the NEWS MAGAZINE of Western Michigan University

Rare Chinese Leather Puppets—Moore Hall

Summer 1962

the COLLEGE of TOMORROW
A Special Insert
Controversy and Order, Both Part Of a University

As Educators, we need constantly to remind ourselves that the central purposes of a university are essentially three in number, namely, (a) the preservation, analysis, and criticism of the present fund of human knowledge, (b) the development of habits of systematic and critical inquiry which a faculty gives to students in their quest for this knowledge, and (c) the constant and vigorous search for new knowledge. We should keep in mind that the uniqueness of a university is that while it must have organization and order, the very essence of a university is such that it must inevitably foster a spirit of controversy and individualism.

Harold W. Dodds and others in the new publication, The Academic President—Educator or Caretaker? published by McGraw-Hill a few weeks ago, describe this schizoid nature of the institutions of higher education very well. For example, it is pointed out that a university must of necessity place an "inherent emphasis on personal creativity and intellectual independence in faculty and students." It is the very nature of a university that there will be continual hauling and pulling "between the demands of conformity and of non-conformity, between the need for order and the university's mission to cultivate individuality and self-expression."

These conflicts between the demands for order and the demands for individual creativity seem at times to be designed to keep the president and his administrative colleagues humble. Actually, these are conditions which it is important that we keep in reasonable "mobile equilibrium" if we are to serve the best interests of the university, its students, its faculty, its alumni, and the city.

(Continued on Page 26)
There is a mountain of misunderstanding even in educational circles as to what the devices actually are, how they work and what can be expected from

The Teaching Machines

By Carl B. Snow
Director, Audio-Visual Education

ITEM ONE
"Teaching Machines, properly programmed and properly used, are our best hope for Education."
—Dr. James McClellan
Columbia University

ITEM TWO
"Programed Learning promises the first real innovation in teaching since the invention of movable type in the 15th century."
—Time

ITEM THREE
"Teaching Machines and Programed Learning" by Lumsdaine and Glaser, a highly technical book of 700 pages went through three printings in less than a year.

ITEM FOUR
A Wall Street market journal recommended the purchase of shares of stock in companies which were producing self-instructional programs, and estimated that one of the program publishers would gross $2.5 million dollars from the sales in the year 1961.

ITEM FIVE
A Center for Programed Instruction, supported by the Fund for the Advancement of Education, has been formed in New York City to provide help to schools and teachers in the complex field of self teaching devices and programs.

ITEM SIX
A new magazine entitled AID (Auto-Instructional Devices) is being sold on a nation-wide scale and is devoted exclusively to news and research reports on the subject of automated instruction.

THE ABOVE items to be found in the common reading material coming in a teacher's mail give some indication of the great interest aroused in recent years by the introduction of Teaching Machines to the American classroom.

Lumsdaine summed up the reasons for this high interest in teaching machines as follows:

"The great idea behind the teaching machine, many proponents are convinced, is its potential capability for providing effective guidance and control of the individual student's behavior as he learns, much as this can be provided by a skilled tutor, and for doing so in a way that is economically feasible."

The teaching machine was first made a reality by Dr. Sidney L. Pressey in 1926. He developed a simple, hand cranked device which allowed the learner a choice of four answers. The learner who selected the correct response received a piece of hard candy as a reward. Pressey has recently stated that today's candy will not fit his machine so that he now uses a stomach soothing tablet as a reward.
for the correct response. Perhaps this is more in keeping with the tempo of the sixties.

Pressey’s original machine was not intended for programed instruction in the present sense. The student was expected to have studied certain subject matter before testing himself on the machine. In other words, this original form of the teaching machine was a mechanical self-scoring test form.

The teaching machine of today may or may not be made with hardware and resemble a machine. In some cases it is in book form. In either event it is a device which presents a student with lessons prepared in a special way. These lessons constitute the program of the machine. Obviously, it is the program which teaches, not the machine.

The program is printed usually on separate sheets of paper. On each sheet of paper will appear statements followed by questions concerning the statements. The statement and question constitute one frame or step in the program. Some machines are made so that only one frame at a time appears for the learner to read. Two sample frames are given below:

1. Anti words are opposites: Nazi and anti-Nazi, septic and anti-septic. An opposite place that isn’t “against” anything is the place at the opposite end of the globe from the Arctic which we call the _____________arctic.

2. Antonym and synonym are opposites. The opposite of antonym, meaning “opposite in meaning,” is synonym meaning “_________ in meaning.”

The teaching machine or programed text would have some provision for the student to learn the correct answer immediately after he had recorded his answer in the space provided. This is known as “feedback.”

Between the time of Pressey’s introduction of the teaching machine in the 1920’s and the present, the experimental psychologists have been informing us that subject matter, when arranged in small steps, allows the student to advance from first to last, with a minimum of confusion. We have been told also, of two more important techniques . . . that the student should proceed at his own rate and that he should give a response at the end of each step with an immediate “feedback” to inform him as to whether his answer is correct or not. The importance of this “feedback” or “reinforcement” has been greatly emphasized by the psychologists.

Numerous devices have appeared in the past ten years which follow the pattern of learning mentioned in the preceding paragraph. To many these devices are known as Teaching Machines. Since machines are by no means essential to the techniques listed above, the term Teaching Machine appears to be inappropriate. P. Kenneth Komorski, director of the Center for Programed Instruction, New York City, believes that what is needed is a name which reminds us not of machines but of the much more significant development of a scientific method of instruction, which, mechanized or not, can have an enormous positive effect on education.

Enthusiastic supporters of the teaching machine program have sometimes referred to it as “an infinitely patient, highly qualified tutor.” This is undoubtedly true in part, provided that the program is carefully prepared by one who is skilled in learning theory.

Several inexpensive machines are now on the market such as the TMI Min-Max, the FORINGER, and the KON-CEPT-o-GRAPH. These make use of sheets of printed material. Each page contains the “frames” explained above with the statements, questions, spaces for written answers, and the correct answers. The correct answers are usually revealed by the machine after the student has written in his answers.

There are many different forms of the self-instructional devices in use today. They will vary from the simple paper and pencil devices explained above to the electro-mechanical boxes the size of the well known “coke” machines. The program on some machines is presented on film or filmstrip. On these machines he is asked to indicate his answer by pulling one knob from a selection of several. On some machines the length of time the learner spends in answering is recorded on a tape along with his choice of answers. The price tag on this sophisticated device may run as high as $5,000.

Another of the so-called machines is the Audio-Visumatic teaching device, which refers to the magnetic tape recorder with built-in electronic controls which can operate a conventional slide or filmstrip projector. In addition, the device contains an electronic control unit which is used to stop the tape recorder automatically after a question has been asked and to start it again when the student correctly marks the answer to the previous question on an answer sheet.

Psychologists Differ

Whereas Pressey’s program required that the student choose from given alternatives until he selects the correct answer, Dr. B. F. Skinner, Harvard University, developed a program which required a constructed response similar to the type shown above. Skinner believed that recalling an answer is better in the process of learning than recognizing the correct response among a selection of several possible answers. It is to be noted that in Pressey’s multiple-choice questions, each student must eventually answer each part correctly before moving to the next group of questions. Because all students will follow the same path, the program is said to be linear. Likewise with the Skinner program of small steps, taken one at a time, both bright and slow students will proceed along the same path. This type of program would also be linear.

A third type of program was developed by Dr. Norman Crowder and is known as a branching system. It might seem at first to be like the Pressey multiple-choice system. However it is found to be different in as much as the alternatives to the correct answer are not “dead ends” . . . they lead somewhere. When a wrong answer is chosen, the learner will be
told why his answer is incorrect and perhaps additional information will be provided.

This branching system of programming is to be found in the "scrambled" texts. The learner may start on the first page, but he may soon be turning back a few pages or moving ahead several pages depending upon which one of the possible answers he selects as the correct one. If the answer he chose is incorrect, he will find correctional information appropriate to the information he chose. If he chose the correct answer, he will find the next "frame" or "step" with the next set of multiple choice questions. Some psychologists have pointed out that this type of programming usually results in a delay of time in the "feedback." It is believed that for maximum benefit, the feedback effect must be immediate!

Two years ago Harcourt Brace and Company, publishers, appeared with a ninth grade English text in programmed form known as "English 2600," and now being used experimentally by Miss Bernyce Cleveland in University High School.

Encyclopedia Britannica Films has published several programmed texts in languages and mathematics on the high school and college level. The well known Roanoke, Virginia, experiment in the teaching of ninth grade algebra by means of EBF's programmed algebra text was sponsored by Encyclopedia Britannica Films during the 1960-1961 school year. EBF refers to its programmed learning materials as its TEMAC (TEaM ACtion) program. One of the characteristic features of TEMAC texts is the moveable mask operating on a slider on the right hand side of the book. After making a response, the student would move his slider down, revealing the correct answer. The student writes his answer in a second supplementary booklet rather than in the programmed text. This allows the text to be used in subsequent classes.

The TUTORTEXTS are prepared and published jointly by Doubleday, and Company, Inc. and Western Design,

(Continued on Page 27)
A DEDICATED woman has received both national acclaim and international recognition for serving our nation's most precious commodity—its children. The woman? Mrs. James C. Parker, the former Karla Van Ostrand, who from 1958 until 1961 was president of one of the largest organizations in the United States, the National Congress of Parents and Teachers, better known as the P.T.A.

As far back as she can recall, Mrs. Parker has been keenly interested in the home and family and the part they play in children's lives. Even as a child living in South Haven, this was apparent. She wanted only to become a "grandmother." Needless to say, this ambition never changed.

Later, in keeping with her interest in the home, Mrs. Parker studied home economics at Western. Upon graduation in 1915 she taught for eight years in the Michigan public schools as both an elementary and as a home economics teacher in high school. These experiences combined with those of marriage, motherhood, and the upbringing of two small daughters, Nona and Carlene, only confirmed her beliefs that the home and family do play important parts in the education of children.

During these years Mrs. Parker became a free-lance writer. She contributed articles on home and family life to such magazines as the Better Homes and Gardens, and news and feature articles to the Christian Science Monitor. She also found great enjoyment in writing fiction stories for both youngsters and teen-agers. Several of these were published.

Her background as teacher, parent and writer helped initiate Mrs. Parker into P.T.A. work. When her older daughter entered Dickinson Elementary School in Grand Rapids, Mrs. Parker became active, serving as its vice-president and chairman of committees. Ironically, though president of many other parent-teacher groups in later years, Mrs. Parker never became president of her first, the Dickinson one. In succession she became president of the South High School P.T.A.; president of the Grand Rapids Council of P.T.A.'s; editor for six years of the state branch bulletin, the Michigan Parent-Teacher; first vice-president, then president of the Michigan Congress of Parents and Teachers, this latter office from 1942 until 1945; the regional vice-president of the National Congress of Parents and Teachers for Region IV (including Michigan, Illinois, Indiana, Kentucky, Ohio and Wisconsin); national chairman for six years of the Committee on Congress Publications; first vice-president of the National Congress of Parents and Teachers in 1955-1958; followed by the presidency in 1958.

During these busy years, Mrs. Parker did not confine her activities solely to P.T.A. work. She participated in other organizations which benefited youth. She helped raise the needed initial building fund that was necessary to erect the outstanding educational and cultural resource—the Grand Rapids Public Museum. In 1946 Mrs. Parker became president of the National Council of Camp Fire Girls after serving many active years in their organization. As a charter member of the Grand Rapids Public Recreation Commission in 1938, she assumed duties as its secretary the following year and has since retained that office. A national honor, a citation for her "outstanding contribution to the recreation movement in America," was be-
A Distinguished Alumna

I have the honor to present to you Karla H. Parker, a distinguished alumna of this University. Forty-five years ago she received her teaching certificate from this institution.

Mrs. Parker had great things to do when she marched across the platform at that time, and she has done them, and she has more still to do as President of the National Congress of Parents and Teachers. Yet, we have asked her to interrupt her busy life to be with us today so that we may show our pleasure in the richness of a career whose aims are identical with some of our own.

Year by year, Mrs. Parker has given more and more of her energy to more and more of the world’s children. She has moved from the chairmanship of the Dickinson Elementary School PTA in Grand Rapids to the chairmanships of ever larger groups, to the position of National PTA President.

Mr. President, you must never underestimate the power of our women graduates when I tell you that Karla Parker has also been a member of the advisory committee to the Kent County Juvenile Court, a secretary of the Grand Rapids Recreation Committee, a president of the Michigan Council on Adult Education, a national president of the Camp Fire Girls. Mrs. Parker has also been a member of the 1960 White House Conference on Children and Youth, of the U.S. Commission for UNESCO, of the Inter-American Seminars and Town Meetings in South American, and of the World Confederation of Organizations of the Teaching Profession, in Rome.

I, therefore, ask you to make her presence among us today officially and spiritually enduring by awarding to her the honorary degree of Doctor of Laws.

stowed upon her in 1957 by the National Recreation Association.

Since 1950 Mrs. Parker has also been a member of the Michigan Youth Commission. In 1952 she became president of the Michigan Council on Adult Education. She likewise served on the advisory council for the Grand Rapids Juvenile Court; as chairman of the Curriculum Committee on Home and Family Living of the State Department of Public Instruction; as well as membership on the board of directors of the Michigan Council on Family Relations.

Mrs. James C. Parker came to the presidency of the National Congress of Parents and Teachers in 1958 well equipped to serve its eleven million members. Her job: to make the nation aware of the needs of its children. To undertake such a task, Mrs. Parker began to travel extensively throughout the United States, often speaking at state P.T.A. conventions. Hardly a state was missed. As Mrs. Parker says, she practically “came to know every inch of our country.” She even visited Alaska and Hawaii at their respective initiations into statehood. Whenever she recalls the P.T.A. convention held at Anchorage, Alaska (1959), she laughs. The Hawaiian Council of Parents and Teachers had flown orchid leis north for this event. How incongruous the leis looked worn upon the Alaskan parkas!

During her term of office Mrs. Parker often met many national dignitaries. A highpoint came when Mrs. Parker visited the White House and presented two life memberships in the National Congress of Parents and Teachers to Mamie Eisenhower, one for herself, the other for her husband.

