

Tomorrow's Resources



MINNESOTA COMMISSION ON HIGHER EDUCATION

Minnesota Laws of 1947, Chapter 603

"Section 1. Interim commission on higher education. A commission is hereby created for the purpose of studying higher education and making a report to the commissioner of education.

"Section 2. Appointment; personnel. The commission shall be appointed by the state commissioner of education, shall serve without compensation, and include representation from private liberal arts colleges, private and public junior colleges, the state teachers colleges, the state university, the state public school administrators and the state department of education.

"Section 3. Appropriation. There is appropriated \$5,000 for each year of the biennium to the state department of education to defray the expense of stenographic, clerical and statistical help and the necessary supplies and printing."

This report has been prepared by the Commission on Higher Education to acquaint the people of Minnesota with the progress and the problems of higher education in the state. The original Statewide Committee on Higher Education, with publication in 1947 of "Unfinished Business — Minnesota's Needs in Higher Education," established a policy of reporting to the people the progress of Minnesota's colleges in cooperatively charting their future growth. The present report continues that policy. A complete record of the findings of the Commission, entitled *Higher Education in Minnesota*, is being compiled for publication and presentation to the Commissioner of Education.



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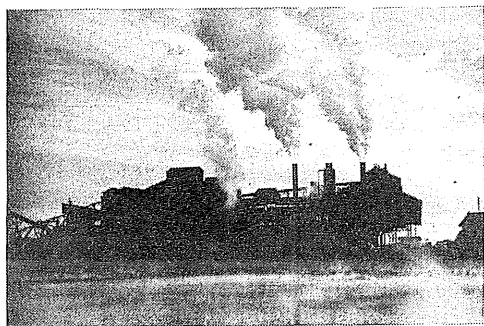
This is Post-War Minnesota

Photos by Minneapolis Star and St. Paul Dispatch

In the fourth year of peace, *this* is the post-war era we dreamed of through the long war years. Is living in Minnesota as good as we hoped it would be? Is it as good as we can make it?

Let's look at ourselves squarely.

OUR WEALTH



University Audio-Visual Education Service

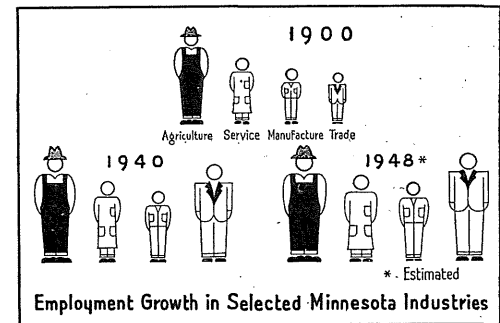
**Minnesota's economic opportunities
are now the greatest of a generation.**

Our per capita wealth has taken an upward turn after a long decline. From a per capita wealth well above the national average in 1920 we dropped to nearly 20 per cent *below* that average in the middle 1930's. But higher farm prices and the boost given our industry by war production have raised our wealth now to within 10 per cent of the average.

We have made an excellent start in the climb back to state prosperity. The opportunity that is ours—to hold and build on this start—must not be allowed to slip away. The energies and talents of our people, if properly directed, should secure better living for us all. We must plan and act for the future now, while the national economy still favors us.

OUR WORK

Minnesota's ways of earning a living are changing.



Agriculture still employs nearly one third of our labor force, more than any other single industry. However, the number of people engaged in farming has been shrinking slowly for many years. Modern machines and better methods of cultivation make it possible to produce more and better farm products with fewer workers.

Continued improvement in farming methods may reduce still further the labor force needed to man our farms, and it should continue to increase Minnesota's farm income per worker. Our 1947 farm income per person engaged in farming, the highest in our history, ranked sixth in the Midwest.

Non-agricultural employment has been absorbing more and more of our working population. This trend has been apparent for years, but it was speeded up by war demands. Between 1940 and 1948 the total labor force outside of agriculture increased by more than 50 per cent.

Growth at this rapid rate means that non-farm industry is absorbing almost all of the natural population gain, some former agricultural workers, and many more women.

