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THE TECHNE

Life without Labor is a Crime, Labor without Art
and the Amenities of Life is Brutality. —RUSKIN.

Discover Talent.

THE sum of knowledge of nature and of man is increased directly by the intellectual labor of a few exceptionally gifted men and women. Probably not one in a hundred of the pupils who enter our schools could, even with the most advantageous training, discover new truth—add to the world's intellectual capital. But the work of the one in a hundred, or in a hundred thousand, means an enrichment of the world, a higher percentage of satisfied wants, for ever after. To discover such a one, to prepare him to do the work and to give him the opportunity to do it, is an important aim of education—as important, perhaps, as the diffusion of knowledge among a thousand others.—*Thorndike.*



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PITTSBURG, KANSAS

THE TECHNE

PUBLISHED BY THE STATE MANUAL TRAINING NORMAL, PITTSBURG, KANSAS.
A COLLEGE FOR TEACHERS.

VOL. 3

APRIL, 1920

No. 3

STAFF.

PRES. W. A. BRANDENBURG, Editor in Chief.

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ERNEST BENNETT.

O'DELLA NATION.

O. B. BADGER.

EDGAR MENDENHALL.

The purposes of this magazine are: To set forth the distinctive work of the State Manual Training Normal; to publish papers that will be of interest to its readers; to assist teachers to keep in touch with the development in their subjects; to foster a spirit of loyalty that will effect united action among the alumni and former students in promoting the best interests of the institution.

Alumni, teachers and friends of the Normal are invited to send communications on such subjects as fall within the scope of the magazine to the committee in charge.

Address communications to The Editor, State Manual Training Normal, Pittsburg, Kan.

Issued every month except August and September.

Sent free to all alumni and students of the State Manual Training Normal and to teachers, school officials and citizens on request.

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The editors will welcome suggestions from TECHNE readers. Their desire is to make this little magazine helpful to teachers. Tell us how we can make it of greater service to you. Tell us what YOU want.

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The Testing of Intelligence.

FRANK DEERWESTER, Principal of the Senior High School, S. M. T. N.

"Psychological measurement," of necessity, overlaps "educational measurement" more or less, because the measurement of educational attainments will always be, in part, the measurement of psychological ability. A distinction between the two, however, is usually made by applying the term "psychological measurement" to the original power of mind, the native intelligence, in contrast with the acquired ability that comes directly from education. This distinction is more or less arbitrary and, in fact, more or less impossible in an exact sense, yet it is both possible and logical to a sufficient degree to make the effort worth while.

Psychological measurement has come as a response to various demands arising out of the complex of modern social life; from the custodian of children or adults of less than normal intelligence, in order that he may gauge somewhat the possibilities of his charges; from juvenile courts and social workers having to do with moral delinquency, in which want of intelligence may be a factor; from teachers of supposedly "normal" children, who recognize that educational methods and tasks must be adjusted to individual differences of intelligence; from directors of large masses of men, as in the recent recruiting of our national army for service overseas; from those who have the responsibility of selecting persons specially fitted for important tasks, such as aviation and various forms of industrial and technical service; and from other sources not necessary here to mention.

For the measurement of native mental ability two general types of tests have been developed—the "individual" and the "group" test, the former to be given to each person separately, the latter for groups of any size up to several hundred individuals at a time. Tests for either individual or group may range from a single item, as the matching of two pieces of wood or finding one's way out of a maze, to a lengthy and more or less complex series involving a total of several hundred items, and from a few seconds to an hour or more for the giving. Many of the simpler tests are sooner or later incorporated in one of the extended series, possibly to displace some less satisfactory item therein. In this way, for example, various changes have been made in the so-called "Binet" series.

The Binet tests, named from their chief formulator, Dr. Binet of Paris, were developed in connection with his work among children of defective intelligence some twenty-five years ago. The tests were made known in this country largely through the work of Dr. H. H. Goddard, of the New Jersey Training School for Defectives. Dr. Goddard, as a result of thousands of applications of the tests to both normal and sub-normal children, made a few alterations, but in the main accepted the tests as originally proposed. Numerous other American psychologists have investigated the efficiency of the tests with varying results. Two of the most noted of these later studies have been those of Dr. Terman, at Stanford, and Dr. Yerkes, at Harvard. Each has published a thorough-

going revision—that of the former known as “The Stanford Revision,” that of the latter called “The Point Scale.” The Yerkes Point Scale gets its name from the fact that a hundred test items or “points” are provided, and the number successfully passed expresses the person’s intelligence on a percentage basis. The Stanford Revision retains, with modifications, the original Binet plan of expressing “mental age” in years and months.