But this was not all. Encouraged, briefed, but not sponsored by the U.S. State Department, Mrs. Parker toured seven countries and eight cities in South America. There she attended seminars and open meetings with the educational and lay leaders from those countries. Mrs. Parker acted as consultant to them—for there were no national parent-teacher groups in South America. However, Mrs. Parker discovered that a few P.T.A.’s did exist: those implanted and sponsored by United States citizens living together in certain sections.

Japan, unlike South America, does have a national P.T.A. organization. Credit for this is due General Douglas MacArthur. At the time of American occupation in Japan, he requested aid from the National Congress of Parents and Teachers in starting such a P.T.A. One of Mrs. Parker’s fondest memories concerns this Japanese Council of Parents and Teachers—the time its president came to the United States and presented her with a “letter” from his group. It was eight feet long and its message was written in Japanese, of course!

In the three year period of her office, Mrs. Parker made three trips to Europe, each time as a representative for the National Congress. Twice she attended the World Confederation of the Organization of Teaching Professions (W.C.O.T.P.), once in Rome and once in Amsterdam. Then in Berchtesgaden, Germany, she was present at the annual convention of the European Congress of American Parents and Teachers, a branch of the National Congress. Here she met again an old friend from the states, the outgoing president of the European Congress—Col. Edwin J. Marsh. He had at one time
proof read her copy for the National Congress Bulletin when she had been writing articles for it.

But whether it was traveling throughout the United States or South America, conversing with a student on the streets of Rome, or meeting other delegates and friends on a terrace overlooking Hitler's famous retreat, Mrs. Parker was able to make many first hand observations concerning the education of children.

In many countries, Mrs. Parker discovered, the people regard education as their only means of escape from the many oppressive living conditions in which they live. Their strong belief in education, therefore, arises from this restricted living which they must endure. Those children who are most fortunate to receive an education are those whose parents are well-to-do. But even these children regard their education in a serious light; they are truly grateful for it; they really appreciate it.

Many of the schools in these countries do not provide for broad learning experiences and greater opportunities, as our schools do. Instead they are supervised by a strict central education administrative agency which dictates all policies. Even the daily lessons are doled out by this office, as well as checked by it. Mrs. Parker deplores this practice, but praises the way our own local people undertake the responsibilities for education in the United States. The very fact that we don't try to enforce preconceived ideas upon our children should be cherished. Local responsibility in education is an important factor, therefore, if education is to grow.

Mrs. Parker also discovered that in some countries all testing of children's intellectual capacities are completed by age eleven. In comparison with this is our own attitude toward education in the United States. We realize that many children do develop slowly, that many capabilities come with maturity. Mrs. Parker believes that we are to be commended for this attitude. However, she warns, "though it is good that a child be challenged according to his own abilities, we must remember that environment and circumstances influence his capabilities to learn as well as his own native intelligence. If we can stimulate his desire for learning, then learning goes on through his lifetime. If we fail to do this, learning stops, and as the child grows into adulthood he will stop making an effort to learn." If this happens, we will have lost our goal in education.

But the tremendous factor about education in the United States, according to Mrs. Parker, is the idea that education is for all children, each in accordance with his own needs. She believes the way we try to discover this innate ability in the individual child and then develop it —this, too, should be cherished and protected. This happens to be a challenge greater than any other country has yet accepted. And, we in the United States should be proud of ourselves for going out, meeting and accepting this challenge.

- Although we may be going in the right direction concerning our educational policies, Mrs. Parker can point to some needs that we should still concern ourselves with. For one thing we need more teachers; real teachers; those teachers who possess a true sense of professionalism; teachers who do not teach for the paycheck alone.
- There is a great need to explore ways of supplementing the work of teachers. Until now this matter has not been investigated sufficiently. We should begin using part time assistants, mechanical aids, and all other modern inventions useful to education. The teachers should investigate them and must learn how to use them to the best advantage. Perhaps in this way we could speed education.
- Flexibility, too, needs to be explored more fully. The removal of strict grade levels in the elementary grades, letting children progress at their own rate of learning—these certainly need further study.
- Last, but not least, is the need to permeate the entire curriculum with

(Continued on Page 26)
Raising the Sights
Of Business Leadership

By Ray Eppert, Hon. '61
President, Burroughs Corporation

MORE THAN a century ago a famous philosopher, referring to ethics, said: "Aim above morality. Be not simply good; be good for something."

Business leadership today must aim above morality.

By that I mean the objective of our moral policies must not be just to keep out of jail; must not be just to fend off any further legislative policing; must not be just avoid censure or to bask in self-righteousness. We can achieve those ends by being simply good... but we have something of far greater importance to be good for.

Business leaders lead much more than the companies they represent. Collectively, the business leaders of the free world are the first line of defense of the capitalistic system which the leaders of Communism have sworn to humiliate, defeat and destroy. Only as long as we can continue to make capitalism work beneficially can capitalism survive. Only as long as we can make capitalism work beneficially can man's hopes for better living with personal liberty and individual dignity remain alive. In the economic war which is going on around the world, every business leader is high in the strategic council of freedom's forces.

This struggle with Communism, however, is really only one theater of a much larger war. This is the war against war—the elevation of standards of living among impoverished peoples. In order to survive... in order to deserve survival... our capitalistic system of free enterprise must continue to work better than any other system in bringing the benefits of civilization to all men everywhere. And it must be respected and trusted.

That is the full and real challenge which conforms business leadership today. That is what we have to be good for.

Probably every one of us has at one time or another made the statement that management's first duty is to make a profit. We do not need to apologize for it, but unless we qualify or explain the statement, we take ourselves out of context. What we should say is that management's first duty is to make a continuing profit. I question whether there has ever been a company so sick that unscrupulous management could not have milked it for immediate profit, and early demise. But to any company which is interested in being in business ten years from now, this year's profits are no more important, and perhaps less important, than the profits to come in the years ahead.

To assist in obtaining these continuing profits, business and industry have developed many tools: improved methods, research and development, sales techniques, market research, advertising, public relations, industrial relations, systems management, to name a few. Valuable as they have been, not one of these has ever been half as effective as the oldest and most basic business tool of all: dealing in good faith.

Fair dealing... with employees, with customers, with stockholders, with competitors, with suppliers, with our communities, with our country, with our society. Fair dealing has always been and will always be the best business practice, and what is morality but fair dealing? As I say—and it has been said often and better by others—good business morals are good business, and must be a basic policy for successful business leadership.

Our free enterprise systems demands fierce competition... it won't work effectively without it. Other moral obligations demand that we pursue business aggressively. Inevitably we must come to a very thin line between fierce competition and unfair competition. There is only one rule of thumb for judging this situation that I know: would you feel that your competitor was being unfair if he did it to you?

And if it is your competitor who hits below the ethical belt, I would consider carefully this old Chinese proverb: "Before you set out on revenge, dig two graves."

Every business has its hands full in producing and marketing its own products. Running down a competitor is time and effort stolen from constructive and positive purposes—a
sheer waste which neither our companies nor our national economy can afford. Let’s swell the superiority of our own product; not the inferiority of somebody else’s.

There remains to be commented upon the subject of the corporate role in public affairs, at all levels from our community to our country, from the local to the national.

We have the obligation not only to participate actively but to participate in the public interest, rather than to serve a specific corporate interest. Perhaps as a blot upon our escutcheon and perhaps as a necessary step in our economic evolution, it is to be feared that some of our corporate forebears gave priority to only part of this obligation. Some participated in public affairs primarily and sometimes exclusively for their own benefit. Although that attitude has been dead for a great many years, it has been hard to wipe out those early mistakes. We are frequently suspect if we attempt to carry our corporate citizenship into the legislative area.

Why should it be so difficult to believe that a corporation has a genuine public interest? There is no other area in which business leadership needs greater public confidence. Also, it is in this area that we all get tarred by the same brush whenever any one of us promotes or appears to promote self-interest without regard for public interest.

Moral behavior is easier said than done—not necessarily because we are prone to yield to temptation, but because of differences of opinion or many degrees. Being a little immoral may sound as absurd as being a little pregnant, but the fact is that for almost every decision we can make on the basis of clear-cut right and wrong, we must make a hundred decisions on the basis of whether the rights outweigh the wrongs.

That realization, however, should only serve to strengthen the determination of business leaders to remain consistent with the highest possible level of morality—to aim above that target, as I said at the beginning.

We must recognize that the growth of our corporations has given them tremendous power not only in the economic but in the moral structure of our society. Recognition of that fact has given rise to much discussion of a need for a national ethical code for executives. Such a code could only be an expression of intent, because the situations we face are so varied and numerous that no complete book can ever be written. No national code of ethics is a substitute for specific company policies which are designed to protect the objectives of the company and to govern individual conduct. I am also opposed to any national code because it would carry the connotation that a set of moral rules is necessary for management.

Nevertheless, I would like to suggest a voluntary code of conduct for individuals. The author was Thomas Jefferson, and I submit it for your consideration as an individual management guide line.

Jefferson said, “Whenever you are to do a thing, though it can never

Becomes New York Realtor

William R. Magel has joined the Real Estate Board of the Bronx, Inc., in New York City as executive vice president. The board has 1,300 members.

Magel had been very successful as executive secretary of the Kalamazoo Board of Realtors, serving for six and one-half years.

In 1961 he was elected president of the Michigan Executive Officers Council of the Michigan Real Estate Association, and was also on the multiple listing policy committee of the National Association of Real Estate Boards.
"WILL MY CHILDREN GET INTO COLLEGE?"

The question haunts most parents. Here is the answer:

Yes...

- If they graduate from high school or preparatory school with something better than a "scrape-by" record.
- If they apply to the college or university that is right for them—aiming their sights (and their application forms) neither too high nor too low, but with an individuality and precision made possible by sound guidance both in school and in their home.
- If America's colleges and universities can find the resources to carry out their plans to meet the huge demand for higher education that is certain to exist in this country for years to come.

The if's surrounding your children and the college of tomorrow are matters of concern to everyone involved—to parents, to children, to alumni and alumnæ (whatever their parental status), and to the nation's educators. But resolving them is by no means being left to chance.

- The colleges know what they must do, if they are to meet the needs of your children and others of your children's generation. Their planning is well beyond the hand-wringing stage.
- The colleges know the likely cost of putting their plans into effect. They know this cost, both in money and in manpower, will be staggering. But most of them are already embarked upon finding the means of meeting it.
- Governments—local, state, and federal—are also deeply involved in educational planning and financing. Some parts of the country are far ahead of others. But no region is without its planners and its doers in this field.
- Public demand—not only for expanded facilities for higher education, but for ever-better quality in higher education—today is more insistent, more informed than ever before. With this growth of public sophistication about higher education, it is now clear to most intelligent parents that they themselves must take a leading role in guiding their children's educational careers—and in making certain that the college of tomorrow will be ready, and good, for them.

This special report is in the form of a guide to parents. But we suspect that every reader, parent or not, will find the story of higher education's future remarkably exciting.
Where will your children go to college?

Last fall, more than one million students enrolled in the freshman classes of U.S. colleges and universities. They came from wealthy families, middle-income families, poor families; from all races, here and abroad; from virtually every religious faith.

Over the next ten years, the number of students will grow enormously. Around 1964 the long-predicted "tidal wave" of young people, born in the postwar era and steadily moving upward through the nation's school systems ever since, will engulf the college campuses. By 1970 the population between the ages of 18 and 21—now around 10.2 million—will have grown to 14.6 million. College enrollment, now less than 4 million, will be at least 6.4 million, and perhaps far more.

The character of the student bodies will also have changed. More than half of the full-time students in the country's four-year colleges are already coming from lower-middle and low income groups. With expanding scholarship, loan, and self-help programs, this trend will continue strong. Non-white college students—who in the past decade have more than doubled in number and now compose about 7 per cent of the total enrollment—will continue to increase. (Non-whites formed 11.4 per cent of the U.S. population in the 1960 census.) The number of married students will grow. The average age of students will continue its recent rise.

The sheer force of this great wave of students is enough to take one's breath away. Against this force, what chance has American higher education to stand strong, to maintain standards, to improve quality, to keep sight of the individual student?

And, as part of the gigantic population swell, what chances have your children?

To both questions, there are some encouraging answers. At the same time, the intelligent parent will not ignore some danger signals.

Finding Room for Everybody

Not every college or university in the country is able to expand its student capacity. A number have concluded that, for one persuasive reason or another, they must maintain their present enrollments. They are not blind to the need of American higher education, in the aggregate, to accommodate more students in the years ahead; indeed, they are keenly aware of it. But for reasons of finance, of faculty limitations, of space, of philosophy, of function, of geographic location—or of a combination of these and other restrictions—they cannot grow.

Many other institutions, public and private, are expanding their enrollment capacities and will continue to do so:

Private institutions: Currently, colleges and universities under independent auspices enroll around 1,500,000 students—some 40 per cent of the U.S. college population. In the future, many privately supported institutions will grow, but slowly in comparison with publicly supported institutions. Thus the total number of students at private institutions will rise, but their percentage of the total college population will become smaller.

Public institutions: State and locally supported colleges and universities are expanding their capacity steadily. In the years ahead they will carry by far the heaviest share of America's growing student population. Despite their growth, many of them are already feeling the strain of the burden. Many state institutions, once committed to accepting any resident with a high-school diploma, are now imposing entrance requirements upon applicants. Others, required by law or long tradition not to turn away any high-school graduate who applies, resort in desperation to a high flunk-out rate in the freshman year in order to whittle down their student bodies to manageable size. In other states, coordinated systems of higher education are being devised to accommodate...
students of differing aptitudes, high-school academic records, and career goals.

**Two-year colleges**: Growing at a faster rate than any other segment of U.S. higher education is a group comprising both public and independently supported institutions: the two-year, or "junior," colleges. Approximately 600 now exist in the United States, and experts estimate that an average of at least 20 per year will be established in the coming decade. More than 400 of the two-year institutions are community colleges, located within commuting distance of their students.

These colleges provide three main services: education for students who will later transfer to four-year colleges or universities (studies show they often do as well as those who go directly from high school to a four-year institution, and sometimes better), terminal training for vocational skills (more and more important as jobs require higher technical skills), and adult education and community cultural activities.