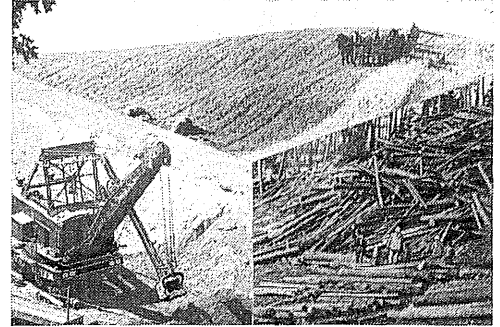
Outstanding even during this period of general industrial growth has been the spectacular expansion of certain Minnesota industries. Jobs in wholesale and retail trade have just about doubled since 1940. Manufacturing, which was losing ground before the war, has come back with a gain of more than 50 per cent in employment. Transportation, public utilities, and the service industries also have hired many more workers in post-war Minnesota.

Minnesota's work, then, is becoming more diversified. This alone will not satisfy our economic needs, of course, but it is an encouraging step in the right direction. In the old ways of working as well as the new, the total productive effort of all our people needs to be and can be made more fruitful.

With the changes in the ways we make our living we will be making changes in many phases of our economy and culture. Our major problem is to recognize and use *all* our resources.

OUR NATURAL RESOURCES

**Minnesota's natural resources must
be re-enforced with human effort.**



Minneapolis Morning Tribune Photo

There was a time when our soil would yield up riches enough for all — rivers of wheat, millions of feet of lumber, mountains of iron ore — without intelligent and continuing help from the people of Minnesota.

For two generations we lived well on what the land gave us simply for the taking. But the manual skills needed in those days — digging, felling, reaping — no longer serve alone to extract wealth from the land. We are forced to add to our use of the land more specialized knowledge, modern skills, and new abilities.

Successful farming has changed from the simple plowing-sowing-reaping cycle of the old days. It is now a science involving soil conservation, selective breeding, farm engineering, cost accounting, and countless other special skills.

New knowledge, new products, and new methods in agriculture are being developed through study and experiment in centers that Minnesota has built and maintained. Wise use of these new processes requires that they be put in the hands of the people who can apply them. This means that larger numbers of our workers need training in technical skills.

Our willingness to support research is already paying rich dividends. Research on taconite has made possible the economical use of low-grade iron ore for the day when our better ore is gone. Experiments with peat foreshadow the use of that new resource in several ways. Recent developments in the use of pulpwood make it possible to put cut-over marginal land back into production.

The growing resort and recreation industry combines the beauty of our lakes region with the “know-how” of its workers to add an important contribution to the state’s income. New ways of using the wealth of our land *are* appearing. More are in prospect.

Minnesota can be made a better place to live than ever before IF we combine with our remaining natural resources the resources that lie in our people. We have only begun to help nature provide us with a new abundance.

Natural resources are still plentiful in Minnesota. They require only that we add to the earth’s wealth more of our *human* resources — the skill, knowledge, energy, and ingenuity of our people.

This is post-war Minnesota—

OUR HUMAN RESOURCES

Minnesota's people — all 3 million of them — are its real unfailing resource.



University Audio-Visual Education Service

What Minnesota becomes will depend almost wholly upon how its human resources are used. These resources warrant careful examination. Who are our people and what are they like?

Nine out of ten Minnesotans were born in this country — most of them in this state. The many likenesses among our people tend to make us a rather closely-knit group, sharing a fairly large common background and a broad community of interests. We are able, therefore, to see eye to eye on most state problems and willing to act cooperatively when the public good is at stake.

On the whole, Minnesota's people are sparsely settled over the land, averaging 35 persons per square mile. The three major cities — Minneapolis, St. Paul, and Duluth — account for only two fifths of the population. All the rest of our people live in smaller cities, in towns, and in open farm country.

Providing needed social services for such an unevenly distributed and widely scattered population is far more difficult than satisfying the needs of a more dense population. But our unity of interest and our experience in cooperative action can be used to overcome even this handicap.

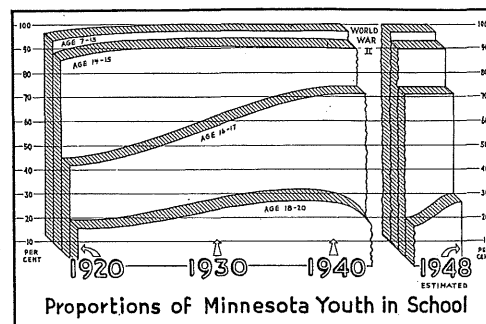
One third of Minnesota's people live on farms. Their number is not increasing, however, because so many of their young folks — particularly the young women — move to the cities as soon as they are old enough to become self-supporting. This movement of youth is draining away from rural areas and small towns an alarmingly high proportion of their *most capable* young people. Enhanced vocational and cultural opportunities, growing out of farm improvement and a contributing educational program, can be used to hold more of these able youngsters in agricultural communities.

