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An Adventure in Education

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AN ADDRESS

DELIVERED AT THE

FIFTY-FIRST COMMENCEMENT

OF THE

UNIVERSITY OF ILLINOIS

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BY

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NOTE

Doctor Eugene Davenport, Vice-President of the University, retires this year after twenty-seven years of continuous service. He came as Dean of the College of Agriculture in 1895 and in addition to his services as Dean during all of these years, he has been Director of the Agricultural Experiment Station since 1897 and Professor of Thremmatology since 1901. In September, 1920, he was appointed Vice-President of the University. The Board of Trustees on April 12, 1922, made his connection with the University permanent by appointing him Professor and Dean, *Emeritus*.

In the retirement of Doctor Davenport, the University loses one of its great personalities. A great educator and scientist, his far-sighted vision of the agricultural needs and policy of the State and University have made him one of the outstanding figures in the Agriculture of the State and Nation. Although he leaves, his influence remains. It will be reflected in the future, as it has been in the past, in the work of the many men in educational as well as practical agriculture who received their training under his guidance and inspiration.

DAVID KINLEY

Urbana, Illinois

June 26, 1922

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AN ADVENTURE IN EDUCATION

IN A very real sense the modern state university has arisen out of the greatest educational adventure of all time—the diffusing of knowledge among the masses of men. Nothing is like it in its history, its objectives, or its possibilities; for whether its roots are considered as running to the Land Grant Act of 1862, or to the new spirit actuating the provisions for governing the Northwest Territory, or still farther back to the public elementary schools of New England days, in any case the institution we call the state university is unique, *sui generis*, of the people, by the people and for the people. Under the forces long at work its evolution has been as inevitable as it has been natural, and its future may be predicated upon the spirit that has led to its development.

It is a privilege to invite attention for a few moments to the philosophy of education that underlies the genius of our beloved University. For this University of ours is more than an institution of higher learning; it is more than a shrine where devotees of knowledge may worship; it is more than a place where a favored few may secure for themselves advantages over others. It is a reservoir of knowledge, feeding fountains of progress wherever men live and love and multiply and serve.

When our forefathers established the public elementary schools in order that every man might read the Scriptures and the statutes for himself and know at first hand the laws of God and man, they put out to sea upon uncharted waters, seeking the modern golden fleece, and the event has extended the kingdom of learning beyond the wildest dreams of the adventurers.

For it was a great adventure, this putting of knowledge and the means of securing it, into the hands of all the people; and the result has been, by a series of inevitable steps, the modern state university. These steps

are easily traceable here and there as the idea of universal education developed with the generations.

The Ordinance of 1787, for example, did more than provide for the government of a disputed territory; it looked ahead to the welfare of all the people. For it declared a new principle in governmental concern and that, too, in the most solemn and prophetic language: "Religion, morality and knowledge being necessary to good government and the happiness of mankind, schools and the means of education shall forever be encouraged." (Article III.) In sharp contrast to this was the boast of Governor Berkeley, who thanked God some time before that in all Virginia, which had claimed sovereignty over this same domain, there was not so much as one free school or printing press in all the commonwealth.

The result of the western forward look was the University of Michigan and the University of Wisconsin, with publicly supported colleges or normal schools in every state carved out of the Northwest Territory, while not only Virginia but much of the South continued until after the Civil War to ignore the public side of the utilization of knowledge.

INDUSTRIAL EDUCATION AND THE UNIVERSITY IDEA

Another significant step in educational adventure was the Land Grant Act of 1862, clearly designed to provide the means of higher education to the men of the farm and the shop, and to do this so satisfactorily in terms of their own interests as to no longer force them to abandon these fundamental callings in order to secure the benefits of knowledge. This legislation was intended to reach and benefit the so-called ninety-five percent, but it has accomplished far more than that. It has nationalized the principle that in every walk of life knowledge is necessary to the happiness of mankind, and it has also nationalized the determination that knowledge shall be set at work in every possible field of human activity.