Evidence of their importance: One out of every four students beginning higher education today does so in a two-year college. By 1975, the ratio is likely to be one in two.

**Branch campuses**: To meet local demands for educational institutions, some state universities have opened branches in population centers distant from their main campuses. The trend is likely to continue. On occasion, however, the "branch campus" concept may conflict with the "community college" concept. In Ohio, for example, proponents of community two-year colleges are currently arguing that locally controlled community institutions are the best answer to the state's college-enrollment problems. But Ohio State University, Ohio University, and Miami University, which operate off-campus centers and whose leaders advocate the establishment of more, say that taxpayers get better value at lower cost from a university-run branch-campus system.

**Coordinated systems**: To meet both present and future demands for higher education, a number of states are attempting to coordinate their existing colleges and universities and to lay long-range plans for developing new ones.

California, a leader in such efforts, has a "master plan" involving not only the three main types of publicly supported institutions—the state university, state colleges, and locally sponsored two-year colleges. Private institutions voluntarily take part in the master planning, also.

With at least 661,000 students expected in their colleges and universities by 1975, Californians have worked out a plan under which every high-school graduate will be eligible to attend a junior college; the top one-third will be eligible for admission to a state college; and the top one-eighth will be eligible to go directly from high school to the University of California. The plan is flexible: students who prove themselves in a junior college, for example, may transfer to the university. If past experience is a guide, many will—with notable academic success.

**Thus it is likely** that somewhere in America's nearly 2,000 colleges and universities there will be room for your children.

How will you—and they—find it?

On the same day in late May of last year, 33,559 letters went out to young people who had applied for admission to the 1961 freshman class in one or more of the eight schools that compose the Ivy League. Of these letters, 20,248 were rejection notices.

Not all of the 20,248 had been misguided in applying. Admissions officers testify that the quality of the 1961 applicants was higher than ever before, that the competition was therefore intense, and that many applicants who might have been welcomed in other years had to be turned away in '61. Even so, as in years past, a number of the applicants had been the victims of bad advice—from parents, teachers, and friends. Had they applied to other institutions, equally or better suited to their aptitudes and abilities, they would have been accepted gladly, avoiding the bitter disappointment, and the occasional tragedy, of a turndown.

The Ivy League experience can be, and is, repeated in dozens of other colleges and universities every spring. Yet, while some institutions are rejecting more applications than they can accept, others (perhaps better qualified to meet the rejected students' needs) still have openings in their freshman classes on registration day.

Educators, both in the colleges and in the secondary schools, are aware of the problems in "marrying" the right students to the right colleges. An intensive effort is under way to relieve them. In the future, you may expect:

- Better guidance by high-school counselors, based on
improved testing methods and on improved understanding of individual colleges and their offerings.

- Better definitions, by individual colleges and universities, of their philosophies of admission, their criteria for choosing students, their strengths in meeting the needs of certain types of student and their weakness in meeting the needs of others.
- Less parental pressure on their offspring to attend: the college or university that mother or father attended; the college or university that "everybody else's children" are attending; the college or university that enjoys the greatest sports-page prestige, the greatest financial-page prestige, or the greatest society-page prestige in town.
- More awareness that children are different from one another, that colleges are different from one another, and that a happy match of children and institutions is within the reach of any parent (and student) who takes the pains to pursue it intelligently.
- Exploration—but probably, in the near future, no widespread adoption—of a central clearing-house for college applications, with students stating their choices of colleges in preferential order and colleges similarly listing their choices of students. The "clearing-house" would thereupon match students and institutions according to their preferences.

Despite the likely growth of these practices, applying to college may well continue to be part-chaos, part-panic, part-snobishness for years to come. But with the aid of enlightened parents and educators, it will be less so, tomorrow, than it is today.

What will they find in college?

The college of tomorrow—the one your children will find when they get in—is likely to differ from the college you knew in your days as a student. The students themselves will be different. Curricula will be different. Extracurricular activities will be different, in many respects, from what they were in your day. The college year, as well as the college day, may be different.

Modes of study will be different. With one or two conspicuous exceptions, the changes will be for the better. But for better or for worse, changes there will be.

THE NEW BREED OF STUDENTS

IT WILL COME AS NEWS to no parents that their children are different from themselves.

Academically, they are proving to be more serious than many of their predecessor generations. Too serious, some say. They enter college with an eye already set on the vocation they hope to pursue when they get out; college, to many, is simply the means to that end.

Many students plan to marry as soon as they can afford to, and some even before they can afford to. They want families, homes, a fair amount of leisure, good jobs, security. They dream not of a far-distant future; today's students are impatient to translate their dreams into reality, soon.

Like most generalizations, these should be qualified. There will be students who are quite far from the average, and this is as it should be. But with international tensions, recurrent war threats, military-service obligations, and talk of utter destruction of the race, the tendency is for the young to want to cram their lives full of living—with no unnecessary delays, please.

At the moment, there is little likelihood that the urge to pace one's life quickly and seriously will soon pass. This is the tempo the adult world has set for its young, and they will march doubletime to it.

Economic backgrounds of students will continue to grow more diverse. In recent years, thanks to scholarships, student loans, and the spectacular growth of public educational institutions, higher education has become less and less the exclusive province of the sons and daughters of the well-to-do. The spread of scholarship and loan programs geared to family income levels will intensify this trend, not only in low-tuition public colleges and universities but in high-tuition private institutions.

Students from foreign countries will flock to the U.S. for college education, barring a totally deteriorated international situation. Last year 53,107 foreign students, from 143 countries and political areas, were enrolled in 1,666 American colleges and universities—almost a 10 per cent increase over the year before. Growing numbers of African and Asian students accounted for the rise; the growth is virtually certain to continue. The presence of
such students on U.S. campuses—50 per cent of them are undergraduates—has already contributed to a greater international awareness on the part of American students. The influence is bound to grow.

**Foreign study by U.S. students** is increasing. In 1959-60, the most recent year reported, 15,306 were enrolled in 63 foreign countries, a 12 per cent increase in a period of 12 months. Students traveling abroad during summer vacations add impressive numbers to this total.

**WHAT THEY'LL STUDY**

Studies are in the course of change, and the changes will affect your children. A new toughness in academic standards will reflect the great amount of knowledge that must be imparted in the college years.

In the sciences, changes are particularly obvious. Every decade, writes Thomas Stelson of Carnegie Tech, 25 per cent of the curriculum must be abandoned, due to obsolescence. J. Robert Oppenheimer puts it another way: nearly everything now known in science, he says, "was not in any book when most of us went to school."

There will be differences in the social sciences and humanities, as well. Language instruction, now getting new emphasis, is an example. The use of language laboratories, with tape recordings and other mechanical devices, is already popular and will spread. Schools once preoccupied almost entirely with science and technology (e.g., colleges of engineering, leading medical schools) have now integrated social and humanistic studies into their curricula, and the trend will spread to other institutions.

**International emphasis** also will grow. The big push will be related to nations and regions outside the Western World. For the first time on a large scale, the involvement of U.S. higher education will be truly global. This non-Western orientation, says one college president (who is seconded by many others) is "the new frontier in American higher education." For undergraduates, comparative studies in both the social sciences and the humanities are likely to be stressed. The hoped-for result: better understanding of the human experience in all cultures.

**Mechanics of teaching** will improve. "Teaching machines" will be used more and more, as educators assess their value and versatility (see *Who will teach them?* on the following pages). Closed-circuit television will carry a lecturer's voice and closeup views of his demonstrations to hundreds of students simultaneously. TV and microfilm will grow in usefulness as library tools, enabling institutions to duplicate, in small space, the resources of distant libraries and specialized rare-book collections. Tape recordings will put music and drama, performed by masters, on every campus. Computers, already becoming almost commonplace, will be used for more and more study and research purposes.

This availability of resources unheard-of in their parents' day will enable undergraduates to embark on extensive programs of independent study. Under careful faculty guidance, independent study will equip students with research ability, problem-solving techniques, and bibliographic savvy which should be of immense value to them throughout their lives. Many of yesterday's college graduates still don't know how to work creatively in unfamiliar intellectual territory: to pinpoint a problem, formulate intelligent questions, use a library, map a research project. There will be far fewer gaps of this sort in the training of tomorrow's students.

**Great new stress on quality** will be found at all institutions. Impending explosive growth of the college population has put the spotlight, for years, on handling large numbers of students; this has worried educators who feared that quality might be lost in a national preoccupation with quantity. Big institutions, particularly those with "growth situations," are now putting emphasis on maintaining high academic standards—and even raising them—while handling high enrollments, too. Honors programs, opportunities for undergraduate research, insistence on creditable scholastic achievement are symptomatic of the concern for academic excellence.

It's important to realize that this emphasis on quality will be found not only in four-year colleges and universities, but in two-year institutions, also. "Each [type of institution] shall strive for excellence in its sphere," is how the California master plan for higher education puts it; the same idea is pervading higher education at all levels throughout the nation.

**WHERE'S THE FUN?**

**Extracurricular activity** has been undergoing subtle changes at colleges and universities for years and is likely
to continue doing so. Student apathy toward some activities—political clubs, for example—is lessening. Toward other activities—the light, the frothy—apathy appears to be growing. There is less interest in spectator sports, more interest in participant sports that will be playable for most of a lifetime. Student newspapers, observes the dean of students at a college on the Eastern seaboard, no longer rant about band uniforms, closing hours for fraternity parties, and the need for bigger pep rallies. Sororities are disappearing from the campuses of women’s colleges. “Fun festivals” are granted less time and importance by students; at one big midwestern university, for example, the events of May Week—formerly a five-day wingding involving floats, honorary-fraternity initiations, faculty-student baseball, and crowning of the May Queen—are now crammed into one half-day. In spite of the well-publicized antics of a relatively few roof-raisers (e.g., student rioters at several summer resorts last Labor Day, student revelers at Florida resorts during spring-vacation periods), a new seriousness is the keynote of most student activities.

“The faculty and administration are more resistant to these changes than the students are,” jokes the president of a women’s college in Pittsburgh. “The typical student congress wants to abolish the junior prom; the dean is the one who feels nostalgic about it: ‘That’s the one event Mrs. Jones and I looked forward to each year.’ ”

A QUEST FOR ETHICAL VALUES

EDUCATION, more and more educators are saying, “should be much more than the mere retention of subject matter.”

Here are three indications of how the thoughts of many educators are running:

“If [the student] enters college and pursues either an intellectual smörgåsbord, intellectual Teutonism, or the cash register,” says a midwestern educator, “his education will have advanced very little, if at all. The odds are quite good that he will simply have exchanged one form of barbarism for another . . . Certainly there is no incompatibility between being well-informed and being stupid; such a condition makes the student a danger to himself and society.”

Says another observer: “I prophesy that a more serious intention and mood will progressively characterize the campus . . . This means, most of all, commitment to the use of one’s learning in fruitful, creative, and noble ways.”

“The responsibility of the educated man,” says the provost of a state university in New England, “is that he make articulate to himself and to others what he is willing to bet his life on.”

Who will teach them?

Know the quality of the teaching that your children can look forward to, and you will know much about the effectiveness of the education they will receive. Teaching, tomorrow as in the past, is the heart of higher education.

It is no secret, by now, that college teaching has been on a plateau of crisis in the U.S. for some years. Much of the problem is traceable to money. Salaries paid to college teachers lagged far behind those paid elsewhere in jobs requiring similarly high talents. While real incomes, as well as dollar incomes, climbed for most other groups of Americans, the real incomes of college professors not merely stood still but dropped noticeably.

The financial pinch became so bad, for some teachers, that despite obvious devotion to their careers and obvious preference for this profession above all others, they had to leave for other jobs. Many bright young people, the sort who ordinarily would be attracted to teaching careers, took one look at the salary scales and decided to make their mark in another field.

Has the situation improved?

Will it be better when your children go to college?

Yes. At the moment, faculty salaries and fringe benefits (on the average) are rising. Since the rise started from an extremely disadvantageous level, however, no one is getting rich in the process. Indeed, on almost every campus the real income in every rank of the faculty is still considerably less than it once was. Nor have faculty salary scales, generally, caught up with the national scales in competitive areas such as business and government.

But the trend is encouraging. If it continues, the financial plight of teachers—and the serious threat to education which it has posed—should be substantially diminished by 1970.

None of this will happen automatically, of course. For evidence, check the appropriations for higher education made at your state legislature’s most recent session. If yours was like a number of recent legislatures, it “economized”—and professorial salaries suffered. The support which has enabled many colleges to correct the most glaring salary deficiencies must continue until the problem is fully solved. After that, it is essential to make sure that
the quality of our college teaching—a truly crucial element in fashioning the minds and attitudes of your children—is not jeopardized again by a failure to pay its practitioners adequately.

There are other angles to the question of attracting and retaining a good faculty besides money.

- The better the student body—the more challenging, the more lively its members—the more attractive is the job of teaching it. "Nothing is more certain to make teaching a dreadful task than the feeling that you are dealing with people who have no interest in what you are talking about," says an experienced professor at a small college in the Northwest.

- An appalling number of the students I have known were bright, tested high on their College Boards, and still lacked flair and drive and persistence," says another professor. "I have concluded that much of the difference between them and the students who are 'alive' must be traceable to their homes, their fathers, their mothers. Parents who themselves take the trouble to be interesting—and interested—seem to send us children who are interesting and interested."

- The better the library and laboratory facilities, the more likely is a college to be able to recruit and keep a good faculty. Even small colleges, devoted strictly to undergraduate studies, are finding ways to provide their faculty members with opportunities to do independent reading and research. They find it pays in many ways: the faculty teaches better, is more alert to changes in the subject matter, is less likely to leave for other fields.

- The better the public-opinion climate toward teachers in a community, the more likely is a faculty to be strong. Professors may grumble among themselves about all the invitations they receive to speak to women's clubs and alumni groups ("When am I supposed to find the time to check my lecture notes?")", but they take heart from the high regard for their profession which such invitations from the community represent.

- Part-time consultant jobs are an attraction to good faculty members. (Conversely, one of the principal check-points for many industries seeking new plant sites is, What faculty talent is nearby?) Such jobs provide teachers both with additional income and with enormously useful opportunities to base their classroom teachings on practical, current experience.