The first of the group tests to be thoroughly standardized and extensively used were those employed by the Psychological Service of the United States Army during the recent war. In the six months from May to November, 1918, a million and a half of recruits took these examinations, and with the two hundred thousand more who had been tested during the period of the development of the system, made a total of approximately one and three-quarters millions of men thus examined. These army tests were of two types—one for “literates,” the other for “illiterates,” the test of literacy being the ability to get the thought of simple English. The value of these tests as a factor in the big task of making and placing the host of men called to the colors in the last year of the war cannot be denied by any one at all conversant with the facts. Since the ban against publicity of military matters has been lifted, the army tests have been given to the students in a number of leading high schools and colleges. One interesting modification and adaptation of these tests has been their use of entrance to certain institutions of higher learning. Columbia University has made such an examination alternative with the ordinary examination for college entrance. The University of Pittsburg, on the other hand, requires the psychological examination of all matriculates.

Since the close of the war Dr. A. S. Otis, of Stanford, has completed and published a set of ten tests for the group measurement of the intelligence of children in grades and high schools. Five of these ten are very similar to the army tests, and the other five are tests more or less commonly used by psychologists. All have been adapted to the situation for which they are planned. “Norms,” or standards of attainment, have been computed for various ages in years and months, from age three to eighteen years. Thus, a score of 30 points means a mental age of three years, 68 points means eleven years and two months, and 120 points means a mental age of eighteen years.

Another series, consisting of five tests, supposedly adapted to children of junior high-school age, especially, has been recently published by Professors Freeman and Rugg, of Chicago University. Three of the five, the tests on “Opposites,” “Analogies,” and “Proverbs,” are similar to the Otis tests. Since the Otis tests require about seventy-five minutes for giving, cost twice as much for material, and require a double amount of work in grading papers, it may properly be asked whether the additional expenditure of time, energy, and money is warranted. To this end the two tests were recently given to a sixth-grade group and an eighth-grade group in the State Manual Training Normal School, and a comparative checking made with the best available estimates of the abilities of the children. The results seem to indicate that the more

varied and extensive testing by the Otis plan is worth the while. In some instances, in the cases of the strongest and the weakest members of the groups, the Otis and the Rugg results agreed closely with each other and with the teacher's estimates. Thus the three agreed as to the pupil who should be ranked first, the one to be ranked second, the ones to be ranked lowest and next to lowest, but there was some disagreement as to the sixth place, tenth place, and the like.

Some of the interesting and suggestive revelations of these examinations are set forth in the following table of results, as shown by the giving of the Otis tests to a sixth-grade group. In this table the seventeen individuals are indicated by the letters A, B, C, etc. "Chronological age" means the actual age of the children in years, extra months being ignored. "Usual school grade" means the grade which the normal child of that age is expected to be in. "Mental age" means the degree of mental ability shown by the individual as compared with normal human ability. Thus the first line of the table may be interpreted: "Child A is between nine and ten years old, would ordinarily be in the fourth instead of the sixth grade, and shows the intelligence of an average person of sixteen."

TABLE—OTIS INTELLIGENCE TESTS, SIXTH-GRADE PUPILS.

Pupils.	Chronological age, months ignored.	Usual school grade.	Mental age in years.
A	9	4	16
B	11	6	14
C	12	7	13
D	13	8	13
E	13	8	13
F	11	6	12
G	13	8	12
H	12	7	12
I	13	8	12
J	11	6	12
K	12	7	12
L	11	6	11
M	12	7	11
N	11	6	11
O	13	8	10
P	14	9	9
Q	11	6	9

From this table it can be seen that these seventeen pupils range in age from nine to fourteen years. Since they are in sixth grade, their normal expectancy would be from eleven to twelve years of age. The table shows, therefore, one pupil two full years above this standard, and, on the other hand, there are four pupils one year below, five two years below, and one three years below the standard for their ages, a total of ten pupils out of seventeen whom we have a right to expect higher up than sixth grade. The fact that children who attain the age of six in the months from November to June often fail to enter until the following September, makes it possible that some of the twelve-year-old pupils are only in their sixth year of schooling, hence properly in sixth grade. Leaving out all twelve-year-olds, there yet remain six pupils, a third of the group, apparently two or three years over-age for their grade.