In the conservation and use of its human resources, Minnesota has been remarkably progressive in some ways but behind the times in others. We have pioneered in medical research to improve the health of our people. We have made a praiseworthy beginning in social legislation. We aid the sick and the old and the unfortunate. But we do not yet provide all our people with the opportunity to develop fully their potential abilities.

There are gaps in our development of human resources. Whole segments of our population have been left virtually in the condition of raw resources.

DEVELOPING HUMAN RESOURCES

Education is the key to human development.



Our main efforts to refine Minnesota's human resources are organized into a system designed for just that job — education. To meet the need for further development of our human resources, we look first to our schools and colleges.

Minnesota always has given much of its wealth and talent to the schooling of its young people. As their educational needs have increased, we have improved our provisions for their education.

When our people needed the skills of the "three R's," we built elementary schools — thousands of them — wherever there were children to be taught. Then, as demands for further training multiplied, we made it possible for more and more of our youngsters to go to high school. In much the same way, our private and public colleges have grown in response to our expanding needs for cultural and professional leadership.

The foundation of Minnesota's educational program is a network of 6,000 public elementary schools now in operation, enrolling close to 300,000 pupils, and 300 private and parochial elementary schools, enrolling 65,000 pupils.

Upon this foundation rests the secondary structure of 600 public and 50 private high schools, together enrolling almost 170,000 students.

At the top levels of our educational system are thirty-five recognized colleges and universities which now serve 52,000 full-time students.

Our public institutions of higher education include the University with its Duluth branch, five state teachers colleges, and ten locally supported junior colleges.

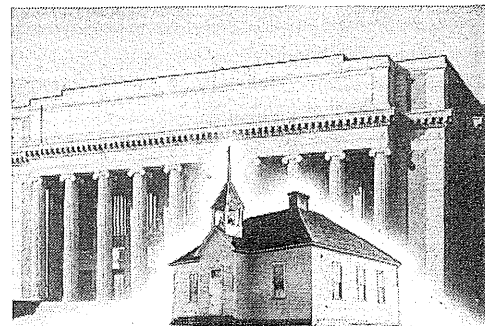
Fourteen of Minnesota's liberal arts colleges and four junior colleges are supported by private means. Their contributions to our intellectual and cultural growth deserves the continued appreciation of our people.

Twenty of our public and private colleges offer four years of training leading to the bachelor's degree. The University also provides more specialized graduate work leading to the master's and doctor's degrees. These twenty colleges, including the state university, enroll 92 per cent of the students attending Minnesota colleges. The remaining 8 per cent are enrolled in our fourteen junior colleges.

We have a tremendous investment in our present program for developing human resources. New needs can be met only by keeping that program up-to-date.

STRENGTHS AND WEAKNESSES

**The success of the lower schools
vitally affects the role of our
colleges.**



University Photo Lab

At the elementary level, we have succeeded better than most states in bringing our children into school. BUT . . . far too many elementary schools—because they are so badly underequipped, understaffed, and poorly housed—cannot do the kind of job they should be doing.

The lower schools are overloaded as a result of high war-time birthrates. Our primary grades alone enrolled 12,000 more pupils last year than in 1940, and still more are to come.

Two fifths of our elementary school pupils attend ungraded schools, most of which are one-room rural schools offering meager programs in unimproved buildings. Yet few school districts, rural or urban, can afford to build new school plants or to remodel outdated ones. Neither can they afford to offer adequate physical examinations, guidance services, special facilities for the handicapped, low cost school lunches, or even kindergarten training. Too few cooperate with other agencies on children's problems.

At the high school level, erosion of our human resources really begins in earnest. Two out of every five fifth-graders in Minnesota drop out of school before they finish high school. The graduating class of 1947 included only 59 students out of every 100 who had been in that class seven years earlier. The greatest losses occur at the points of transfer from the elementary or junior high school to the high school, and at age 16. These losses reveal the gaps that exist between the successive units of our educational system and the defects of our present school attendance laws.