But our forefathers foresaw—or were they inspired?—that as man does not live by bread alone, so the farmer in

a democracy must be something more than a producer of food, and the mechanic something besides a hewer of wood and a drawer of water. For they added to the technical provisions of the Act these significant and prophetic words: "without excluding other scientific and classical studies." There and then were planted the seeds of the modern state university.

Nobody but a Turner could have added those words or have foreseen their significance. It was this provision that developed farming into agriculture, the mechanic arts into engineering, and knitted them both firmly into the very warp and woof of our advancing civilization. For we cannot educate the people of an occupation without at the same time developing the occupation itself, and the adventure has taught us as we never realized before the essential importance of every activity of man in the fabrication of that complex which we like to call our national life.

So does every educational ideal and purpose that touches the masses of men escape its original boundaries, overleap its logical barriers and overflow into wider domains. So did the educational adventures of our fathers develop into the modern state university through the widening importance of knowledge and the growing complexity of modern life.

A SHIFT IN THE EDUCATIONAL OBJECTIVE

Now, the most significant feature of this evolution in education is not the agricultural college, the engineering college, or even vocational education. It is the shift in the objective and the consequent change in the essential features of university outlook and activity. Traditionally, the objective in education had been almost exclusively personal; namely, to endow certain favored individuals with a mental equipment which should set them apart as members of a privileged class distinguished for culture or aptitude for government, or other leadership, in any event freed from the ordinary problems that plague humanity.

But now the objective is *life*; how to understand it and how best to live it for the common good. So has the scene shifted from the man to his activity. So have language, literature, and history; agriculture, engineering, and economics; the natural sciences and their applications; philosophy and art in all its forms—these and their relations to mankind have become objects of study as means of understanding life and of living it more successfully rather than as means of educating individual men and women for their personal advantage over others. This means that today the student has become the means to the end, like a good book, rather than the end itself, as aforesaid; and this is well.

RESEARCH FUNDAMENTAL

Incidentally this change in objective from the man to the activity has radically altered many of our fundamentals in procedure. For one thing, it has shifted the emphasis from instruction to research. So long as the only objective was the education of the individual, we were inclined to satisfy ourselves with that which chanced to lie at hand, and discovery of new truth was left for the few solitary souls who may be called educational pioneers by nature.

But when the chief objective becomes the development of this, that, or the other field of knowledge, then the faculty of an institution becomes a body of real scholars who will exert all their powers toward discovering new facts and setting them into their proper places with related facts in order that principles may be brought to light and safe procedure indicated. Where this great process of critical analysis and synthesis, with logical deduction which we call research, is going on, the student catches the spirit almost out of the atmosphere, and instruction becomes incidental to that kind and that thoroughness of inquiry after new truth which seeks to learn all the facts with which life and its activities must reckon.

It is this shift from instruction to research that has brought the university into new relations to the public. Farmers, for example, ignored the agricultural college for thirty years, but they did not ignore the experiment station. They said they wanted facts, not theory. They got them out of the experiment station and so did the student, and what has been done in this newest of all educational attempts is being done, or will be done, for every essential activity of the people of the commonwealth. As the support of the farmer has come to rest upon what scientific study could do for the business and life of farming, so will the university as a whole be supported both morally and financially in proportion to what the public believes the institution will contribute to the welfare of the commonwealth.

THE CUE IS FROM WITHOUT

This all means that we of the state universities must take our cue from without, rather than from within. What are the problems that puzzle the people? Why is mankind not more successful in utilizing the gifts of nature and in making more of his physical, intellectual, and spiritual endowments? How can this or that essential activity be better discharged and the people discharging it be more prosperous and happy? These are the problems in the large which humanity must solve, and some of them can be solved only by the special machinery of an educational institution. Here lie at once the service, the strength, and the support of the state universities, all without limit if the officers charged with the management be wise and keep close to the constituency whom the university is especially designed to serve, which means all the people in all their activities and relations of life, save only those of formal religion.