Looking now to the column of "mental ages," we observe that five of the seventeen show a native intelligence of more than twelve years, while three test below eleven, which reveals some of the difficulties the teacher has to face. To have to handle children having a mental age of nine in class with those having intelligence of fourteen or sixteen is a problem. And had not the grading of this group been more flexible than that which prevails in the average public school, the divergence would have been greater still. Assuming that the results of the test are reasonably accurate, the question of what is the wisest disposition to make of a nine-year-old child with a sixteen-year-old mind is a serious problem.

Readjusting Values.

PROF. D. M. BOWEN, Head of the Department of Education, S. M. T. N.

One of the most important and most significant results of the political and social upheaval through which we have passed, and are passing, will be a saner and juster estimate of human values, and a more equitable recognition of human service. Just as the permanent result of the American and French Revolution was the birth of our modern democracy—a step forward in the elevation of the common man—and just as the permanent result of the Civil War was an enlarged vision of the common brotherhood of man, so the important achievement and ultimate result of the intense struggle in which humanity is now engaged will be another step forward in eradicating the artificial inequalities among men—a further leveling process by the giant engine of democracy.

What the masses of men are now asking, either consciously or unconsciously, is not so much more wages, shorter hours and better living conditions, but that society shall recognize, acknowledge and justly reward the services they render, and grant them a larger participation in the fruits of that democracy they fought to preserve. Reconstruction that looks only to the reestablishment of pre-war conditions and pre-war attitudes is doomed to failure. What is needed is a rational readjustment of human values, and a more righteous distribution of rewards and compensation in accordance with the service individuals and groups render society. Among no other class of workers is this readjustment so necessary, so vital to the welfare of the republic, as in the profession of teaching. It is the one calling in life in which the ultimate aim and end of efforts is the improvement of human society. The prime object of education is to preserve and make secure the achievements of the present generation for the benefit of the next. The work of the educator makes possible the enjoyment, the satisfaction, the pleasure, the happiness that flows from other vocations in life. The last few years has demonstrated how valueless is property, money and business, unless sustained by an intelligent and virtuous citizenry which it is the mission of education to maintain.

Education and educators are not only the benefactors of the race in time of peace, but the chief reliance of civilization in time of war, as recent events have fully proven. But why repeat the unchallenged and

undisputed statement of the superior service of the teacher to society? Simply because, at this critical time, the morale of the teaching force of the nation is being undermined and weakened by the indifference and inaction of those who ought to know the consequences of the breaking down of the schools of the nation. Teachers, in common with other classes of people, are taking stock of present social conditions. The services and contributions of the individual to society are being weighed and measured. The psychology of the hour invites this social introspection. As a result of this reflection, the teacher has become conscious of the fact that the individual who works for his own interests is enjoying all the benefits, pleasures and luxuries of life, while he is living upon the husks, although he is rendering the greater service to society.

Fifteen years ago two brothers, John and Will, near the same age, started out upon life's career. John chose the teaching profession, Will chose business. Both were industrious, both of about the same ability, and both uniformly successful. Both have families. The past year John's salary was \$3,000; Will's income, \$11,000. John owns no home. Will owns a fine home, two or three farms, automobiles, etc. Is it any wonder John is thinking these days?

Ten years ago four young men entered the same community. Two of them were college professors, with college education. Two of them were clerks in a store, with high-school education. All of them were considered successful. The same society rewarded them for their service. The two college professors received \$6,000 the past year, the two business men's income was in excess of \$25,000. The two college men live in homes not yet paid for, the necessities of life are never out of mind these days. The other two own their own business, live in well-furnished homes, own stock in a half dozen corporations, ride in Cadillac cars, and indulge their families in all the pleasures of life. They now enjoy the distinction of being "taxpayers," and chide the board of education for increasing the salary of teachers.

A few weeks ago the board of education raised the salary of their superintendent of schools, or rather adjusted the salary to keep pace with the H. C. L., for *raise* is the wrong word. The editor in the town, whose income was three times that of the superintendent, derived from the same community, roundly abused the board for extravagance and misuse of "taxpayers'" money. Is it pertinent or timely to inquire, which of those two rendered the greater service to the community?