But colleges and universities must do more than hold on to their present good teachers and replace those who retire or resign. Over the next few years many institutions must add to their teaching staffs at a prodigious rate, in order to handle the vastly larger numbers of students who are already forming lines in the admissions office.

The ability to be a college teacher is not a skill that can be acquired overnight, or in a year or two. A Ph.D. degree takes at least four years to get, after one has earned his bachelor's degree. More often it takes six or seven years, and sometimes 10 to 15.

In every ten-year period since the turn of the century, as Bernard Berelson of Columbia University has pointed out, the production of doctorates in the U.S. has doubled. But only about 60 per cent of Ph.D.'s today go into academic life, compared with about 80 per cent at the turn of the century. And only 20 per cent wind up teaching undergraduates in liberal arts colleges.

Holders of lower degrees, therefore, will occupy many teaching positions on tomorrow's college faculties.

This is not necessarily bad. A teacher's ability is not always defined by the number of degrees he is entitled to
write after his name. Indeed, said the graduate dean of one great university several years ago, it is high time that "universities have the courage . . . to select men very largely on the quality of work they have done and soft-pedal this matter of degrees."

IN SUMMARY, salaries for teachers will be better, larger numbers of able young people will be attracted into the field (but their preparation will take time), and fewer able people will be lured away. In expanding their faculties, some colleges and universities will accept more holders of bachelor's and master's degrees than they have been accustomed to, but this may force them to focus attention on ability rather than to rely as unquestioningly as in the past on the magic of a doctor's degree.

Meanwhile, other developments provide grounds for cautious optimism about the effectiveness of the teaching your children will receive.

THE TV SCREEN
TELEVISION, not long ago found only in the lounges of dormitories and student unions, is now an accepted teaching tool on many campuses. Its use will grow. "To report on the use of television in teaching," says Arthur S. Adams, past president of the American Council on Education, "is like trying to catch a galloping horse."

For teaching closeup work in dentistry, surgery, and laboratory sciences, closed-circuit TV is unexcelled. The number of students who can gaze into a patient's gaping mouth while a teacher demonstrates how to fill a cavity is limited; when their place is taken by a TV camera and the students cluster around TV screens, scores can watch—and see more, too.

Television, at large schools, has the additional virtue of extending the effectiveness of a single teacher. Instead of giving the same lecture (replete with the same jokes) three times to students filling the campus's largest hall, a professor can now give it once—and be seen in as many auditoriums and classrooms as are needed to accommodate all registrants in his course. Both the professor and the jokes are fresher, as a result.

How effective is TV? Some carefully controlled studies show that students taught from the fluorescent screen do as well in some types of course (e.g., lectures) as those sitting in the teacher's presence, and sometimes better. But TV standardizes instruction to a degree that is not always desirable. And, reports Henry H. Cassirer of UNESCO, who has analyzed television teaching in the U.S., Canada, Great Britain, France, Italy, Russia, and Japan, students do not want to lose contact with their teachers. They want to be able to ask questions as instruction progresses. Mr. Cassirer found effective, on the other hand, the combination of a central TV lecturer with classroom instructors who prepare students for the lecture and then discuss it with them afterward.

TEACHING MACHINES
HOLDING GREAT PROMISE for the improvement of instruction at all levels of schooling, including college, are programs of learning presented through mechanical self-teaching devices, popularly called "teaching machines."

The most widely used machine, invented by Professor Frederick Skinner of Harvard, is a box-like device with three windows in its top. When the student turns a crank, an item of information, along with a question about it, appears in the lefthand window (A). The student writes his answer to the question on a paper strip exposed in another window (B). The student turns the crank again—and the correct answer appears at window A.

Simultaneously, this action moves the student's answer under a transparent shield covering window C, so that the student can see, but not change, what he has written. If the answer is correct, the student turns another crank, causing the tape to be notched; the machine will by-pass this item when the student goes through the series of questions again. Questions are arranged so that each item builds on previous information the machine has given.

Such self-teaching devices have these advantages:

- Each student can proceed at his own pace, whereas classroom lectures must be paced to the "average" student—too fast for some, too slow for others. "With a machine," comments a University of Rochester psychologist, "the brighter student could go ahead at a very fast pace."
- The machine makes examinations and testing a rewarding and learning experience, rather than a punishment. If his answer is correct, the student is rewarded with that knowledge instantly; this reinforces his memory of the right information. If the answer is incorrect, the machine provides the correct answer immediately. In large classes, no teacher can provide such frequent—and individual—rewards and immediate corrections.
- The machine smooths the ups and downs in the learn-
ing process by removing some external sources of anxieties, such as fear of falling behind.

If a student is having difficulty with a subject, the teacher can check back over his machine tapes and find the exact point at which the student began to go wrong. Correction of the difficulty can be made with precision, not gropingly as is usually necessary in machineless classes.

Not only do the machines give promise of accelerating the learning process; they introduce an individuality to learning which has previously been unknown. "Where television holds the danger of standardized instruction," said John W. Gardner, president of the Carnegie Corporation of New York, in a report to then-President Eisenhower, "the self-teaching device can individualize instruction in ways not now possible—and the student is always an active participant." Teaching machines are being tested, and used, on a number of college campuses and seem certain to figure prominently in the teaching of your children.

## Will they graduate?

Said an administrator at a university in the South not long ago (he was the director of admissions, no less, and he spoke not entirely in jest):

"I'm happy I went to college back when I did, instead of now. Today, the admissions office probably wouldn't let me in. If they did, I doubt that I'd last more than a semester or two."

Getting into college is a problem, nowadays. Staying there, once in, can be even more difficult.

Here are some of the principal reasons why many students fail to finish:

**Academic failure:** For one reason or another—not always connected with a lack of aptitude or potential scholastic ability—many students fail to make the grade. Low entrance requirements, permitting students to enter college without sufficient aptitude or previous preparation, also play a big part. In schools where only a high-school diploma is required for admission, drop-outs and failures during the first two years average (nationally) between 60 and 70 per cent. Normally selective admissions procedures usually cut this rate down to between 20 and 40 per cent. Where admissions are based on keen competition, the attrition rate is 10 per cent or less.

**Future outlook:** High schools are tightening their academic standards, insisting upon greater effort by students, and teaching the techniques of note-taking, effective studying, and library use. Such measures will inevitably better the chances of students when they reach college. Better testing and counseling programs should help, by guiding less-able students away from institutions where they'll be beyond their depth and into institutions better suited to their abilities and needs. Growing popular acceptance of the two-year college concept will also help, as will the adoption of increasingly selective admissions procedures by four-year colleges and universities.

Parents can help by encouraging activities designed to find the right academic spot for their children; by recognizing their children's strengths and limitations; by creating an atmosphere in which children will be encouraged to read, to study, to develop curiosity, to accept new ideas.

**Poor motivation:** Students drop out of college "not only because they lack ability but because they do not have the motivation for serious study," say persons who have studied the attrition problem. This aspect of students' failure to finish college is attracting attention from educators and administrators both in colleges and in secondary schools.

**Future outlook:** Extensive research is under way to determine whether motivation can be measured. The "Personal Values Inventory," developed by scholars at Colgate University, is one promising yardstick, providing information about a student's long-range persistence, personal self-control, and deliberateness (as opposed to rashness). Many colleges and universities are participating in the study, in an effort to establish the efficacy of the tests. Thus far, report the Colgate researchers, "the tests have successfully differentiated between over- and under-achievers in every college included in the sample."

Parents can help by their own attitudes toward scholastic achievement and by encouraging their children to
develop independence from adults. "This, coupled with the reflected image that a person acquires from his parents—an image relating to persistence and other traits and values—may have much to do with his orientation toward academic success," the Colgate investigators say.

**Money:** Most parents think they know the cost of sending a child to college. But, a recent survey shows, relatively few of them actually do. The average parent, the survey disclosed, underestimates college costs by roughly 40 per cent. In such a situation, parental savings for college purposes often run out quickly—and, unless the student can fill the gap with scholarship aid, a loan, or earnings from part-time employment, he drops out.

**FUTURE OUTLOOK:** A surprisingly high proportion of financial dropouts are children of middle-income, not low-income, families. If parents would inform themselves fully about current college costs—and reinforce themselves periodically, since prices tend to go up—a substantial part of this problem could be solved in the future by realistic family savings programs.

Other probabilities: growing federal and state (as well as private) scholarship programs; growing private and governmental loan programs.

**Jobs:** Some students, anxious to strike out on their own, are lured from college by jobs requiring little skill but offering attractive starting salaries. Many such students may have hesitated about going to college in the first place and drop out at the first opportunity.

**FUTURE OUTLOOK:** The lure of jobs will always tempt some students, but awareness of the value of completing college—for lifelong financial gain, if for no other reason—is increasing.

**Emotional problems:** Some students find themselves unable to adjust to college life and drop out as a result. Often such problems begin when a student chooses a college that’s "wrong" for him. It may accord him too much or too little freedom; its pace may be too swift for him, resulting in frustration, or too slow, resulting in boredom; it may be "too social" or "not social enough."

**FUTURE OUTLOOK:** With expanding and more skillful guidance counseling and psychological testing, more students can expect to be steered to the "right" college environment. This won’t entirely eliminate the emotional-maladjustment problem, but it should ease it substantially.

**Marriage:** Many students marry while still in college but fully expect to continue their education. A number do go on (sometimes wives withdraw from college to earn money to pay their husbands’ educational expenses). Others have children before graduating and must drop out of college in order to support their family.

**FUTURE OUTLOOK:** The trend toward early marriage shows no signs of abating. Large numbers of parents openly or tacitly encourage children to go steady and to marry at an early age. More and more colleges are providing living quarters for married undergraduate students. Some even have day-care facilities for students’ young children. Attitudes and customs in their "peer groups" will continue to influence young people on the question of marrying early; in some groups, it’s frowned upon; in others, it’s the thing to do.

**Colleges and Universities** are deeply interested in finding solutions to the attrition problem in all its aspects. Today, at many institutions, enrollment resembles a pyramid: the freshman class, at the bottom, is big; the sophomore class is smaller, the junior class still smaller, and the senior class a mere fraction of the freshman group. Such pyramids are wasteful, expensive, inefficient. They represent hundreds, sometimes thousands, of personal tragedies: young people who didn’t make it.

The goal of the colleges is to change the pyramid into a straight-sided figure, with as many people graduating as enter the freshman class. In the college of tomorrow, the sides will not yet have attained the perfect vertical, but—as a result of improved placement, admissions, and academic practices—they should slope considerably less than they do now.
What will college have done for them?

If your children are like about 33 per cent of today's college graduates, they will not end their formal education when they get their bachelor's degrees. On they'll go—to graduate school, to a professional school, or to an advanced technological institution.

There are good reasons for their continuing:

- In four years, nowadays, one can only begin to scratch the surface of the body of knowledge in his specialty. To teach, or to hold down a high-ranking job in industry or government, graduate study is becoming more and more useful and necessary.
- Automation, in addition to eliminating jobs in unskilled categories, will have an increasingly strong effect on persons holding jobs in middle management and middle technology. Competition for survival will be intense. Many students will decide that one way of competing advantageously is to take as much formal education beyond the baccalaureate as they can get.
- One way in which women can compete successfully with men for high-level positions is to be equipped with a graduate degree when they enter the job market.
- Students heading for school-teaching careers will increasingly be urged to concentrate on substantive studies in their undergraduate years and to take methodology courses in a postgraduate schooling period. The same will be true in many other fields.
- Shortages are developing in some professions, e.g., medicine. Intensive efforts will be made to woo more top undergraduates into professional schools, and opportunities in short-supplied professions will become increasingly attractive.
- "Skills," predicts a Presidential committee, "may become obsolete in our fast-moving industrial society. Sound education provides a basis for adjustment to constant and abrupt change—a base on which new skills may be built." The moral will not be lost on tomorrow's students.

In addition to having such practical motives, tomorrow's students will be influenced by a growing tendency to expose them to graduate-level work while they are still undergraduates. Independent study will give them a taste of the intellectual satisfaction to be derived from learning on their own. Graduate-style seminars, with their stimulating give-and-take of fact and opinion, will exert a strong appeal. As a result, for able students the distinction between undergraduate and graduate work will become blurred and meaningless. Instead of arbitrary insistence upon learning in two-year or four-year units, there will be more attention paid to the length of time a student requires—and desires—to immerse himself in the specialty that interests him.

And even with graduate or professional study, education is not likely to end for your children.

Administrators in the field of adult education—or, more accurately, "continuing education"—expect that within a decade the number of students under their wing will exceed the number of undergraduates in American colleges and universities.

"Continuing education," says Paul A. McGhee, dean of New York University's Division of General Education (where annually some 17,000 persons enroll in around 1,200 non-credit courses) "is primarily the education of the already educated." The more education you have, the more you are likely to want. Since more and more people will go to college, it follows that more and more people will seek knowledge throughout their lives.

We are, says adult-education leaders, departing from the old notion that one works to live. In this day of automation and urbanization, a new concept is emerging: "time," not "work," is the paramount factor in people's lives. Leisure takes on a new meaning: along with golf, boating,
and partying, it now includes study. And he who forsakes gardening for studying is less and less likely to be regarded as the neighborhood oddball.

Certain to vanish are the last vestiges of the stigma that has long attached to "night school." Although the concept of night school as a place for educating only the illiterate has changed, many who have studied at night—either for credit or for fun and intellectual stimulation—have felt out of step, somehow. But such views are obsolescent and soon will be obsolete.

Thus far, American colleges and universities—with notable exceptions—have not led the way in providing continuing education for their alumni. Most alumni have been forced to rely on local boards of education and other civic and social groups to provide lectures, classes, discussion groups. These have been inadequate, and institutions of higher education can be expected to assume unprecedented roles in the continuing-education field.

Alumni and alumnae are certain to demand that they take such leadership. Wrote Clarence B. Randall in The New York Times Magazine: "At institution after institution there has come into being an organized and articulate group of devoted graduates who earnestly believe...that the college still has much to offer them."