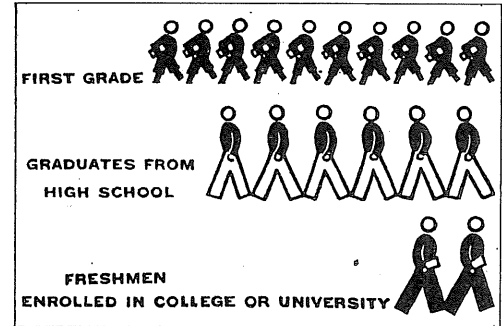
Minnesota's farm youngsters are still handicapped in getting a high school education. Of the sixteen- and seventeen-year-olds living on farms in 1940, more than 56 per cent of the boys and 37 per cent of the girls were *not* in school.

It is evident that schools offering programs planned to meet the needs of *all* their young people hold more of their students to the point of graduation.

Like the human beings it serves, our educational system draws its strength from the vitality of each of its parts.

STRENGTHS AND WEAKNESSES

Our most serious loss of human resources occurs just beyond the high school.



The gap between high school and college is almost as wide now as it was before the war.

The great influx of veteran students, swelling our college enrollments, has led many of us to assume that more of today's 18 to 22-year-olds are attending college than attended before the war. Post-war studies of high school graduates show, however, that pre-war ratios have improved only slightly.

Only one in five of our young people (one in three of high school graduates) continues his education beyond the high school. For every highly talented graduate who goes to college, another equally talented one does not. Most of those who do take further work go to recognized colleges in Minnesota.

Three factors — distance, cost, and limited course offerings — are the major barriers to college education in Minnesota.

1. Distance. One fourth of our young people who live within 10 miles of a college are attending college the year after they graduate from high school. But among the youth who live more than 25 miles from a college the ratio is one in seven.

2. Cost. The expense of a college education is an impassable barrier for many capable young people. Inability to meet this cost ranks highest among the reasons given by high school principals for the failure of many of the ablest graduates to attend college. The distant student must add to actual college costs the expense of living away from home.

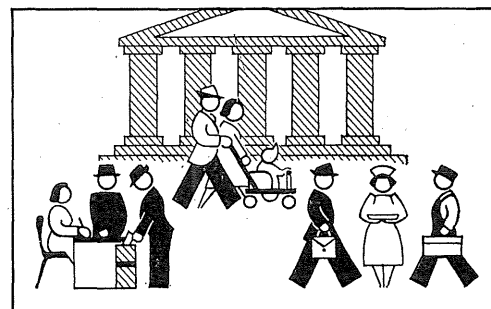
The evidence shows clearly that ability to benefit from college training, and ability to serve the community with college-learned skills, are not reserved to the children of well-to-do parents. Minnesota must take immediate steps to assist the capable student who is unable to pay the bill himself.

3. Limited course offerings. Still other students cannot find in our colleges the kinds of training they seek. Many of the students who dropped out of college last year stated that they were unable to secure the courses they wanted, that they had changed their vocational plans, or that they could not see a clear relationship between their courses and out-of-school life.

We need the trained services of more of our young people, but our colleges are out of reach in dollars as well as in miles for too many of them.

SHORTCOMINGS

Though real progress has been made, there are still gaps in education's content.



Bringing more of our young people into the schools will not alone satisfy our needs or theirs. The training they receive when they get there must be vitalized in three major respects.

1. Education in Minnesota still does not effectively *train youth for earning a livelihood*. Some young people in every school need help in choosing their future work. A majority of our boys and girls also need actual vocational training in the high school, since their formal education ends there. Yet thousands of our high school pupils do not have access to vocational guidance or training services.

For a smaller number of our youth—probably less than a fourth—suitable occupational training will necessitate four years or more of college education. But our times are imposing a demand for an *intermediate* level of training. A growing number of jobs in post-war Minnesota require vocational and general education that extends through the first year or two of college.

2. Special efforts must be made to *educate youth for full personal development*. Preparation for occupational competence will be out of balance without broad general education for successful living.

Each individual student in our schools has his own pattern of skills, abilities, and personality characteristics. He deserves personal counseling and planned instruction to help him achieve a satisfying life.

Sound physical and mental health, satisfying human relationships, a variety of leisure activities, and a wholesome philosophy of living are minimum necessities. There are many evidences that Minnesota's education falls short of providing these necessities in adequate measure.