It is such cold, stubborn facts as the above that is breaking the spirit of teachers, driving the most vigorous of them out of the profession, and menacing the standard of our future civilization. The possibilities and opportunities of the coming generation are at stake. The present educational crisis is not, or should not be, the concern of teachers alone. Thinking, aggressive citizens of all classes must *act* in this situation. Emotional attitudes will no longer suffice. Society must pay in the end—why not pay now?

The Science-Spirit in a Democracy.

[The philosophy of the excerpt, "The Science-Spirit in a Democracy," from the writings of PROF. L. H. BAILEY, of Cornell University, is so fundamental, and the spirit that it breathes is so needful, the editors have given it space in this number of THE TECHNE. It can be re-read frequently with profit.]

To find the fact and to know the truth—this is the purpose of the quest of science. If the truth can be applied to the arts of life, the gain is good; but the truth is valuable on its own account, and for the range and reach that it imparts to the mind. As the truth is of itself, as it knows no person and no condition, so is its application impartial and so is its effect on the mind uncompromising.

One never makes the quest with success unless the mind is open at the start. The quest is to find out, always to discover, never to prove a thesis or to demonstrate an assumed position. Herein does this mind differ from that of the advocate who must merely prove a case, or from that of the preacher who must support a dogma, or from that of the politician who must defend a party.

Science cannot be dogmatic, if it is science; it cannot be partisan, if its judgment is that of the open mind, seeking. Our policies are largely controlled by the partisan, and by the publicist who endeavors to support his argument. Science is not argumentative—the whole statement of its case is merely the statement of the fact and its significance. There is no taking of sides to truth. The prejudiced mind—the mind that pre-judges—is never the scientific mind. Therefore, does the science-spirit introduce a modern element into society; and in the end it will reshape our political philosophy.

Science is never partial to any set of facts. It weighs all facts, giving to each its due place and import. It is easy enough to show that the moon exerts powerful influence on the work of the planter, if we choose certain coincidents and ignore all the exceptions. This is the political method—to remember the facts that support our own argument and forget those that have an opposite or a different significance. Most persons in all the daily relations of life see only one side of a situation, which means that they do not see at all, but only follow a chosen and blind course, consciously or subconsciously.

If science is not dogmatic or partial, so is it not disputatious. A few weeks ago a great meeting was held to discuss a difficult public situation, involving disease. There were violent opinions and strong parties for and against. One man read a paper giving the facts, without argument. The facts, not the arguments or the heated debates, finally determined the procedure. No species of argument can influence a microorganism.

So accustomed are we to partisan opinion and to subjective "beliefs" that plain statements of facts may fail to hold our attention. They do not have sufficient color, or power, of entertainment, to elicit applause, and we say that the reciter of them is impractical, which is the heaviest epithet that we can hurl at a man in a commercial epoch.

Never have we arrived at mastery, and never do we discover the greatest intellectual delights until plain facts, ungarnished, standing for them-

selves, are poetry and painting and inspiration. Nothing is so beautiful or abides so long as the truths of facts; and keen is the joy when we partake in the discovery of them. To read with relish a clear statement of the plants that grow in a field, of the birds that breed in a wood, of the rocks that lie on a hillside, is a rare and choice satisfaction, and one that we love to share with every friend.

Science is free to all men so far as they are able to understand. It is no discriminator of persons. It eliminates no man because of his position or his name or relations, but only as he lacks ability to comprehend or desire to partake. It shuts no doors, but it opens many.

Science also is unselfish. To be selfish with the results of one's scientific labors is as much to be reprehended as to be selfish with time or money or counsel, and even more so. To act grudgingly with one's facts or discoveries, to hoard and withhold, to stand primarily for "credit," is not the science-spirit.

It is adaptable to all persons, fitting their needs. While the method of science is one in its essentials, and while facts are indisputable, nevertheless the mental processes are personal and phenomena are variable. In the quest and the application of science there is none of the impersonality and invariability of the machine that makes a product or secures a result with constant uniformity, varying not, and by which so many of our people are now deprived of originality; and thus does the science-spirit contribute highly to personal education.