When colleges and universities respond on a large scale to the growing demand for continuing education, the variety of courses is likely to be enormous. Already, in institutions where continuing education is an accepted role, the range is from space technology to existentialism to funeral direction. (When the University of California offered non-credit courses in the first-named subject to engineers and physicists, the combined enrollment reached 4,643.) "From the world of astronauts, to the highest of ivory towers, to six feet under," is how one wag has described the phenomenon.

SOME OTHER LIKELY FEATURES of your children, after they are graduated from tomorrow's colleges:

They'll have considerably more political sophistication than did the average person who marched up to get a diploma in their parents' day. Political parties now have active student groups on many campuses and publish material beamed specifically at undergraduates. Student-government organizations are developing sophisticated procedures. Nonpartisan as well as partisan groups, operating on a national scale, are fanning student interest in current political affairs.

They'll have an international orientation that many of their parents lacked when they left the campuses. The presence of more foreign students in their classes, the emphasis on courses dealing with global affairs, the front pages of their daily newspapers will all contribute to this change. They will find their international outlook useful: a recent government report predicts that "25 years from now, one college graduate in four will find at least part of his career abroad in such places as Rio de Janeiro, Dakar, Beirut, Leopoldville, Sydney, Melbourne, or Toronto."

They'll have an awareness of unanswered questions, to an extent that their parents probably did not have. Principles that once were regarded (and taught) as incontrovertible fact are now regarded (and taught) as subject to constant alteration, thanks to the frequent toppling of long-held ideas in today's explosive sciences and technologies. Says one observer: "My student generation, if it looked at the world, didn't know it was 'loaded'. Today's student has no such ignorance."

They'll possess a broad-based liberal education, but in their jobs many of them are likely to specialize more narrowly than did their elders. "It is a rare bird today who knows all about contemporary physics and all about modern mathematics," said one of the world's most distinguished scientists not long ago, "and if he exists, I haven't found him. Because of the rapid growth of science it has become impossible for one man to master any large part of it; therefore, we have the necessity of specialization."

Your daughters are likely to be impatient with the prospect of devoting their lives solely to unskilled labor as housewives. Not only will more of tomorrow's women graduates embark upon careers when they receive their diplomas, but more of them will keep up their contacts with vocational interests even during their period of childrearing. And even before the children are grown, more of them will return to the working force, either as paid employees or as highly skilled volunteers.

DEPENDING UPON THEIR OWN OUTLOOK, parents of tomorrow's graduates will find some of the prospects good, some of them deplorable. In essence, however, the likely trends of tomorrow are only continuations of trends that are clearly established today, and moving inexorably.
Will you be able to afford a college education for your children? The tuition? The travel expense? The room rent? The board?

In addition:
Will you be able to pay considerably more than is written on the price-tags for these items?

The stark truth is that you—or somebody—must pay, if your children are to go to college and get an education as good as the education you received.

Here is where colleges and universities get their money:

From taxes paid to governments at all levels: city, state, and federal. Governments now appropriate an estimated $2.9 billion in support of higher education every year. By 1970 government support will have grown to roughly $4 billion.

From private gifts and grants. These now provide nearly $1 billion annually. By 1970 they must provide about $2.019 billion. Here is where this money is likely to come from:

<table>
<thead>
<tr>
<th>Source</th>
<th>Amount</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alumni</td>
<td>$505,000,000</td>
<td>25%</td>
</tr>
<tr>
<td>Non-alumni individuals</td>
<td>$505,000,000</td>
<td>25%</td>
</tr>
<tr>
<td>Business corporations</td>
<td>$505,000,000</td>
<td>25%</td>
</tr>
<tr>
<td>Foundations</td>
<td>$252,000,000</td>
<td>13%</td>
</tr>
<tr>
<td>Religious denominations</td>
<td>$242,000,000</td>
<td>12%</td>
</tr>
<tr>
<td><strong>Total voluntary support, 1970</strong></td>
<td><strong>$2,019,000,000</strong></td>
<td></td>
</tr>
</tbody>
</table>

From endowment earnings. These now provide around $210 million a year. By 1970 endowment will produce around $333 million a year.

From tuition and fees. These now provide around $1.2 billion (about 21 per cent of college and university funds). By 1970 they must produce about $2.1 billion (about 23.5 per cent of all funds).

From other sources. Miscellaneous income now provides around $410 million annually. By 1970 the figure is expected to be around $585 million.

These estimates, made by the independent Council for Financial Aid to Education*, are based on the “best available” estimates of the expected growth in enrollment in America’s colleges and universities: from slightly less than 4 million this year to about 6.4 million in the academic year 1969-70. The total income that the colleges and universities will require in 1970 to handle this enrollment will be on the order of $9 billion—compared with the $5.6 billion that they received and spent in 1959-60.

Who pays?

Virtually every source of funds, of course—however it is labeled—boils down to you. Some of the money, you pay directly: tuition, fees, gifts to the colleges and universities that you support. Other funds pass, in a sense, through channels—your church, the several levels of government to which you pay taxes, the business corporations with which you deal or in which you own stock. But, in the last analysis, individual persons are the source of them all.

Hence, if you wished to reduce your support of higher education, you could do so. Conversely (as is presumably the case with most enlightened parents and with most college alumni and alumnae), if you wished to increase it, you could do that, also—with your vote and your checkbook. As is clearly evident in the figures above, it is essential that you substantially increase both your direct and your indirect support of higher education between now and 1970, if tomorrow’s colleges and universities are to give your children the education that you would wish for them.

The money you’ll need

Since it requires long-range planning and long-range voluntary saving, for most families the most difficult part of financing their children’s education is paying the direct costs: tuition, fees, room, board, travel expenses.

These costs vary widely from institution to institution. At government-subsidized colleges and universities, for
example, tuition fees for state residents may be non-existent or quite low. At community colleges, located within commuting distance of their students’ homes, room and board expenses may consist only of what parents are already paying for housing and food. At independent (non-governmental) colleges and universities, the costs may be considerably higher.

In 1960–61, here is what the average male student spent at the average institution of higher education, including junior colleges, in each of the two categories (public and private):

<table>
<thead>
<tr>
<th></th>
<th>Public Institutions</th>
<th>Private Institutions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tuition</td>
<td>$179</td>
<td>$676</td>
</tr>
<tr>
<td>Board</td>
<td>383</td>
<td>404</td>
</tr>
<tr>
<td>Room</td>
<td>187</td>
<td>216</td>
</tr>
<tr>
<td>Total</td>
<td>$749</td>
<td>$1,296</td>
</tr>
</tbody>
</table>

These, of course, are “hard-core” costs only, representing only part of the expense. The average annual bill for an unmarried student is around $1,550. This conservative figure, provided by the Survey Research Center at the University of Michigan for the U.S. Office of Education, does not include such items as clothing. And, as we have attempted to stress by italicizing the word “average” wherever it appears, the bill can be considerably higher, as well as somewhat lower. At a private college for women (which is likely to get relatively little money from other sources and must therefore depend heavily upon tuition income) the hard-core costs alone may now run as high as $2,600 per year.

Every parent must remember that costs will inevitably rise, not fall, in the years ahead. In 1970, according to one estimate, the cost of four years at the average state university will be $5,800; at the average private college, $11,684.

**HOW TO AFFORD IT?**

Such sums represent a healthy part of most families’ resources. Hard-core costs alone equal, at public institutions, about 13 per cent of the average American family’s annual income; at private institutions, about 23 per cent of average annual income.

How do families afford it? How can you afford it?

Here is how the typical family pays the current average bill of $1,550 per year:

<table>
<thead>
<tr>
<th>Source</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Parents contribute</td>
<td>$950</td>
</tr>
<tr>
<td>Scholarships defray</td>
<td>130</td>
</tr>
<tr>
<td>The student earns</td>
<td>360</td>
</tr>
<tr>
<td>Other sources yield</td>
<td>110</td>
</tr>
</tbody>
</table>

Nearly half of all parents begin saving money for their children’s college education well before their children are ready to enroll. Fourteen per cent report that they borrow money to help meet college costs. Some 27 per cent take on extra work, to earn more money. One in five mothers does additional work in order to help out.

Financing the education of one’s children is obviously, for many families, a scramble—a piecing-together of many sources of funds.

Is such scrambling necessary? The question can be answered only on a family-by-family basis. But these generalizations do seem valid:

► Many parents *think* they are putting aside enough money to pay most of the costs of sending their children to college. But most parents seriously underestimate what these costs will be. The only solution: Keep posted, by checking college costs periodically. What was true of college costs yesterday (and even of the figures in this report, as nearly current as they are) is not necessarily true of college costs today. It will be even less true of college costs tomorrow.

► If they knew what college costs really were, and what they are likely to be in the years when their children are likely to enroll, many parents *could* save enough money. They would start saving earlier and more persistently. They would gear their family budgets to the need. They would revise their savings programs from time to time, as they obtained new information about cost changes.

► Many parents count on scholarships to pay their children’s way. For upper-middle-income families, this reliance can be disastrous. By far the greatest number of scholarships are now awarded on the basis of financial need, largely determined by level of family income. (Colleges and other scholarship sources are seriously concerned about the fact, indicated by several studies, that at least 100,000 of the country’s high-school graduates each year are unable to attend college, primarily for financial reasons.) Upper-middle-income families are among those most seriously affected by the sudden realization that they have failed to save enough for their children’s education.

► Loan programs make sense. Since going to college sometimes costs as much as buying a house (which most families finance through long-term borrowing), long-term
repayment of college costs, by students or their parents, strikes many people as highly logical.

Loans can be obtained from government and from private bankers. Just last spring, the most ambitious private loan program yet developed was put into operation: United Student Aid Funds, Inc., is the backer, with headquarters at 420 Lexington Avenue, New York 17, N.Y. It is raising sufficient capital to underwrite a reserve fund to endorse $500 million worth of long-term, low-interest bank loans to students. Affiliated state committees, established by citizen groups, will act as the direct contact agencies for students.

In the 1957–58 academic year, loans for educational purposes totaled only $115 million. Last year they totaled an estimated $430 million. By comparison, scholarships from all sources last year amounted to only $160 million.

**IS THE COST TOO HIGH?**

High as they seem, tuition rates are bargains, in this sense: They do not begin to pay the cost of providing a college education.

On the national average, colleges and universities must receive between three and four additional dollars for every one dollar that they collect from students, in order to provide their services. At public institutions, the ratio of non-tuition money to tuition money is greater than the average: the states typically spend more than $700 for every student enrolled.

Even the gross cost of higher education is low, when put in perspective. In terms of America's total production of goods and services, the proportion of the gross national product spent for higher education is only 1.3 per cent, according to government statistics.

To put salaries and physical plant on a sound footing, colleges must spend more money, in relation to the gross national product, than they have been spending in the past. Before they can spend it, they must get it. From where sources?

Using the current and the 1970 figures that were cited earlier, tuition will probably have to carry, on the average, about 2 per cent more of the share of total educational costs than it now carries. Governmental support, although increasing by about a billion dollars, will actually carry about 7 per cent less of the total cost than it now does. Endowment income's share will remain about the same as at present. Revenues in the category of "other sources" can be expected to decline by about .8 per cent, in terms of their share of the total load. Private gifts and grants—from alumni, non-alumni individuals, businesses and unions, philanthropic foundations, and religious denominations—must carry about 6 per cent more of the total cost in 1970, if higher education is not to founder.

Alumnae and alumni, to whom colleges and universities must look for an estimated 25 per cent ($505 million) of such gifts: please note.

**CAN COLLEGES BE MORE EFFICIENT?**

Industrial cost accountants—and, not infrequently, other business men—sometimes tear their hair over the "inefficiencies" they see in higher education. Physical facilities—classrooms, for example—are in use for only part of the 24-hour day, and sometimes they stand idle for three months in summertime. Teachers "work"—i.e., actually stand in the front of their classes—for only a fraction of industry's 40-hour week. (The hours devoted to preparation and research, without which a teacher would soon become a purveyor of dangerously outdated misinformation, don't show on formal teaching schedules and are thus sometimes overlooked by persons making a judgment in terms of business efficiency.) Some courses are given for only a handful of students. (What a waste of space and personnel, some cost analysts say.)

A few of these "inefficiencies" are capable of being curbed, at least partially. The use of physical facilities is being increased at some institutions through the provision of night lectures and lab courses. Summer schools and year-round schedules are raising the rate of plant utilization. But not all schools are so situated that they can avail themselves of even these economies.

The president of the Rochester (N.Y.) Chamber of Commerce observed not long ago:

"The heart of the matter is simply this: To a great extent, the very thing which is often referred to as the 'inefficient' or 'unbusinesslike' phase of a liberal arts college's operation is really but an accurate reflection of its true essential nature . . . [American business and industry] have to understand that much of liberal education which is urgently worth saving cannot be justified on a dollars-and-cents basis."

In short, although educators have as much of an obligation as anyone else to use money wisely, you just can't run a college like a railroad. Your children would be cheated, if anybody tried.
In sum:

When your children go to college, what will college be like? Their college will, in short, be ready for them. Its teaching staff will be competent and complete. Its courses will be good and, as you would wish them to be, demanding of the best talents that your children possess. Its physical facilities will surpass those you knew in your college years. The opportunities it will offer your children will be limitless.

If.

That is the important word.

Between now and 1970 (a date that the editors arbitrarily selected for most of their projections, although the date for your children may come sooner or it may come later), much must be done to build the strength of America's colleges and universities. For, between now and 1970, they will be carrying an increasingly heavy load in behalf of the nation.

They will need more money—considerably more than is now available to them—and they will need to obtain much of it from you.

They will need, as always, the understanding by thoughtful portions of the citizenry (particularly their own alumni and alumnae) of the subtleties, the sensitivity, the fine balances of freedom and responsibility without which the mechanism of higher education cannot function.

They will need, if they are to be of highest service to your children, the best aid which you are capable of giving as a parent: the preparation of your children to value things of the mind, to know the joy of meeting and overcoming obstacles, and to develop their own personal independence.

Your children are members of the most promising American generation. (Every new generation, properly, is so regarded.) To help them realize their promise is a job to which the colleges and universities are dedicated. It is their supreme function. It is the job to which you, as parent, are also dedicated. It is your supreme function.