3. Our most pressing need in these times is to *prepare youth for democratic living*. Democracy must be worked at to survive in a hostile world. Its problems today are so complex that our people must be trained to work at them effectively. This kind of training is the job of our schools and colleges. Yet studies by this Commission show that less than a third of former Minnesota college students are satisfied with their preparation for civic and social responsibilities.

There are other ways in which education in Minnesota must be strengthened and expanded, but these three needs are so pressing that they merit top priority in our planning. We must face them and take action now.



Photos by St. Paul Pioneer Press, Minneapolis Star, and Dunwoody Industrial Institute

BETTER FOUNDATIONS

Some of the next steps in elementary education are under way. County survey committees, working under the provisions enacted by the 1947 legislature, have spent the past year studying school district reorganization. They would replace the many small school districts with larger districts, supported by the taxes of broader areas and offering richer, more varied programs. These survey committees deserve all the help and encouragement we can give them.

Steps are being taken also to recruit more young people to elementary teaching and to increase the period of college training for this important service.

In spite of difficult circumstances, our elementary teachers and school administrators are doing an excellent job. But if we want the training of our children to measure up to their needs and Minnesota's, we cannot allow these circumstances to become permanent. We must bring to *all* children, as *soon* as possible, the improvements we have begun.

The next steps in secondary education are beginning to make high school training more useful as well as more available. The state's school transportation aids, provided by action of the last legislature as a supplement to local efforts, are making high school training available to more of our young people. Reorganization of districts, too, will help to bring this education within reach of more rural youth.

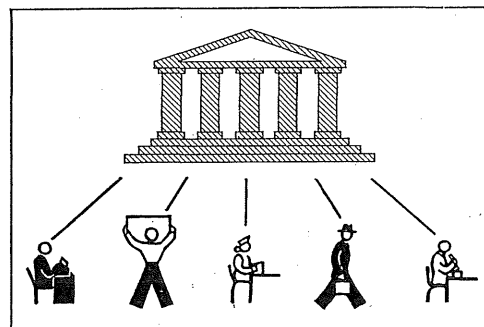
We people of Minnesota have been content too long with high schools so small or so limited in funds that they can supply neither adequate general education nor practical vocational training.

Our high school educators are moving away from high school training that is geared largely to college preparation. They are developing programs suited to individual and community needs. But parents and other taxpaying citizens must recognize advantages of such programs and rally to their support. The training a high school can offer is limited only by its enrollment and by the backing of its community.

These things come next—

NEW COLLEGE CONCEPTS

The definition of "a college education" is being enlarged.



Our college system was built on the principle of public responsibility for training a small and highly selected group of students, usually for service in the professions.

Minnesota's present needs in democratic living go far beyond the earlier ideas of college training.

Democracy today needs the vitality that can come only from the active participation of its citizens. And successful conduct of our democracy's affairs now requires extensive information, training, and practice. It is imperative that our colleges enlarge their programs to provide this experience, both for their present students and for a great many more of our young people who do not now go to college.

College training for responsible citizenship must instruct our youth in the practical mechanics of government, develop the skills of critical thinking, furnish practice in democratic group action, build a working knowledge of social economics, and stimulate more students toward public service.

It is imperative, too, that our colleges extend their programs to include the occupational training of semi-professional as well as professional workers.

The skill and competence of highly-trained professional people—the scientists, the doctors, the scholars, and others—are vital to our survival in the world of today. Training of gifted leaders continues to be the primary responsibility of the private and public colleges and of the state university.

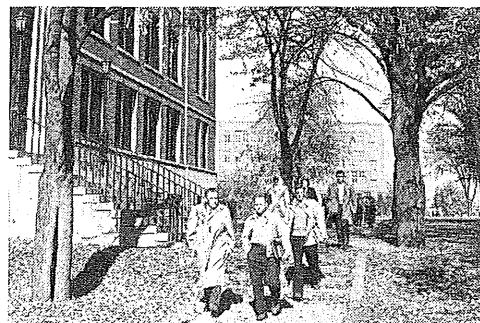
However, it is now necessary in Minnesota to extend college training at public expense to include other occupations than the professional ones. Post-war studies show that in some fields four or five workers at the semi-professional or technical level are needed for every one professional person required.