In the truth there is no secrecy, no deals, no combinations, no conspiracy, no favor, no courtesy to high opinion. Whether there will be an eclipse, does not depend on discussion nor even on agreements of any number of persons. Whether a species migrates in twos or in tens, does not depend on what somebody "believes" or on authority. Whether the summer is wet or the winter is cold, does not depend on the will of the king or the kaiser.

And if in the truth there is no secrecy, so the science-method is not a secret method. It is not a subject for underhand dealing. Its very essence is of openness, straightforwardness, integrity. It always makes for understanding. If there were no intrigues of diplomacy there would be no international wars.

Every discovery of new truth, however near or remote, is an example in intellectual poise. It is a contribution to self-mastery, a reason for independence. The greater the number of discoveries, the wider their range, the more widespread their publication, the greater will be the independent thinking of the people; and finally, the intellectual attitude will express itself in political practice.

There are no parties in science. There may be difference of opinion when we do not yet know the truth, and variations in interpretation, and personal antagonisms between those whose science does not reach to the heart. A merchant is not partisan in his shop, nor a manufacturer in his factory, nor a farmer on his farm, nor a teacher in his classroom; but at the polls these persons think they are not citizens unless they have opinions which are correct because they hold them. This long-continued

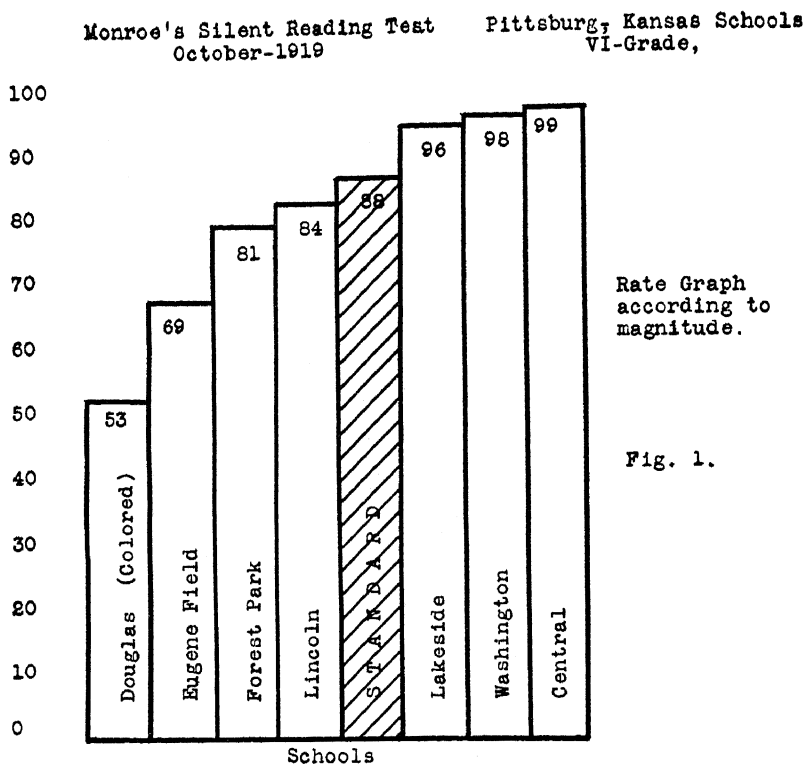
practice, too, often solidifies opinion and makes it impregnable to evidence; we come at length to substitute habit for reason.

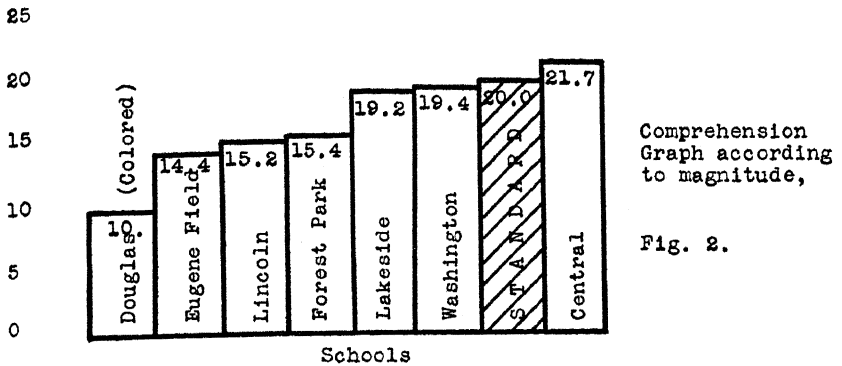
The science-spirit removes at once the fear of truth and the fear of dogma and the fear of nature. Ignorance is always bondage, and it is the truth that shall make you free.—*Prof. L. H. Bailey.*

Investigation of Reading in the Sixth Grade of the Pittsburg, Kan., Schools.

