee of Fifteen, to be known as the Committee on the Revision of Standards. This committee has operated since its appointment under the able chairmanship of President Coffman of the University of Minnesota. When the work of this committee was begun, it was found desirable to appoint a subcommittee on ways and means. At the meeting of this sub-committee in Chicago on May 20, 1930, another smaller committee of five members, which has been known as the research committee, was appointed for the purpose of making a preliminary study of a small group of colleges with a view to setting up a comprehensive program of investigation looking toward the revision of standards."

This is an encouraging announcement, for it indicates a definite desire on the part of administrators in the association, of which this university is a member, to reappraise existing standards of higher education on the basis of facts determined by well established methods of research.

While, of course, the University of Oklahoma is far beyond the minimum standards in most particulars that the North Central Association has set up, there are some of the requirements that are of concern to this institution. There is need, for example, of a better measure of faculty service than the one now in effect in this association. It is quite misleading to determine teaching service on the basis of a maximum number of hours of recitation, or their equivalent, per week. While the old standard has served the cause of education well, it is now obsolete. A standard should be adopted that measures the entire service of the faculty member to the institution, rather than merely measures service in terms of recitation hours devoted to instruction which, in many cases, is only a relatively small part of the actual service to the institution.

The standard relating to size of classes, also, needs thorough revision and consideration. In fact, important investigation has been going on concerning this matter and it has become quite obvious from results already obtained that the number of students that may be taught in one class may be considerably enlarged under certain conditions without endangering educational efficiency.

Surprising results have, also, been obtained with reference to laboratory practice. For example, it has been found that in many kinds of experimentation demonstration may take the place of individual experimentation without the slightest loss in educational accomplishment.

These illustrations are sufficient to indicate the effort that is being made to justify standards on the basis of actual facts for the purpose of revising standards in accord with these facts. I am convinced that important economies may be effected as a result of research in this field without the slightest endangering the quality of instruction.

The peril to research

I find myself rather deeply concerned about the future of research in the university under existing conditions. No university is worthy of the name that does not lay large emphasis on research. I believe that the university has made substantial progress in its research activities in recent years. There has certainly been great increase in interest on the part of our people in research work. This is largely due to the progress that our graduate school has made. The extension of our graduate program to include work leading to the doctor's degree and the establishment of a chapter of Sigma Xi in the university have stimulated the spirit of research in many directions. Many of our graduate students in the preparation of theses have revealed genuine aptitude for research, and a number of our faculty members have been doing most excellent work on various research projects.

On the whole, research is expensive. It is much easier to get the public to accept the benefits of research than it is to impress them with its cost. For this reason, I feel some concern at this time about the future of our research activities.

Wise administration, however, in the field of research may enable us to continue our research work on the present basis. It has long since been demonstrated, as a result of the work of many men, that it is possible to combine teaching and research not only without sacrifice of one or the other, but to the actual benefit of both. But, after all, there are only twenty-four hours in the day and it is unreasonable to expect a man carrying a heavy teaching load to make satisfactory progress on a research project. Some of the economies, however, referred to in a previous connection, in our educational machinery may redound to the benefit
Dr. J. C. Stephenson

Dr. J. C. Stephenson, for twelve years a member of the medical faculty of the university and since the beginning of this semester professor of anatomy in the new medical school of Louisiana State university at New Orleans, died November 10 in a hospital at New Orleans from spinal meningitis. Doctor Stephenson was forty-five years old and one of the ablest men in the south in his field.

YEAR BY YEAR

1915

Howard C. Speakman, '15 law, superior judge in Phoenix, Arizona, will be the trial judge in December of Winnie Ruth Judd, the "trunk slayer" whose alleged murder of two girls created one of the big news stories of the year.

1920

The address of Paul L. Fahrney, '20 arts-sc., formerly of Baltimore, Maryland, is care American Bumulus Company, 200 Bush street, San Francisco, California. He has been appointed general sales manager of the company and his activities will carry him all over the United States.

Miss Olga Bobo, '20 arts-sc., who has been teaching in Sand Springs for several years is located in Tulsa at 1308 South Baltimore.

1921

Dr. Earl Garside, '21 B. S., '23 med., formerly of New Orleans, is now living in Chicago, Illinois. His address is care Augustana hospital.

1922

R. Chester Hughes, '22 arts-sc., is connected with the zoology department of Oklahoma A. & M. college, Stillwater.

Reuben E. Brittain, '22 arts-sc., with his two brothers are the owners of the General Automotive Parts company, located at 27 West Third street, Oklahoma City.

1924

Mary Elizabeth Simpson, '24 arts-sc., M. A. '25, instructor in English at the university, has accepted an invitation to become an honorary member of Alpha Lambda Delta, national freshman scholastic fraternity for women.

1925

Mrs. Muriel Craven Lumadue, '25 arts-sc., is now living at 124 North Granite, Apartment D, Prescott, Arizona.