For all these reasons our state universities are coming to be regarded as repositories of knowledge needful to the people, and the dwelling places of prophets who have some peculiar insight into the future, because, knowing the present and the past with a relatively disinterested

perspective, they may speak as one having some authority.

The world needs and wants and will have, if we permit it, the closest possible contact with such repositories of knowledge and such sources of prophetic wisdom. We are honored today by the visit in a body of the first citizens' organization to officially undertake, as they did some quarter of a century ago, the moral and financial support of an essential part of the work of a state university. I refer to the Illinois Farmers' Institute. Their example has been followed and will be further followed as the years go by. For it is because the world believes in the value of such sources of information that the states have endowed these institutions beyond the dreams of a half century ago and will still further endow them in proportion as their present hopes are realized and all our eyes are still further opened.

ADVISORY RELATIONSHIPS

Illinois has led in the highest utilization of this working relationship between the citizens and the university, first in its long standing system of advisory committees, and later through various temporary committees and commissions by whose services the institution seeks to learn as accurately as may be and as far in advance as possible the probable direction of the development of the State, the consequent needs for educational service, and incidentally to interest as many as may be of the thinking citizens of the State in the modern problems of educational development.

A university of this kind so guided by mutual councils will develop sane, safe and useful about in proportion as representative citizens adopt and promote active and aggressive measures for its development and support. It is not a question of what the University needs but of what the State needs. The University, as an institution, "needs" nothing. It is an organism which exists not for itself but for the State and the State needs everything by way of knowledge and ideals which the resources of the

commonwealth are able to provide. Upon this principle will an institution of our kind either stand or fall.

Last year and after mature deliberation the University and its advisers put up a ten-year plan calling for a biennial investment of ten and one-half million dollars in the discovery and promulgation of knowledge and its application in the State of Illinois. The program enjoyed the most sweeping endorsement ever accorded an educational proposition, both by the people and their representatives at the Capitol. Only an administrative accident disarranged the details and greatly impaired the effectiveness of the large sums that were provided. The State should embrace the first opportunity to resume this program and as the initial step restore what has been cut out of a closely knit, well-considered plan of development to meet demands already upon the institution.

We hear too much about educating for leadership. What the world wants is not leaders, of whom it has a surfeit, but rather information and trained habits of thinking that it may select its leaders wisely. This all means the closest possible working relations between the institution and the citizenship of the state; between those who, feeling the pressure of unsolved problems, realize the need of better information, and those whose business it is to supply the need. A university so guided will remain close to the people and close to its problems. A university that so functions will not come very far from fulfilling its highest usefulness, and a university so favored will not, in the long run, want for support, tho its normal condition will be one of poverty because the load will always come before the relief.

Such a university has no special schemes to promote, no propoganda to "put over." It is a public service institution, serving the world in every way possible at all times and places where knowledge is needed, drawing upon that world in turn for all it is able to contribute to public welfare through the medium of its everyday experiences. Such a university is a clearing house of

knowledge, both old and new—free to all who need it for the public good.

THE PROBLEM OF NUMBERS

Any developing organism is subject to growing pains, and the state university is no exception. The problem of numbers is now upon us, for more men and women will take degrees today than were registered in all the classes a quarter of a century ago. We talk about a "flood of students." But a flood of students is not like a devastating flood of waters that have broken away from their proper restraints. A flood of students is a normal event and a good barometer of public endorsement, furnishing the most concrete and indisputable of all arguments for adequate support.

To meet the problem of numbers we must be neither led nor driven from institutional sound moorings: For example, if in order to reduce numbers we should declare ourselves a graduate school only, or perchance willing to do the work only of the junior and senior years, or so worship the fetish of high standards as to shut away large numbers, the public would doubtless have something to say about all these propositions, in which case the institution would find itself in the position of the fool who sawed off the limb on which he was sitting.