With your efforts and the efforts of the college of tomorrow, your children's future can be brilliant. If.
Cagers Fourth in MAC Play

COACH DON BOVEN led the basketball team to a fine 13-11 record and a fourth place tie in the Mid-American Conference race (6-6). Included in the skein of victories was a thrilling and decisive 69-57 win over the University of Detroit on the Titans’ home court; Detroit was an at-large entry in the NCAA tourney.

Three heart-breaking one-point decisions went against the Broncos. Powerful Chicago Loyola, a traditional opponent and third place finisher in the NIT in New York, handled WMU an 87-86 overtime defeat; MAC champion Bowling Green took a 73-72 win over WMU with just two seconds left; and second place finisher Ohio University took a hardearned 82-81 win on its home court over the Broncos.

Sensation of the season and in Mid-American Conference play was Sophomore Manny Newsome who scored 578 points for a 24.08 average in 24 games and who became the Mid-American’s first sophomore to ever win the league scoring title.

Last year’s most-valuable player, Bob (Sticks) Bolton, was a mid-year graduate and competed in only the first sixteen games; he finished with a season average of 13.6 and completed his three varsity seasons with a career total of 734 rebounds and 1,029 points in seventy games, a per-game average of 14.7.

Only four other players will be missed by graduation when the team assembles next winter; forward-center Ron Emerick who became a rebound specialist while averaging 7.1 per game and sparkplug guard Tom Woodruff who finished with a 14.3 average; and subs Willie Thompson and Dick Kozik.

Sophomore forward Bill Street, former Detroit Northwestern High all star, turned in a tremendous year, too. He scored 365 points for a 15.2 average and was second team all-league choice; Street finished second in the loop in percentage of shots made for attempts (139 of 284 for .491).

Other lettermen returning include sophomores Mike Boedy and Jim Baugh.

Trackmen Run Well Indoors

COACH GEORGE DALES' thin-clads performed extremely well in the Midwest’s top indoor track carnivals during the winter. The WMU team dominated the Michigan AAU open and championship meets, the Denison University Relays and the third annual WMU Relays and won the unofficial team championship in the star-studded Michigan State University Relays. Individuals also showed fine performances in the Milwaukee Journal, Chicago Daily News, Mason-Dixon and Cleveland K. of C. Relays carnivals.

In the AAU open meet at Ann Arbor, high jumper Jim Oliphant; the distance medley relay team of Carl Reid, Jerry Bashaw, Dick Greene and Floyd Cook; and the mile relay team of Eglis Lode, Bashaw, Dennis Wright and Cook were first.

The WMU team showed fine balance, taking the MSU Relays with only one first place; high jumper Alonzo Littlejohn set a meet record with a jump of 6’ 7”. The team compiled enough seconds and thirds to total 53 points with MSU, Michigan, Notre Dame and thirteen other schools trailing! At the Mason-Dixon Relays in Louisville, two former Bronco runners won firsts; Jerry Ashmore in the two-mile in 9:03, and John Bork in the 830-run in 1:51.8, both running unattached. The team of Joel Johnson, Calvin Williams, Wright and Cook won the Blue-Gray University Mile Relay in a timing of 3:19.3. The same weekend as the Mason-Dixon, Dales sent a combination of varsity and frosh runners to the AAU championship meet at Ypsilanti; the WMU frosh contig-
ent won the team title with the shortened varsity group taking second.

In the CCC meet held at WMU, the Broncos dethroned Notre Dame and took the team crown with 89 points; Notre Dame was second with 56½; Drake third with 35 and four other teams trailed. Barham won the dash in 6.3; Johnson was first in the 300-dash; Littlejohn set new meet, varsity and fieldhouse marks with a high jump of 6' 8½"; Bashaw took the two mile. The mile relay team of Johnson, Williams, Wright and Cook was first, too.

At the Chicago Daily News meet, Littlejohn was first in high jump and the mile relay team was second to Missouri. At Milwaukee, Bashaw won the Hall of Fame mile in 4:14.9, topping the Midwest's best distance runners. At Cleveland, the mile relay team topped the best, including Villanova's fine team.

At Denison, WMU retired the distance medley trophy for the second time, winning it six out of seven years, and also retired the mile relay trophy, both for permanent possession. Barham won the low hurdles and Littlejohn tied first in high jump, and the WMU sprint medley relay team was first.

In the WMU Relays, again the Broncos showed depth and balance. The 880 relay team of Johnson, Barham, Wright and Cook tied the American record of 1:29.4. The four-mile relay team of Bashaw, Hancock, Dick Mach and Greene came within two seconds of the American record timing of 1960's WMU team in the same relays. The distance medley team broke the fieldhouse record with a 10:15.5 timing. Littlejohn set a meet record in high jump, Barham won low hurdles with a new meet mark; and the mile relay team was first.

Swimmers Finish 2nd

Bronco swimmers finished second in the Mid-American championships, highest since starting the sport six seasons ago! The dual record was excellent, too, including a win over Notre Dame.

In the MAC meet, favored Bowling Green regained the title it lost the previous year to Ohio, scoring 107 points; WMU had 81. At the end of the first day, WMU held the team lead, but relinquished it the next afternoon. Coach Ed Gabel's individual champions were in the 1500-meter freestyle (Beau Toll swam the distance in 19:05.4, breaking the MAC mark by 23 seconds!); the 200-yard breaststroke (Joel Gaff, 2:26.4); and the 400-yard freestyle relay (Charles Lott, Dave Syrett, Bill Butler and Dave Boehlke, 3:33).

During the season WMU tankers set two conference marks (above) and seven school records. In the preliminaries of the MAC meet, Gaff set a 100-yard breaststroke MAC mark of 1:05.4; he was disqualified when he did the same time in the finals, however.

Wrestlers in Fourth Spot

Coach Roy Wietz guided his Bronco grappers to a fine 6-4 dual season and a fourth place finish in the Mid-American championships with 30 points; Toledo was the team champion with 76.

Sophomore Carl Latora of Kalamazoo was runnerup in the 130-pound division and Derrill Coonfield, Buchanan senior, was runnerup in the 147-pound class. Heavyweight Gene Demick was fourth in heavyweight and sophomore Dick Rohlf's was fourth in 167.

Latora was brilliant all season, posting an overall mark of 11-2; he was 130-pound champion at the annual 4-I tourney at Cleveland, Ohio.

Spring Omission-Two Families

In our Spring issue, we failed to mention two omissions from the fall listing of second generation freshmen. They were Elen E. Parrish, daughter of Claude L. Smith '37 and Virginia Parrish Smith '50, of Wayland; and Marshall Wolfe, son of Lester Wolfe, '32, Detroit.

Mrs. Parker

(Continued from Page 6)

subjects concerned with home and family living. Having these courses in only one or two grades is not enough. We must prepare our children for family life. It is the sensible thing to do, for all children have roots in their family. These roots in turn become integrated parts of their lives. Indeed, the foundation of learning is in the home, and it should be about the home as well.

Today Mrs. James C. Parker is many things. Above all, she has realized her childhood ambition: she is the proud grandmother of five grandchildren. She is at last a "president" (honorary, that is) of her pet P.T.A.—the Dickinson School parent-teacher group. She is also an honorary member of Delta Kappa Gamma, an international honor sorority for women teachers. And, she holds an honorary Doctor of Laws degree from Western Michigan University, an event that "touched" her very deeply.

Though no longer president of the National Congress of Parents and Teachers, Mrs. Parker is kept busy with her hobbies that she shares with her husband: photography, collecting and refinishing antiques. She is also kept busy lecturing and showing the movies she took while on tour in South America. But, no matter what she does or where she goes, Mrs. James C. Parker will always be remembered for her selfless work in the P.T.A.—helping to "grant youth's heritage."

Controversy & Order

(Continued from Inside Cover)

zons who support university activities.

Antoine de Saint Exupery, the French aviator and novelist, once said: "The man who sinks his pickaxes into the ground wants that stroke to mean something." At Western all of us, faculty, students and administrators, are figuratively driving our pickaxes into the ground in a variety of ways. For example a committee of the Faculty Senate has made a very
significant report relative to the type and character of calendar that will best meet our educational needs and provide maximum utilization of physical plant for year-around operation. Other faculty members have been working with closed-circuit television. Still other faculty members have been working to develop an expanded Honors Program. Just completed is a master plan for additional plantings and landscaping on both the east and west campuses. Preliminary and tentative plans are now before the faculty relative to overall campus development and land usage. This is a program of planning which is absolutely necessary if we are to move in an orderly way to absorb additional enrollment (but in no case to exceed 20,000 students). In these areas, as well as in many others, there is very interesting and important ferment. Naturally, we hope that these efforts will develop to the point of making our strokes “mean something.”

In all of these activities, it is most important that we keep our educational goals constantly before us lest we become enamored of brick and mortar, and tend to forget the all-important programs which our buildings are designed to serve.

James W Miller

The Right Campsite

Campground Atlas of the United States and Canada, a publication for tent and trailer campers, has just been published in its second and revised edition by the Alpine Geographical Press, Champaign, Ill.

Harry A. Raup, instructor in geography at Western Michigan University, is the co-author of the publication, the first edition of which came out while he was a graduate student at the University of Illinois in the spring of 1960.

“With the increasing interest in family camping and the growing number of campgrounds, it was found necessary to revise the atlas so that campers will have the most up-to-date information,” says Raup. Working with him on the book is James A. Blor, cartographer for the geography department of the University of Illinois.

The new edition lists over 7,000 campgrounds in the 50 states and 10 Canadian provinces, each being plotted on maps and described in the text. The text gives directions for reaching each campground, capacity, facilities for camping, recreational activities, acreage, elevation and points of interest. The national parks, monuments, recreation areas and forests are described, and a list of state and provincial agencies providing free travel information is provided.

Faculty Publications

A complete listing of all publications of the Western Michigan University faculty from 1957 through 1961 has just been published in a new booklet by the School of Graduate Studies.

Covering some 50 pages, the book is the first such compilation of work by the faculty and covers a wide range of material, including the writings of 159 persons who have had published 48 books, 457 articles in periodicals and 111 contributions to bulletins and monographs.

The Teaching Machine

(Continued from Page 3)

a division of U.S. Industries. TUTORTEXTS are of the “scrambled book” type. The TUTORTEXTS published thus far seem to be of the home study type . . . “how to” books on bridge and chess . . . popular mathematics . . . etiquette . . . etc.

At the present time there are more programed materials in text form than in the hardware or teaching machine form.

Guidelines for Programed Learning

While teaching machines and other self-instructional devices are being used experimentally in many school systems, authorities say there is a mountain of misunderstanding even in educational circles as to what these devices actually are, how they work, and what can be expected from them.

To clear up some of the misunderstandings and to provide guidelines for those concerned with the newer teaching tools, a joint statement has been issued by a committee of representatives of three major organizations, the American Educational Research Association, the American Psychological Association, and the NEA Department of Audio-Visual Instruction: “The use of self-instructional programed learning materials in teaching machines and similar devices represents a potential contribution of great importance to American education. But this contribution can be realized best only if users have information with which to evaluate self-instructional materials. Accordingly, the following interim guidelines have been prepared.

1) Teaching machines do not, in themselves, teach. Rather, the teaching is done by a program of instructional materials presented by the teaching machine. Any evaluation of a teaching machine thus requires an assessment of the availability and quality of programs for each type of machine, as well as its mechanical dependability.

2) A variety of programed materials is becoming available, but not all programs will fit all machines. Thus only those programs compatible with a particular machine can be considered as available for use with it.

3) In evaluating the specific content which a self-instructional program purports to teach, the program can be examined to determine what the student is required to do and whether this reflects the kind of competence which the educator wishes to achieve. Like other educational materials, programs labeled with the name of a particular subject matter vary widely with respect to content and instructional objectives.

4) Just any set of question-and-answer material does not constitute
a self-instructional program. One type of self-instructional material proceeds by small steps requiring frequent responses. These steps can be examined to see if they embody a careful, logical progression of the subject matter. Items in such a program are designed so that the student will respond to the critical aspects of each item or will perform the important operation which that item was meant to teach. Furthermore such programs generally provide a wide range of examples illustrating each principle or concept.

5) Self-instructional materials are designed to adapt to individual differences by allowing each student to proceed at his own rate. Some types of self-instructional programs further adapt by branching to alternate material. For this purpose, questions are designed to diagnose the student's needs and to provide alternate material suited to these needs. The material is designed so that the choice of answer to a particular question determines which items will be presented next. Incorrect answers take the student to items containing information designed to correct the error before continuing through the sequence.

6) An important feature of almost all self-instructional materials is the record of the student's responses which provides a basis for revising the program. The prospective purchaser should ask about the extent to which revision has been based on student response and how the preliminary tryout was conducted.

7) The effectiveness of a self-instructional program can be assessed by finding out what students actually learn and remember from the program. The prospective purchaser should find out whether such data are available and for what kinds of students and under what conditions the data were obtained.

8) Active experimentation with self-instructional materials and devices in school systems is to be encouraged prior to large-scale adoption.

At this time it appears more than likely that teaching machines and programmed learning are newcomers to the field of education which is here to stay. It seems to this writer that programmed learning is a new "tool" for the teacher which will take its place alongside other aids in the classroom such as the motion picture projector, the tape recorder, the chalkboard, the map, the globe, etc. Like the other aids for the teacher, it will be only as effective as the teacher makes it.

IN MEMORIAM

DR. CLAYTON J. ETTINGER
Dr. Ettinger, 83, a member of the WMU sociology faculty from 1929 to 1932, died Jan. 14 in Detroit, where he was founder and president of Great Lakes College. He was the author of one book, The Problems of Crime. Dr. Ettinger leaves his wife and one son, John.

DR. PAUL HICKEY
Dr. Hickey, 88, WMU historian from 1910 to 1919, died March 24 in Darien, Conn. From 1921 to 1944 he headed the Detroit Institute of Technology and Detroit College of Law. He also spent a year each with the Upjohn Co., and Ford Motor Co. Dr. Hickey had lived in Darien since retiring. One daughter and a granddaughter survive.