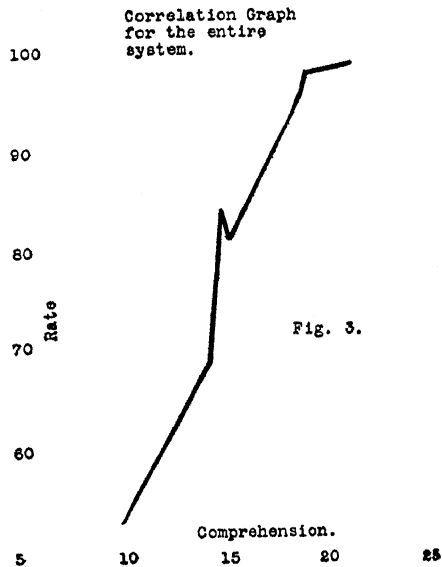
Under the direction of Prof. Edgar Mendenhall, the class in Educational Measurements undertook the project of measuring the ability in reading of the sixth-grade pupils of the Pittsburg, Kan., public schools, by the use of Monroe's Silent Reading Test. The class was divided into groups, each group being assigned a certain school in which to give the test and make tabulations of results for their particular buildings. This material was assembled, and tabulated results applying to the entire system of city schools were constructed. Graphical representation of these results are shown herewith.

Figure 1 is a graph of the rate score of the different schools, each bar





Monroe's Silent Reading Test.
Pittsburg, Kansas Schools,
October, 1919--6th Grade,



representing a school and the figure at the end of the bar being the exact score of that school. Only two schools are seriously low in rate, Douglas and Eugene Field. From figure 2, a graph of comprehension scores, it may be seen that these two schools are also the lowest in comprehension. In the Eugene Field school district, many families move in and out, and this may in a measure account for the low score of the school. Douglas is a school for colored children. There was no Sixth A class at the time of the test, which would make some little difference in the score.

It is significant that the arrangement of the schools according to magnitude of score in both rate and comprehension is almost identical. There seems to be some relationship between the two scores, the ones higher in rate being also relatively higher in comprehension.

Figure 3 shows this relationship, or correlation, graphically represented. The horizontal axis represents comprehension and the vertical axis represents rate. By finding a point on the horizontal axis representing the comprehension score, then finding a point on the vertical axis

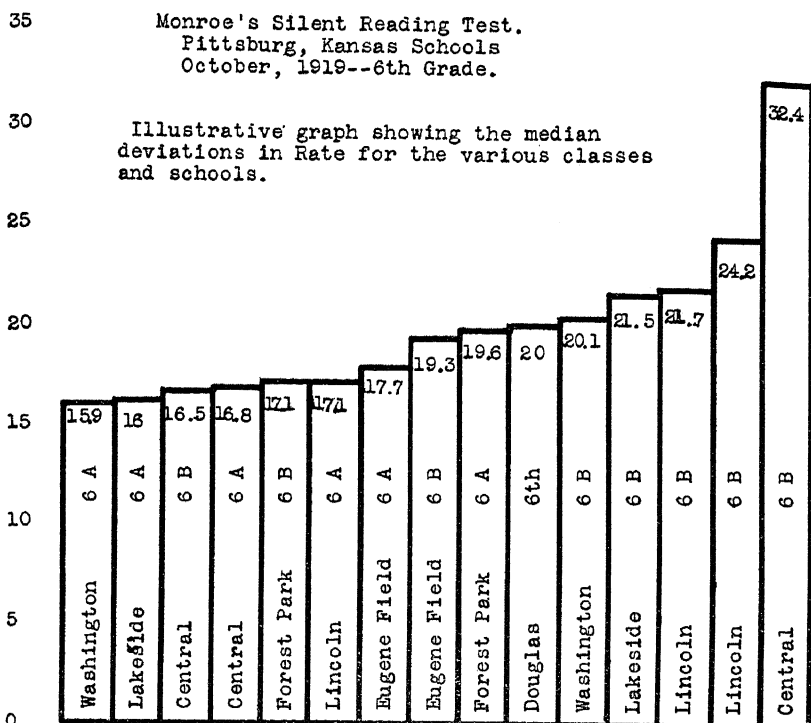


Fig. 4.

representing the rate score of the same individual or building, and erecting perpendiculars at these two places, the point of intersection will represent both the rate and the comprehension score. Perfect correlation would mean that for each degree of increase in the rate score there would be a corresponding increase in the comprehension score, and so perfect correlation, graphically represented, would be a straight line. Figure 3 shows exceptional correlation, there being but one irregularity in the curve.