There is little need for concern about mere numbers. They furnish the raw material; and while we shall be embarrassed more or less during the period when numbers overlap support, yet in the long run we shall succeed in proportion to the number of people, the variety of interests and the percentage of the thinking population that become deeply interested in the institution. Of course, bricks cannot be made without straw, and incidentally clay as well, but the university has always the inalienable right of the retort courteous, which entitles it to call upon society to provide the means of executing the work which it has laid upon its servant.

THE PRESERVATION OF UNITY

With adequate endowment, the problem of numbers is a problem of organization, but at this point one principle must never be offended if we hope to reach the highest development, and that principle is unity. When the amount of campus territory which students can cover by walking has been fully occupied by buildings—not as a public park but as a working plant—then perforce a new unit must be established. But it need not be far away—only so far as may be necessary to house and quarter a new group using largely the same equipment and subject to the same general and departmental administration.

The mistake which must not be made, as the speaker sees the problem, is that any college or interest should be split off and set aside when the first swarm is ready to leave the hive; but the thing set off as a new unit should be a cross-section of all the University interests. It might be confined to freshmen, perhaps, or to sophomores, but let this group represent all the professions, the ideals and the aspirations that they as future citizens will encounter in their relationships. So shall the essential integrity and the unity of the institution be preserved and so shall the coöperative and mutual understanding of the future citizens of the state be not only foreshadowed but insured.

OBJECTIONS TO BRANCH INSTITUTIONS

One of the seductive solutions for large numbers is the device of branch institutions where certain subjects, such as agriculture, for example, might be taught for a year or two, and where students might be served nearer home. This is no solution for the problem of numbers.

The student naturally prefers to invest his time and money to the best advantage, and he will not go to branch institutions unless excluded by main strength from the university, which his father helps to support. Again, the people of the locality in which the branch is situated will not be satisfied that it should remain a junior college.

serving only those who are headed for the university. They will demand that it shall be also a finishing school for the region and for the convenience of those who go no farther, and the university will yield the point. Last of all, this will set up local, geographical, and political interests that will prove competitive to a surprising degree; and once started on such a program, the state university would soon find itself spread over the commonwealth and very largely the prey of petty jealousies.

CONTROL WORK BELONGS TO THE STATE GOVERNMENT

An activity that has often been confused with education is control work, such as inspection duty and law enforcement. That the university may well be consulted as a source of expert information bearing on proposed legislation, goes without saying; but to enforce the laws enacted with or without its advice, arrest and fine citizens or put them in jail—that is the business of the administrative branch of the state government, backed by the armed forces of the state if necessary. Illinois has been a leader in establishing this distinction between the legitimate and the illegitimate functions of an educational institution operating under public funds.

RESEARCH AND TEACHING BELONG TO THE UNIVERSITY

On the other hand, it is equally important that the control agencies of the state observe the same careful distinctions. The frequent attempt of state departments of agriculture to set up an extension service, teaching and advising the people about their business, is not only an invasion of the field and function of the university, but its effects are wholly bad. Such an extension service accepts all the advantages of popularity with none of the responsibilities of research, and so seductive is the temptation to expand that states can be found in which the funds appropriated to the state department of agriculture as a branch of the state government are larger by far than all that is appropriated to the university for

agricultural purposes, teaching and research, faculty, equipment and operation combined.

WHY THE UNIVERSITY IS COSTLY

It lies in the situation that the state university is relatively costly, and this for three reasons: First, because it is not free to choose its field but must function, certainly to the extent of its ability, in all the major interests of the state, material, social, and artistic. Second, because in assuming responsibility for a subject it must not only give instruction to students in that subject but, what is a far more difficult and costly duty to discharge, it must conduct investigations, collect reliable information, form judgments, and be prepared to act as a dependable adviser to the state and its citizens in matters involving that subject. Third, it carries the same burden as other universities in training new generations of investigators and teachers to meet the new problems that are certain to arise, and this is no mean burden.