1926

Miss Virginia K. Sage, '26 arts-sc., who has been teaching in the Broxton school near Apache for the last five years, is located this year at Oak Dale school near Gracemont.

1927

Robert Janz, ex '27, vice-council at Guatemalita City, Guatamala, has been transferred to Belfast, Ireland as vice-council in the American service.

1929

L. A. Vazquez, '29 geol., is now one of the executives in General Motors Acceptance Corporation in Mexico City. After graduation Mr. Vazquez worked for the Sinclair Oil company in Tampico, Mexico, and later worked as reporter on one of Mexico City's largest newspapers.

1930

Ford Michael, '29 B. S., is principal of the high school and Mrs. Marion Thomas Michael, '27 arts-sc., is teaching in the grades at Jennings.

Miss Olivette L. Douglass, '30 arts-sc., 1503 Drury Lane, Nichols Hills, has recently been appointed as head of the social science department of Howard Taft junior highschool, Oklahoma City.


1931

Raymond S. Smith, '31 M. S. in pharm, is an instructor in pharmacology in George Washington university, Washington D. C.

Roy C. Jenkins, '31 arts-sc., is now college supervisor in the southwestern district for Real Silk Hosery Mills with headquarters in Kansas City, Missouri, 208 Alps Apartment.

Tom Neal, ex '31, is state supervisor in charge of college work in southwestern Oklahoma for Real Silk Hosery Mills with headquarters in Durrant.

Samuel Alexander, ex '31, who is now a graduate student at Boston Institute of Technology, was granted a scholarship by Tauerly of New Orleans, is now living in Chicago, Illinois. His address is care Augustana national convention at Cleveland, Ohio, in October.

LOOKING TO THE FUTURE

(CONTINUED FROM PAGE 83)

of research, as well as to good teaching. After all, I am afraid that the unusual large economies that we may be forced to practice may slow down our research work in the university. This would be disappointing to me in the extreme. We should make almost any other kind of sacrifice rather than to reduce the number of our research projects or retard the progress of projects well under way. The fact is, we need to find some way to extend the scope of our research work rather than merely to hold our own or to reduce the amount of it. This will probably mean that we must go to our friends who are blessed with worldly goods and ask for private benefactions. Even in times like these, there are literally millions of dollars in Oklahoma that ought to be put to work in the interest of science and human welfare. I am determined to turn my hand to this task.

There might be another way out if we are ingenious enough to make it a real possibility. We might adopt the plan of Wisconsin and capitalize on the results of our laboratory experimentation.

The establishment of the Wisconsin Alumni Research Foundation in 1925 was one of the most important steps ever taken by an educational institution in this country. You will recall that this Foundation was established as a result of the work of Dr. Harry Steenbock, who discovered that Vitamin A could be obtained from various plant and animal sources in highly concentrated form by certain chemical processes. The importance of this undertaking and the inadequacy of university funds for the purpose directed attention to the importance of patenting the machinery and capitalizing on the discoveries made by scientists on the staff of the university. According to an article in a recent issue of Review of Reviews, it is stated that the royalties derived from these sources amounted in 1930 to $354,490.00. This is approximately a $1,000.00 a day. The Foundation's invested capital, at the present time, is more than $400,000.00, and it is stated that by the end of the year it should not exceed a half million dollars. The fact that these funds are not derived from legislative appropriations gives the board that administers them a free hand in entering upon projects of vast importance. I see no reason why any university might not, in time, follow the example of Wisconsin in creating a source of funds of this kind for research.

The problem of educational readjustment, resulting from the economic depression and other causes, naturally creates concern. Will it be possible to make these readjustments without impairment to educational accomplishment? Unquestionably, it will be possible to effect some economies without decreasing efficiency, but it is perfectly obvious that there are limitations to the extent to which this readjustment may be carried without impairment to the whole program of educational work. It is unquestionably the duty of educational administrators everywhere to make every possible effort to effect economies in the face of the economic situation. But the impossible must not be expected of us. We must carry on. The public will not be satisfied with mediocre accomplishment or a restricted educational program. It is the duty of educators everywhere to keep before the public the essential dependence of educational accomplishment on adequate financial support.

There are many institutions much better off than the University of Oklahoma at this time. This institution is comparatively young. The older institutions have been able to get their building programs much further along because of their age than we have been able to do. The University of Oklahoma has been doing very well in recent years. Had our normal progress been maintained for three more legis-
ative bienniums, this institution would have been much better able to tide over this depression than we will be able to do, under the circumstances.

There is a real danger that confronts the University of Oklahoma, as well as the other educational institutions in this state. For the reasons referred to, there is danger that the University of Oklahoma will get behind the educational procession. Nothing but heroic efforts on the part of the people and a genuine willingness on our part to make many sacrifices can save us from this situation. It is a real peril and every friend of education, who has pride in the reputation of his state, should see to it that Oklahoma does not lag behind in educational progress.