MILTON OLANDER
Mr. Olander was head football coach in 1922 and 1923, and died recently in Toledo, O. His 1922 team was unbeaten, untied and unscored upon. For the last 25 years Olander had been director of industrial relations for the Owens-Illinois Glass Co. He last visited the campus in 1957 at the 25th reunion of the 1922 grid team.

HELEN GREGG PIERCE '15 died February 26 in Kalamazoo, where she had been a onetime teacher. She leaves two sons, seven grandchildren and two sisters.

HILDA BAUSERMAN FRAYS '18 died April 7 in Battle Creek, having once taught in St. Joseph County. She leaves her husband, a daughter Marjorie Vliek '47, Scotts; one grandson, four sisters and a brother.

NEA REAMS '18 AB '27 died April 8 in Kalamazoo, where she had been a teacher for 41 years until her retirement.

KITTIE WALKING KOBSRANGO '19 died March 3 at her Richland home. She leaves one daughter, four grandchildren, three great-grandchildren, her mother and a brother.

MARGARET HAMILTON MILLARD '19 died March 10 in Detroit. She had lived in Gladwin since 1950, moving there from Detroit. She leaves her husband, a son, one daughter and four grandchildren.

DOROTHY GREENHALGH SCHRIER '21 died February 23 in Kalamazoo after a three-year illness. She had taught in South Bend, Ind., and Kalamazoo, and had been active in business with her husband, Harold, who survives.

MATTIE OHLER REEDER '23 died Feb. 24 in Grand Rapids at the age of 96. She had been a teacher for many years.

MISS DORIS A. STOCKFORD '26 AB '38 died March 11 in Kalamazoo, where she had taught at the Parkwood School. She leaves a brother and two sisters.

MARY DAVIS ANYWAY '27 died March 12 at Fremont, where she had lived since 1942. She leaves her husband, a daughter, two sons and nine grandchildren.

ELIZABETH A. FELGAL '28 died March 27 in Kalamazoo, where she was a secretary for the Shakespeare Co. She was a member of Delta chapter, Alpha Beta Epsilon, and leaves her mother, two sisters and four brothers.

ESTHER M. TEMPLE '29 BS '41 died February 28 at Grand Rapids. She had taught all of her adult life at Southwest Christian School, there. Her mother, a sister and a brother survive.

JACK A. WEAVER, a student between 1932 and 1937, died March 16 at his Cedar Springs home, having retired a year ago as a Michigan state conservation officer because of ill health. He leaves his wife and two sons.

DOROTHY BRUNDAGE ARCHER, a student between 1933 to 1936, died April 5 in Kalamazoo. She leaves her husband, Hugh, an associate professor of education; two sons, two sisters and two brothers.

CECIL H. MYERS '34 died March 11 in Pontiac, teaching at Waterford for the last 15 years. He leaves his wife, three children, his mother, two sisters and a brother.

MILLARD L. PRICHARD '35 died March 11 in Grand Rapids. He was director of the children's division, Michigan Department of Social Welfare, Muskegon, having been with the department for 15 years. His master's degree was from the University of Chicago. Mr. Prichard leaves his wife, two sons, four sisters and two brothers.

ELDON B. BEARDSLEE '41, superintendent of schools at Morrice, died Feb. 20. He had also taught at Belding and Marine. He leaves his wife, three children, three brothers and a sister.

MRS. BERTHA SHORT '44 died March 9 at her Flint home, having taught for 40 years. She leaves two daughters, a son, and four grandchildren.

JETTE F. LAWRENCE, a student in 1948-49, died April 5 of auto accident injuries. She had retired from teaching in 1950, and was a noted historian of the Climax area, where she lived. Mrs. Lawrence leaves a stepdaughter.


Class Notes

'20-'29 Russell Doney '20 AB '26 of Kalamazoo will retire in June as director of testing and guidance after 40 years. Don R. Pears '23 is a candidate for representative in Congress from the fourth district of Michigan. The district includes Berrien, Cass, St. Joseph, Van Buren, Barry, and Allegan counties. Pears is completing his 12th year as a member of the Michigan House and his fourth year as Speaker. Howard M. Sundblad '26 is the new principal of the Hull School at St. Joseph. He has been at the Hull School for seven years. Edith D. Blohm '28 is teaching second grade at the Lansing Northwestern School. Harriet Frostic '29 AB '58 is librarian at Howell High School.

'31 Mr. and Mrs. J. Edgar Bigelow (Cecile Yinger) have been appointed ambassadors in former President Eisenhower's “People to People” program. He is principal at Howe School in Dearborn, while his wife is librarian at Ten Eyck School and the Dearborn Public Schools Professional Library. They will leave soon on a European tour for the purpose of educational research in areas of teacher training, teacher orientation and preparation.

'32 Ernest V. Blohm of Lansing had an article “Crowds Crowding Public Open Spaces” published in Parks & Recreation magazine. He is executive secretary of the Michigan Inter-Agency Council for Recreation.

'33 Ann T. Galbraith AB '38 is on the faculty at Central Michigan University as an associate professor. Albert C. Johnson has been appointed superintendent of schools at Benton Harbor.

'34 Jack E. Morgan has been named to take charge of the financial operations of the Republican State Central Committee office in Lansing. He will fill the newly created post of Office and Budgetary Control Manager.

Cospé '35 New English Head at Purdue University

Dr. Russell Cospé '33 will become head of the English department at Purdue University July 1, having taught there since 1946. He first taught at East Detroit, then for nine years at Eastern Michigan University. At Purdue, he has been chairman of the developmental reading program since 1950. From 1954 to 1958 he was chairman of the committee on reading improvement for the North Central Association.

'35 Jack Foster of Arlington, Va., has been elected chairman of the Southern Regional Conference of the Public Personnel Association. The Southern Region will have its annual meeting in Houston, Tex., in May. Mrs. Roberta Haas Varner recently represented WMU at the inauguration of Joseph J. Copeland as president of Maryville College, Maryville, Tenn.

'36 Dr. Gardner Ackley has requested relief as head of the department of economics at the University of Michigan in order to return to teaching and research, effective June 30.

'37 Charles A. Schoenknuecht recently represented WMU at the inauguration of President T. W. VanArsdale at Bradley University.

'39 Lee Mallison, former Calhoun County probate judge, is now trust officer for the Michigan National Bank, Battle Creek. Harrison Fisher has been named head of the business administration department of the American School, a Chicago-based correspondence school.

'40 Carrell Adler is chairman of the academic unit at Holland’s new high school.

'41 Dr. Max VanDenBerg of Kalamazoo has been named “Optimist of the Year” by the Kalamazoo Optimist Club. M. L. Irwin has been promoted to assistant promotion planning manager at the Battle Creek Post division of General Foods Corp.

Ware Makes Move to New Hampshire Firm

Harris O. Ware, a student between 1934 and 1937, has been elected vice president and technical manager of the Brown Company, a paper manufacturing firm at Berlin, N.H. From 1956 to 1962 he was technical manager of the Beveridge Paper Co., Indianapolis, and before that was with Hercules Powder Co.
Voller '37 President on New York State Campus

Ellwood A. Voller '37 is president of Roberts Wesleyan College, Chili, N.Y. Teaching first at North Branch, he moved to Davison following World War II service as a Navy officer, and in 1952 was appointed an assistant dean of students at Michigan State University, remaining there until his presidential appointment in 1958. He earned the doctor of education degree at Michigan State University.

Smith '38 Milwaukee Boy Scout Leader

Charles L. Smith '38 has been named director of field service for the Milwaukee County Council, Boy Scouts of America. He has been a professional Scouter in Bloomington and Logansport, Ind., St. Joseph, Mich., before moving to Milwaukee. He and his wife (Verald Nash '39) have four children from 9 to 20 years of age.

Thomas G. Mitchell has been nominated as a candidate for director of the Buchanan Federal Savings and Loan association. He is presently with the Electro-Voice, Inc., as production superintendent. Stela Koski of Farmington, is a counselor at the North Farmington High School. Jean R. Simpson is a deaconess in charge of Christian education at Dearborn Woods Presbyterian Church.

William C. Barrett MA '53 has been named superintendent at Coloma. He had been superintendent at Fowler. Kenneth Gordon has been appointed to the newly created position of engineering manager of the Marshall division of Eaton Manufacturing Co., in Marshall.

Weddings: Virginia Andrews and Dwight Brink BS '53 MA '57 at Winona Lake, Ind.


Jack Lyle has been promoted to vice president of the First National Bank and Trust Co. in Kalamazoo. Dorothea Barnes is teaching commercial subjects at St. Johns High School. Capt. Arvilla L. Dyer has been promoted to head the occupational therapy department at Army Hospital, Fort Campbell, Ky. She is also on the list of those to be promoted to Major.

Robert W. Wright received a promotion in the Saginaw Bay division of Dow Chemical Company. He was named controller. Richard Olson has been appointed principal of the Rochester Central Junior High School. Clifford M. Keddie recently represented WMU at the inauguration of the new president at the University of Houston. He is with the computer division of Control Data Corp., in Houston.

Eugene W. Smith MA '53 has been appointed manager of Automobile Club of Michigan's Big Rapids division. He resides in Grand Rapids. Thomas O. Cummings, advertising manager of the L. W. Robinson Co., in Battle Creek has been advanced to the post of sales promotion manager.

Maurice Sumney of Kalamazoo participated in the graduate seminar of the Lile Insurance Marketing Institute Jan. 29. Feb. 2 at Purdue University. John H. Shirley, vice president of the Kalamazoo Savings and Loan Association has been elected first vice president, fifth district National Retail Credit Association. The fifth district includes Michigan, Ohio, Illinois, Indiana, Wisconsin and Ontario.

Arnold C. Thomson is the new director of advertising for Dodge passenger cars at Farmdale. Walter S. Lowell received an Ed. D. degree in education at Michigan State University. Fred M. G. Lehman has been appointed as San Francisco zone manager of American Motors Sales Corporation. The zone covers Rambler dealers in Northern California, Hawaii and most of Nevada. He had been Milwaukee zone manager for the past three years.

Jack E. Kerr, assistant city attorney, has been named by the city council to the Saginaw City Board of Appeals on Zoning. He is associated with the law firm of Kerr & Strobel, 421 Court, which was established in June.

Mr. and Mrs. Bill Boss '51 (Eileen Schermer AB '56 MA '59) have a son Christopher Bradley born Aug. 11. Al Williams, Kalamazoo, has been elected to the board of directors of the Professional Photographers of Michigan.

Robert H. Ray has accepted a position with Phillips Petroleum Co., Atomic Energy Division at Idaho Falls, Idaho.

Abdul B. Naecem is manager of Shalimar International and president of the new corporation in New York. He was formerly with the Pakistan International Airlines and Air-India International.

Norma Brink and her husband recently played a husband-wife role at the Grand Rapids Civic Theater in "Five Finger Exercise."

Nancy Christner is a second grade teacher at Gallimore School in Plymouth. Dr. Duane Allen is a member of the Hanover Medical Center in Jackson. He is doing his surgical residence at Detroit Receiving Hospital and plans to...
open his medical office at Hanover sometime in July . . . Charles F. Kretlowski was director of the March of Dimes campaign in Berrien County. He is vice-president of the Southwest Michigan Beer and Wine Wholesalers Association . . . Russell L. Bearss has been appointed manufacturing manager of the Chrysler Trenton Engine Plant . . . Dick Johnson is merchandise controller in the women's hosiery department of Sears, Roebuck & Co., in Chicago . . . Technical Sergeant Frederick M. Marriott recently arrived in Japan with a Pacific Air Force unit. He is a USAF utilities repair controller.

'51 Charles J. Westra MA '58 has resigned as principal of the Fairplain Junior High School . . . Charles R. Calhoun is vice principal of schools in San Diego, Calif. . . . Don Sudnik, now a photographer for General Motors Corp., was a spectator and took several of the outstanding pictures of the fatal accident involving the Wallenda aerialists at the Shrine circus in Detroit late in January . . . Gladys Fay is teaching reading and English at Belding . . . Barbara Renshous has created the illustrations for a new book, “An Educator Substitutes for Parents,” just published by the Association for Childhood Education International.

'52 Arthur H. Hupp has been appointed director of technical operations for the Watervliet Paper Co., and will continue to head its coating development program . . . Anthony B. Baldwin, was named “Man of the Year” by the Euclid, O. Jaycees. He is director of finance for Euclid . . . Harry Edwardsen is the new superintendent of schools as Shelby. He was principal at Lakeland, Calif. . . . Maxine M. June recently left the WMU library staff to give full time to Jerri-Mac Greenhouse & Gardens in Kalamazoo. This was started as a hobby three years ago . . . John E. Wahler has been promoted from plant manager to works manager in charge of operations at United Nuclear Corp., Montville, Conn. . . . Dr. George C. Clark has been promoted to research group leader in Continental Oil Company's research and development department at Ponca City, Okla.

'53 Army Capt. James G. Richardson is participating in Operation Great Shell, a bi-lateral air-ground mobility exercise involving Army and Air Force units of the U.S. and the Republic of the Philippines near Clark Air Base in the Philippines. He is commander of the 509th Quartermaster Company, which is regularly stationed on Okinawa . . . Carl A. Schulz, Jr., of 1111 W. Canfield, Detroit, is an instructor in math at the University of Detroit. Carl Bjerregaard has accepted the band directorship with the Muskegon Public schools after nine years as band instructor at Montague.

'54 Chester Kocsis MA has been offered a new three-year contract as principal of the Manchester High School. He has been principal for the past seven years at Gobles . . . Bruce Davenport has been appointed assistant trust officer of the Detroit Bank and Trust Co. . . . Edwin Woolley is underwriting supervisor in the Michigan office for The State Farm Insurance Co. He joined the auto company's training program in 1954 . . . Walter J. Bell has been promoted to assistant cashier at the First National Bank and Trust Co. in Kalamazoo. Capt. Thomas K. Lewis recently completed the 34-week officer career course at The Transportation School, Fort Eustis, Va. . . . Jerry Alley, a University of Michigan photographer, has earned membership in the Explorer's Club of New York for his photographic work on major expeditions of exploration around the world. He is also a photo consultant for the American Institute of Exploration . . . WEDDINGS: Minda R. Sherzer BS '56 and Albert Y. Sing in Detroit . . . Florence Johnson and Archie Lytle III March 11 in Highland Park.