The war emergency and the post-war producers' market have given us the start we need in industrial growth. We cannot hold and build on that start unless we begin to train now the technical and semi-professional workers we will need for efficient operation and continuing growth. Clearly, we must provide for the training of these needed people in our new concept of college education.

The logical time to develop both civic and vocational skills is during the senior high school and college years.

COLLEGES FOR TODAY'S NEEDS

Established colleges face greater tasks.



University Photo Lab

Our public and private colleges must be strengthened in the work for which they are designed.

Liberal arts education should be safeguarded. The President's Commission on Higher Education, composed of many distinguished leaders in American life, said: "Our society is desperately in need of men and women capable of giving wise leadership—the kind of leadership that can come only from those who have read with insight the record of human experience, . . . who sense the meaning of social forces, . . . who comprehend the complexities and intricacies of social processes, and who command the methods of rigorous critical thinking."—*Higher Education for American Democracy*, Vol. I.

Minnesota's private liberal arts colleges carry a large measure of responsibility for this kind of training, since they educate more than a fourth of all our college-going students. Supported through philanthropy and higher tuition fees, these private colleges ease greatly the load on taxpayers of the state for post-high-school education. Their work in raising the cultural and moral level of life in Minnesota continues to be an outstanding contribution.

Programs of teacher education should be strengthened. Four fifths of all our elementary teachers have had no more than two years of college preparation. More than 2,300 elementary school teachers were still teaching on substandard permits in 1947-48. Minnesota high school teachers typically have four years of college training, though many states have already moved to a five-year standard. Clearly, Minnesota's agencies for training teachers—the teachers colleges, the liberal arts colleges, the University—should be aided in their efforts to attract more students and to train them more adequately.

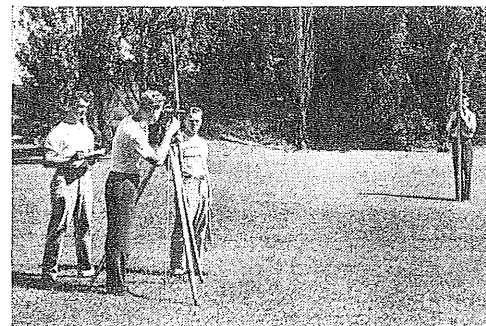
Professional and graduate programs should be improved constantly. Critical shortages in other professional fields—nursing, medicine, pharmacy, and scientific research, for example—emphasize the need to recruit and train many more young people with top level talent. The University's professional, graduate, and research programs, buttressed by professional education in other colleges of the state, are Minnesota's chief sources of professional growth.

We cannot train too well the young people who have exceptional abilities. Nor can we spread too broadly the fruits of their education.

These things come next—

COLLEGES FOR TODAY'S NEEDS

New programs require new colleges.



Duntwoody Photo

"Minnesota's most pressing long-term need is the wider development of programs that can be completed by the end of the fourteenth grade." Unfinished Business, Minnesota's Needs in Higher Education.

Our need for new kinds of post-high-school training is shown clearly by a Commission survey of technical and subprofessional occupations. We do not now provide general education and technical training for such workers as draftsmen, dental technicians, retail merchants, insurance agents, hotel operators, and many others. Two-year college programs, designed to prepare students for this level of employment and for active citizenship, would close the largest gap in our educational system.

The proposed two-year programs would be *terminal* programs, equipping students for out-of-school responsibilities rather than further academic studies. The technical education provided should be intensive and comprehensive enough to give students command of marketable skills, and it should be balanced with general education for personal development.

The new programs could grow within established colleges, in some instances, by addition of terminal training to the regular curriculums. Present junior colleges might so develop into community colleges.

As large sections of Minnesota lack college facilities altogether, some new colleges should be established to provide two-year terminal education. Regional planning is required, since a college certainly is not needed in every town or county. Commission studies show that organization of six new community or regional colleges would bring college facilities within 35 miles of nine tenths of all Minnesota youth.

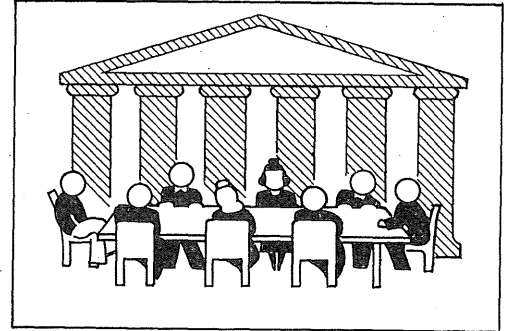
With emphasis on training for technical and semi-professional occupations, some of the new colleges may qualify to perform also the functions of the area vocational schools authorized by recent legislation.