A REVOLUTION IN CLIMATE CALCULATION

(continued from page 81)

tively for the common good than they do at present. Such a project would be involved at every turn with consideration of the climatic pattern.

On a smaller scale this problem is one which will have to be faced in the state of Oklahoma in that reorganization of its economic and industrial life which must certainly come before many decades. At least four distinct major climatic provinces exist within our borders and the effect on human affairs is profound. Perhaps the quiet but arduous labor of the study and laboratory may yet come to be appreciated at its true value. The old military aphorism that knowledge is the first essential in strategy will have its counterpart in the statecraft of the future. Second only to an understanding of human nature and a sympathy for it, must come an accurate technical knowledge of the resources of the commonwealth. Climate, though often overlooked, is one of the most vital of these resources, and Professor Thronthwaite has made a notable contribution to its study.

A CHANGE IN RUSH POLICY

(continued from page 80)

takes place. At a certain time all the rushees come to the dean of women's office where they are lined up alphabetically and file by the dean's desk. They are each handed an envelop with their name written on. Inside this envelop is a card stating that the girl has received a bid to a certain fraternity or regretting that she has not received a bid. This takes very little time if done efficiently and affords privacy to each rushee.

There is no question in my mind that this plan is an improvement over the system that is now being practiced here. But whether it will be the final plan adopted by Panhellenic is a question that no one can answer at the present time. However, it is a step forward in the right direction when the sorority women on the campus agree that the present plan must be changed this year and changed so that the rushing and pledging system will be as modern and progressive as the other projects of the university.

NEW FRONTIERS AND NEW FRONTIERSMEN IN EDUCATION

(continued from page 85)

was to follow the footsteps of his father. Then, too, his choice of things was exceedingly limited. In the matter of books, for example, his choice was largely limited to the Bible and Pilgrims Progress. Because of this condition, the people of yesterday did not have as much occasion to think, evaluate, and judge as do the people of today. Our freedom extends to the boundaries of the world. A farmer's son may take up banking in New York if he so desires. He, by no means, is required to follow the footsteps of his father. And the multiplicity of things we must consider in making our choice is astounding. When we attempt to select a book, we must consider many—one good and some bad. We must choose our recreational activities from a great variety. We can go to the movies, to the dance, or to a club, or read, and the same thing can be said of every choice we make. This condition demands that people be able to think, to evaluate, to judge effectively before making choices. If we fail to think, our choices often lead us along undesirable lines. One of the difficulties of young people today is that this extended freedom of choice is not paralleled by an extended ability to think, evaluate, and judge. We have extended our freedom but we have not extended correspondingly our ability to make wise choices from the great variety of new things about us. This is the third outstanding characteristic of the new frontiersman. He, above all, must be a thinker, he must evaluate things carefully, he must judge and foresee the outcome of his action before his actions take place.

Educating the frontiersmen

This raises another important question. What kind of an education does the new frontiersman demand? How may youth of today secure the wider understanding of their world, develop along the line for which they are best fitted, and learn how to think, evaluate, and judge intelligently before embarking upon lines of action? The kind of education that prevails today will not, for the most part, equip boys and girls for the challenge of tomorrow. Education of today belongs to the age of the old frontiersman. True, we have made many changes in the vehicles of education but we have not changed our point of view in education. We are still teaching boys and girls about the past. The remarks of a high school girl in history indicates this fact. During the history class discussion, she very aptly remarked that she was tired of studying dead people and that she would like to study about some live ones. Then again, education of today gives very little attention to pupil thinking, evaluation, and judging. Teachers do this for the pupils. The most outstanding defect perhaps is the utter disregard to individual differences in the aptitudes of young people. Schools are doing very little in helping young people find their aptitudes and secure an education along that line. They still require all students to go through the same mould. We must change our whole point of view in education if we are to equip young people to grapple with the problems of tomorrow.

At the very outset, we must recognize the fact that no two boys are alike any more than any two blades of grass. They differ widely in physical and mental traits. Individual differences is a fact. Some boys are born with aptitude to engage in farming or some are born with aptitudes to engage in scientific investigations. Young people are born with different aptitudes and every boy and girl is born with an aptitude to do something. They simply do not come into this world as useless heings.

The first objective of the school should be to help boys and girls to discover their aptitudes—the things they can do with joy. This demands that opportunities must be provided for young people to try themselves out in a great variety of occupations, for the purpose of discovering what they can do with joy. This work must begin in the elementary school and extend at least through the high school for it takes time to discover the real aptitudes of youth.

The second objective of the school should be to provide an opportunity for young people to develop along the lines of their aptitudes, and also, at the same time, provide an opportunity for them to understand the line of work in its bearing on the world at large. Opportunity must be provided for youth to study the beautiful in art, in music, in nature and in literature, as a means of spending their leisure time fruitfully. This is vocational education, plus