'55 Hector C. Grant MA has been appointed principal of the new Paul K. Cousino Senior High School in Warren . . . Harold Beattie, associated with William Roney Co., has been approved as a registered representative by the New York Stock Exchange . . . Daniel R. Smith and John G. Wattles have been promoted to trust officers by the First National Bank and Trust Co., in Kalamazoo . . . Army Capt. Robert Ebbole recently arrived in Korea and is now assigned to the 7th Logistical Command . . . Paul D. Smythe is manager of the Oak Park office of Chamberlain Real Estate Co. . . . Daniel L. Beggs has been appointed librarian of the Leo Huff Junior High School in Lincoln Park . . . David T. Rose was the coach of the Far East tournament champion basketball team from the Yamato Dependent's High School. Opposing him in the tournament final was the John High School team, coached by WMU’s Jim Hedberg. Hedberg's team won the regular season title . . . Al Nagel received from the Rawlings sporting goods firm a silver glove trophy for his outstanding defensive play for Victoria-Ardenmore in the Texas League last summer. He finished with a .995 fielding average.

'56 William R. Bernhard has been appointed to Studebaker-Packard Corporation's publicity staff at South Bend . . . Donald L. Button and Charles G. Yoder have been promoted by the First National Bank and Trust Co. in Kalamazoo. Button is an assistant vice president and Yoder is assistant manager at the Paw Paw branch . . . Jay E. Robinson, assistant professor of music at Fairmont State College in W. Va., represented WMU in April at the inauguration of Paul W. Miller as president of West Virginia University . . . Capt. John G. Bugenske recently participated in the most extensive tactical helicopter airlift to have been conducted by the U.S. Army in Europe . . . Curt Thies received his Ph.D. degree in chemistry at Michigan State University . . . Ed Foster MA '61 and Don Schmidt of Loganport, Ind., have been ranked No. 1 in doubles in National Public Courts tennis. Foster is No. 9 in singles . . . WEDDINGS: Ann L. Wiltsie and Don Bonevich MA March 9 in Kalamazoo.

Helen Kosa Beretz '40
Now a Hoosier Teacher

Mrs. Arpad Beretz (Helen Kosa '40) is now living in Hammond, Ind., while her husband serves the United Church of Christ of East Chicago. She has come back to the Midwest after living for some years in Wallingford, Conn., and is teaching this year in the Highland high school at Hammond, bringing to its students their first opportunity to study German language. The Beretzs’ have two daughters, and Mrs. Beretz is a life member of the WMU Alumni Association.
Morse '52 Has Vital Spot in Space Technology

Robert E. Morse '52 has joined the technical staff of the Space Technology Laboratories, Inc., Redondo Beach, California. He began aircraft work with the Northrop Corp., in California, moved into its missile program, and is now working with advanced electromechanical space systems. He has also found time to serve as president of the Los Angeles Alumni Club. Morse and his wife (Norine Richards '52) and their two daughters live at 5322 Whitefox Dr., Rolling Hills, California.

'57 William Haselow has been appointed technical superintendent of the Wisconsin Rapids, Wis., division of Consolidated Water Power and Paper Co. . . . John T. Roberts is a senior claim representative in the East Central office of the State Farm Insurance Co. . . . Phillip C. Buist has passed the certified public accountant examination in Michigan . . . First Lt. Schuyler T. Barnum MA '61 has completed the basic officer orientation course at the Army Signal Training Center, Fort Gordon, Ga. . . . Roberta Lauach and her husband have a daughter Janice Marie born March 1, 1961 . . . Mr. and Mrs. Joe Morrison (Julia DeWitt) have a daughter Susan Marie born March 26, 1961 . . . Mrs. and Mrs. Charles Morsink (Catherine Voelker BS '59) have a son Andrew Charles born July 20, 1961 . . . Peter Klawson, Kalamazoo, has been elected to the board of directors of the Professional Photographers of Michigan . . . Joseph Novot MA recently received his physical education director's degree at Indiana University. He is a teacher at the Liv Norrix High School in Kalamazoo . . . Mr. and Mrs. Henry L. Rohs (Joan Friedli '58) are now living in North Tonawanda, N. Y., where he is working as a process problem engineer with the Kimberly-Clark Corp. . . . Army 1st Lt. Vilmar Kukains recently completed the four-week basic procurement operations course at The Quartermaster School, Fort Lee, Va. . . . Vincent A. LaPointe, Jr., recently returned from a year of teaching and travel in Europe. He is now teaching at Bryan Junior High, Elmhurst, Ill. . . . Don Bruggeman is a candidate for representative to the Ohio General Assembly (State Legislature) in the Ohio primary election in May. He is teaching American history and government in the Lakewood school system . . . Arthur Ellinger MA has been appointed principal at Mendon. He had been football coach at Vicksburg . . . Jerome F. Gilles, Lansing, has been named to direct the Michigan Trucking Association's safety activities . . . Jack A. Egberts is an accountant for the Brunswick Corp., in Kalamazoo . . . Edwin R. Widmer has completed the 40-week officer fixed wing aviator course at The Aviation School, Fort Rucker, Ala. . . . John Daley has been appointed assistant director of the Kalamazoo Community Chest. He is director of the Hege Community Services, Inc., in Kalamazoo . . . Mr. and Mrs. Robert Bennett (Christine Parkhurst) have a son Robert John born April 4, 1961 . . . Lorraine Donovan BS '60 and her husband Richard have a son, Richard II, born April 8, 1961 . . . Evelyn Johnson and her husband Carl have a daughter Kristine Gerda born May 17, 1961 . . . First Lt. Edward W. Wheeler, Jr. has been cited for his outstanding service while assigned to the Defense General Supply Center's Defense Supply Agency in Richmond, Va. He received congratulations and a certificate of achievement from the Commander, during recent ceremonies at Fort Lee, Va. . . . Mr. and Mrs. James Doe (Ellen Neis) have a son David James born March 10. They live at 878 Woodside Dr., Muskegon . . . Robert VanDerWeele has accepted the position of Fleet Truck Manager for the J. I. Case Co., Racine, Wis. . . . Mrs. Alan F. Quick (Doris Ramsey) is teaching fourth grade at Condon elementary school in Eugene, Ore. Alan is doing graduate work in education at The University of Oregon . . . Charles W. Jackson is working for Lybrand, Ross Bros. & Montgomery, public accountants, in Detroit . . . Mr. and Mrs. James H. Henesy '59 (Joan Focht) are now living in Whittier, Calif. He is working for Ford in Los Angeles, while she is substitute teaching in the Los Angeles schools . . . George E. Lewis, Jr., has been awarded a $4,000 grant to study for a master's degree in social work at the University of Michigan by the scholarship committee of the Kalamazoo Community Services Council. Lewis has been a visiting teacher in the Kalamazoo School system during the past two years . . . Duane C. Brickner is now a circuit merchandising instructor for the Wisconsin schools of vocational and adult education at Eau Claire, Marshfield, Superior, and Wisconsin Rapids. He lives at 540 West Grand Ave., Eau Claire, Wis. . . . Nancy Curnow received a master's degree in education at Wayne State University. She is a teacher in the Port Huron schools . . . Weddings: Judy A. Zachary and Gordon K. Noack in Benton Harbor . . . Arlene M. Jensen and Donald Bissen in Muskegon . . . Eleanor Mouw and David P. Vander-Wege in Holland . . . Alice J. Sawyer and Richard A. Perry March 24 in Birmingham.

'59 Mr. and Mrs. Kenneth Woodring '61 (Kay Stoddard) have a son born Aug. 14, 1961. Ken is working for the Cass County public schools . . . Douglas E. Stiteler is attending the 1961-62 National Defense Education Act Guidance Institute at the University of North Dakota, Grand Forks . . . Phyllis Mintz spent the last summer with the Holiday Plaioys, a summer stock company at Manawa, Wis., and is now teaching kindergarten in the Milwaukee public schools . . . Clement Nicoloff is employed with Aetna Casualty and Surety Company in Detroit. He married Evelyn Stovnoff Oct. 15, 1961 . . . Fred A. Brisky is teaching industrial arts at Kabasak Secondary schools at Okinawa. He recently accepted a transfer to Misawa, located in Northern Japan for 1962-63 . . . Norma J. Armstrong MA of Muskegon has been placed under general appointment for work aboard as an educator and missionary for the Church of the Nazarene. Mr. and Mrs. Frank Nemethy (Marilyn Kelly) have a son, Alexander Howard, born June 16, 1961 . . . William L. Brooks has been chosen by the University of Detroit Omicron Kappa Upsilon faculty members to become a member in their honor society.
to add flavor to the gala affair is to be investigated, along with plenty of picnic tables and chairs to handle the hoped-for 1000-plus crowd of happy homecomers.

An important part of the barbecue idea concerns the previous lack of a central area to which most returning alumni could be attracted and, consequently, provide for a larger share of visiting with long-lost classmates and campus friends.

The Council also agreed that the Association's Homecoming dance should be open to members only and that in lieu of a membership in the Association, dance-goers would be requested to help defray the cost of the dance through the purchase of a $1 admittance ticket.

Whereas the Homecoming committee's recommendations had an immediate effect on an already existing program, other agenda items were of a long-range nature and, perhaps, had a broader effect on the future of the Council and Association.

The motion made by the Board of Directors that there be established a "Western Michigan University Alumni Foundation" was discussed and approved, the existing committee to be ready to report in the fall, anticipating an early-1963 kickoff campaign.

Club reports were also on the agenda, including the news that the Northwest Suburban Detroit Alumni Club would soon embark on a precedent-setting survey aimed at building renewed interest in and diversification of the club.

Alpha Beta Epsilon reported all was in readiness for its annual on-campus convention to be held on May 19 in the University Student Center, at which time Barbara Bird will succeed Zola Volpel as President of the 18-chapter sorority. Miss Bird, in turn, will relinquish her duties to Enid Smith of Marshall.

The committee for the presentation of Peter Pan in Grand Rapids had not completed a detailed analysis of its accomplishment, but it should be noted that the five alumni groups responsible for the production netted nearly $1200 in scholarship funds while providing a thoroughly enjoyable experience for the WMU Drama department. It was the general consensus that if the theater works with alumni clubs again, it would be a direct result of the red-carpet treatment given the theater by the Grand Rapids committees.

The Chicago club reported several attempts currently underway to strengthen the main club by organizing suburban groups. The report also listed several types of meetings which could hold interest for other stymied clubs.

The nominations committee presented its slate of 10 candidates and 4 alternates which was approved by the Council. Five vacancies will exist on the Board after the June meeting: Harold Crocker and Lee Gabe are completing their regular terms, while Thomas Coyne and Don Hayes are completing one-year terms as presidential appointees.

The Council approved the resolution that the Bronco Booster organization be authorized representation on the Board of Directors of the WMU Alumni Association. Either the President or Chairman of the Boosters is to fill the vacancy at the option of the Boosters.

Clifford Cole was appointed a committee of one to investigate an income-producing offer made to the Association by the Popular Magazine Service Company of Indiana.

The Club Handbook, through the efforts of Thomas Coyne and Donald Burge, seemed to be well on its way to manuscript form.

VISITING FIREMAN . . .

KALAMAZOO—Surprising the campus by dropping in on a business trip was Alexander "Sandy" McLeod '41 (center), Los Angeles board member and charter member of the Southern California alumni club. Sandy took in the Alumni-Varsity football game and the Western-Marshall baseball contest with Al Pugno (left), past president of the Alumni Association, and Ray Penwick, Alumni Director; he also lunched with a group of local alumni and took a quick tour of the expanding WMU campus.

COUNCIL MEETS

Homecoming and the proposed WMU Alumni Foundation were the main topics of the final Alumni Council meeting of the 61-62 school year. The meeting was held in the Davis Room of the Walwood Union Building on April 28.

Sixteen club representatives (plus three who attended by proxy vote) heard and passed on resolutions calling for a stepped-up Homecoming weekend, scheduled this year for October 20.

Among the items discussed, the most immediate was reported by the Homecoming committee, which recommended that the annual alumni lancheon be replaced by an easy-on-the-pocketbook, informal barbecue to be served from 10 a.m. until game time on Homecoming Saturday. The possibility of a rented tent

Harold C. Bradfield Dies

The WMU Alumni Association mourns the loss of Harold C. Bradfield (Life and Phys. Ed. certificates '26, B.S. '27), of Berrien Springs, who died of a stroke May 3, 1962, in Niles. Mr. Bradfield had been a member of the Board of Directors of the Association since its re-organization in 1956. Both Mr. Bradfield and the university had come to benefit from his advice and counsel during his board term.

Harold was well known in Southwestern Michigan as a coach and leader of youth in Niles and Buchanan. Following his coaching experiences, he had worked for the Yale and Towne Company and for the Clark Equipment Company. He is survived by his wife, Maxine, and one son, Harold Jr., of Eau Gallie, Florida.
Names, Names . . .

What’s in a Name?

Without making too much of a trite reference to Mr. Shakespeare’s rhetorical question, will you permit us to say that there is quite a lot in a name?—especially when the name involved is the name of an active member of the W.M.U. Alumni Association!

We thank the good Mr. Shakespeare for helping us arrive at the point we want to make:

The next issue of this magazine will contain a special insert section—the First Annual Report of the W.M.U. Alumni Association!

The report is an attempt of your Alumni Association to bring some needed recognition, though small, to those alumni and alumnae who have given aid to the Association during the past 12-month period. The report will be simple in content: a listing of active members by class year (addresses, for reasons of privacy, will be omitted).

All types of membership holders will be listed: supporting, family, contributing, and life.

Equally interesting to all active members will be the Progress Report of Association President Virgil Westdale—his first since assuming the presidency in the fall of 1961.

Be sure you get your copy of the next magazine. Be doubly sure you have your correct address and class year! (Is the figure shown behind your name the correct class year for you? Did this magazine have to be forwarded to you by the Post Office or someone else?) If there is any question about your class year or name place information, please notify your Alumni Office before the First Annual Report goes to the printer!