The community or regional colleges would supplement rather than compete with existing colleges. Their students would be drawn mainly from three groups: young people who are now barred from college training by cost and distance factors, students who drop out of four-year colleges after only a year or two of work, and adults who desire additional education for their special needs.

"Whatever form the community college takes, its purpose is educational service to the community. . . ."—Report of the President's Commission on Higher Education, Vol. I.

DEVELOPING A STATE PLAN

The most effective education will grow out of coordinated planning and action.



In order that each public and private college may do the most good for the most people, it should develop within the pattern of a statewide plan. Four characteristics are fundamental to such a plan.

1. Local initiative and control. One of the great strengths of American education has been its "grass-roots" tradition. Local communities have raised their sights progressively to provide elementary, then secondary and, in some instances, higher education for their young people. Private groups, including church denominations, have had the vision to develop programs that serve many youth beyond the particular groups supporting the colleges.

The best interests of higher education will be safeguarded if each college continues to be responsible chiefly to the people it serves directly.

2. Cooperative planning. Gaps will persist in the state's total program unless the colleges study together the needs of the state and use their individual resources to best advantage. The last legislature advanced our progress by establishing the Commission on Higher Education, which brings into one working group the representatives of various types of colleges and other educational agencies.

3. Outstanding leadership. Existing colleges need skilled help in their efforts to meet the many new demands now being made upon them. Faculty members who have special competence in certain fields must be encouraged to devote their best talents to the task.

The State Department of Education requires greater financial backing if it is to provide adequate assistance in developing new regional or community college programs. Forceful leadership and support by community groups are also required.

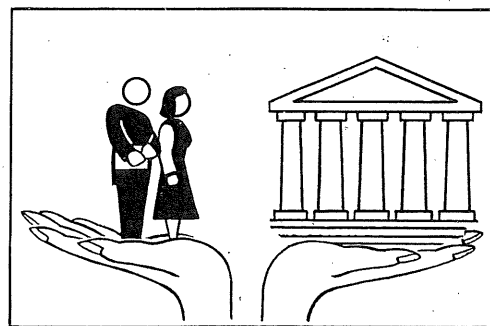
4. A fully-informed public. If our youth are to meet successfully Minnesota's needs of tomorrow, our adults must recognize and anticipate many of those needs today. Any educational plan that depends heavily on local initiative and support will have to grow out of an increased public awareness of the advantages of such a plan. Informing our citizens as to the course and object of higher education is a primary job for statewide planning.

The unity among Minnesota's educational endeavors can be understood and developed best when all who are concerned with it work in association.

These things come next—

FINANCING A STATE PROGRAM

**Our investment in higher education
is a major one and a growing one.**



Financial support of higher education is a proper function of the state. To protect and develop our human resources, the state should act in two ways.

1. Scholarship aids for highly-qualified individual students. The twin barriers of cost and distance still keep many able youth away from college. These talented young people, whose families cannot meet the costs of a college education, need special help.

Scholarship aids are most effective when made available immediately upon graduation from high school. The able graduate who goes directly to college has six times more chance of completing college than the one who postpones college entrance.

Although it would be desirable to provide more than one year of scholarship aid, only a modest beginning is suggested. Two factors influence this recommendation—the present lack of aid for students just starting their college work and the need to extend help to as many as possible. Students who are awarded these scholarships should be free to attend any public or private Minnesota college approved by the State Board of Education.

This Commission also endorses the scholarships for prospective teachers now being proposed by other educational groups.

2. Financial aid by direct grants to public colleges. Minnesota already has done much to increase opportunities for elementary and high school education by distributing costs through state aid. Support of education by local school districts alone is a principle that we outgrew several generations ago.

In advancing ourselves through education, we have established the University and five teachers colleges. Maintenance of these institutions inevitably will cost us more because of the rising prices of materials and services.

The present and future needs of the state require development of two-year terminal programs in our present public junior colleges and establishment of colleges of this kind in sections of the state that now have no college facilities. Yet very few school districts or combinations of school districts are financially able to do this job alone. To develop and maintain two-year terminal programs, the state must become a permanent partner in the program just as it is now in supporting our elementary and secondary schools.