To the moral and the financial support of an institution which can and will render this kind of public service to all classes of citizens and to interests of all sorts and kinds, the state may well pledge its resources to the limit, for it is a vital part of the state's thinking. Progressive citizens may well serve on committees and commissions advisory. They may well question in what new and further ways in science, art, and morals the university may be made useful in producing a homogeneous population engaged in successful, because scientific and harmonious, activities, and they may well endow it beyond the dreams of avarice as measured by the older standards, for the service which such an institution may render and its power for good are almost infinite.

TO THE GRADUATING CLASS

And now a word to the graduating class: I congratulate you young men and women of all the colleges on having completed a four-year course of study in an institution of this kind, and to those who take advanced

degrees a word of special congratulation is due, were there time to give it voice. You are of the family of the Illini, and it is an honorable company.

You have enjoyed a rare privilege here in the studies you have been able to prosecute, in the growth of mental powers you have experienced, in the associations you have enjoyed, in the acquaintances you have formed, and in the introduction to the modern world which a college course assures.

You have enjoyed peculiar privileges, but you are not a peculiar people. You are going into the citizenship of the state debtor to society for a good part of the mental equipment with which you start out. And just as the University owes a constant obligation to the public because of its support, so does every student who leaves its laboratories and its classrooms owe back to society a perpetual debt of gratitude that can be discharged only by faithful service.

You have from now on a triple duty, arising out of your privileges here enjoyed: a duty to yourself and yours, all the greater for your opportunities; a duty to society and to the State that its investment in you shall prove profitable; and a duty to the University as an educational institution of the land of your nativity.

The duty to yourself and yours will be discharged in the prosecution of your profession and the meeting of those personal and family obligations that people of training and refinement are everywhere expected to discharge. Your duty to the public will be rendered in any one or more of a thousand ways in which the material and spiritual welfare of society can be promoted. Here you must pay the debt contracted in getting your education at state expense, and this debt runs on the amortization plan, for you will not live always.

Your duty to the University is the same as that of any other citizen, —plus a something akin to the love we feel for father and mother and for family. I have but one word of caution at this point, and it is this: In all matters concerning the policies and the financial support of the University of Illinois, I beg of you, act not as a

group but as citizens through citizen agencies and organizations, lest we be charged with sailing under false colors and be suspected of building up a close corporation of our own numbers while pretending to serve the public.

Nothing will be more quickly fatal to any state university than a feeling on the part of the citizens at large that the institution is assuming either to direct the state or to manage its affairs through its own peculiar product, the alumni. The University must work with all the State, not with any class or coterie, and so I welcome you after today into the world of men and women with all the privileges of responsible and educated citizenship.

The University of Illinois is a state institution in the broadest possible sense of the term. Its Board of Trustees are elected by the people, and this means that higher education in Illinois is held secondary to nothing else, however worthy. On this broad foundation the University of this imperial State opens its doors, not only to its own sons and daughters, but to those of other states and other lands on practically equal terms, for Illinois, though a mid-continental territory, intends not to be insularized by its educational policy.

Here all classes of men and women are educated together in one society, whatever their future calling. Here acquaintanceships are formed as wide as the world and as broad as humanity. Here is knowledge propagated for the good of men. Your special duty and privilege is to understand the University of Illinois, then seek to promote its welfare and its work by every honorable means.

We stand as yet only at the vestibule of the great Temple of Learning. It is a mansion of many rooms wherein all humanity may find domicile, but it is only well begun. The Architect of all the universe made the plans when he implanted in the human brain the desire for knowledge and the power to achieve. Our forefathers have laid the foundations and erected some of the partition walls. It is for us to finish and furnish this home of knowledge, and it may be as magnificent as our vision can picture and our labors achieve.