We face the choice as to how we shall spend our money — for additional luxuries or for investment in the citizens of tomorrow.

The Minnesota Commission on Higher Education offers for legislative action the following three recommendations:

- I. Enactment of a bill providing state scholarships to enable talented and needy high school graduates to attend Minnesota colleges, the total cost to be limited to \$75,000 per annum.
- II. Revision of the state aid bill to provide state funds for junior colleges and area vocational schools on the same basis as the aid now given high schools.
- III. Enactment of a bill continuing the Commission on Higher Education and extending its support to \$10,000 per annum for further research needed in the field of higher education.

Once we saw no need to do research, to replant, to restock. Our timber, iron ore, and topsoil seemed well-nigh inexhaustible. Nor did we see the need to develop fully our human resources. Therein lies the difference between Minnesota's yesterday and Minnesota's tomorrow.

Today we stand taller in wisdom. Provident instead of wasteful, we have grown more competent in the diverse ways of creating new wealth. We have learned to protect and promote the common welfare through cooperative democratic action. Having made such strides, we stand on the threshold of a new abundance—a full harvest of better living. We have the will to achieve this. Within the state's power is the way—through education—because inherent in the people themselves now lie Minnesota's greatest resources.

RESEARCH STUDIES

The following sources have been used by the Minnesota Commission on Higher Education in developing the present report.

A. STUDIES SPONSORED BY THE MINNESOTA COMMISSION ON HIGHER EDUCATION (1947-1948)*

1. Occupational Survey of Minnesota, with Emphasis on Sub-Professional and Technical Levels of Employment
2. Study of the Educational Backgrounds of Minnesota Elementary School Teachers
3. Follow-up Study of Former Minnesota Junior College Students
4. Analysis of the Curricula of Minnesota Junior Colleges
5. Study of Factors Relating to the Location of New Junior Colleges in Minnesota
6. Follow-up Study of Former Students of Minnesota Liberal Arts Colleges

*In addition to members of the Commission, the following individuals participated in a major way in the conduct of these studies: G. Lester Anderson, Grace Armstrong, John E. Dobbin, and Robert J. Keller.

B. RELATED STUDIES CONDUCTED BY THE UNIVERSITY OFFICE OF EDUCATIONAL RESEARCH

1. Follow-up Study of Minnesota High School Graduates of 1938, Nine Years Later
2. Study of University Agricultural School Students
3. Study of Secondary School Teachers in Minnesota
4. Follow-up Study of Minnesota High School Graduates of 1945
5. A Study of Changes in Students' University Plans

C. STUDIES MADE BY THE EARLIER STATEWIDE COMMITTEE ON HIGHER EDUCATION (1946-1947)

1. Higher Educational Opportunities in Minnesota
2. Social and Economic Background for Consideration of Minnesota's Post-High-School Educational Problems
3. Educational Resources of Minnesota
4. Effect of the War on Minnesota Colleges and the Present Enrollment Outlook
5. Development of a State System of Higher Education in Minnesota
6. The Junior College in Minnesota
7. Teacher Education Needs in Minnesota

D. COOPERATING STATE AGENCIES OR SOURCES

1. Department of Business Research and Development, James W. Clark, Commissioner
2. *Economic Analysis of the State of Minnesota* (J. G. White Corp., 1945), Minnesota Resources Commission
3. "The Erosion of Minnesota's Human Resources," State Department of Education
4. Legislative Research Committee, L. C. Dorweiler, Director
5. "Measuring Minnesota," Department of Business Research and Development
6. Minnesota Division of Employment and Security
7. Minnesota Institute of Governmental Research
8. Minnesota State Auditor's Office
9. Minnesota State Department of Education
10. Report of the Minnesota Interim Committee on Education, 1941
11. Research Division, Minnesota Department of Taxation

E. OTHER SOURCES

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2. Bureau of Labor Statistics, United States Department of Labor
3. Division of Research, National Education Association
4. Minnesota Education Association
5. Office of Business Economics, United States Department of Commerce
6. Report of the President's Commission on Higher Education, *Higher Education in a Democracy*, 1948
7. "Survey of Current Business," August, 1948
8. United States Bureau of the Census (State Tax Collections in 1948)
9. United States Office of Education, Federal Security Agency

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