From the standpoint of administration, it is important for a superintendent to know the spread or range of ability in the various classes. The class that is composed both of pupils having a very low ability and

of those having a very high ability, presents a problem to the executive which calls for either reclassification for a closer grouping of abilities, or the employment of exceptional teaching talent. Promotion by subjects may also offer a solution. To the teacher, a knowledge of the spread or variation in her class is important so that she may adapt her methods to cover the range of ability of the pupils. By taking from the tabulated scores of each class the amount by which these scores deviate from the median or middle score, computing the sum of all individual deviations for the class, and dividing by the number of scores, one is able to find

Monroe's Silent Reading Test.
Pittsburg, Kansas Schools
October, 1919--6th Grade.

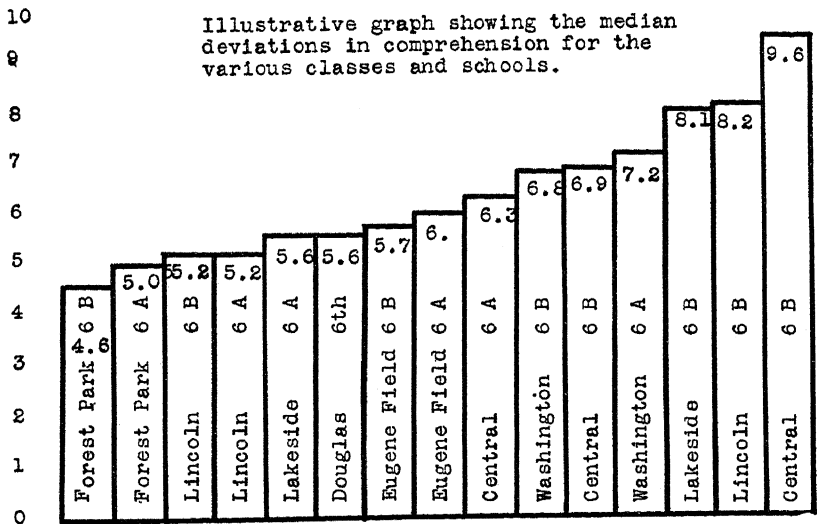


Fig. 5.

ERRATA.—In figures 4 and 5, "Median deviations" should read "mean deviations."

the *mean* deviation for any distribution. Figures 4 and 5 show the mean deviation in both rate and comprehension for the sixth-grade classes, graphically represented. So far as the writer knows, no standard for mean deviation has been derived. It would likely be a fruitful field of investigation to derive standards of deviation. It would be highly helpful to the administrator and to the teacher to know definitely in each subject the limits of deviation for effective teaching.

It is stimulative to both teachers and pupils to know the ranking of their particular grade to similar grades in the same system in any school system and their relation to the standard they should reach. Without investigations by the use of standard tests, the grades of a system go along more or less "in the dark," each grade a law unto itself.

This investigation is not to be taken as conclusive, but rather as a "symptom" of conditions. Pupils usually do not do so well when tests are first given. This should be re-checked by the next form of this reading test before definite conclusions are drawn relative to the reading situation.

NOTE.—The following students gave the silent reading test and compiled the data upon which this article is based: Arthur B. Fox, Norma Gardner, Alva R. Gilbert, Cecile Goodrum, Glenn B. Litton, Clara G. Myers, Marion Nation, Donald E. Ransom, Mrs. Lucile O. Rust, Lowell E. Smith, George O. White, Frances Wingart, Robert Yates. The mean deviation was computed by Donald E. Ransom. The drawings were made by Alva R. Gilbert. Mr. Gilbert also wrote this article, with a few suggestions made by Mr. Litton, Mr. Ransom and Professor Mendenhall.)

Industrial Engineering Courses at the State Manual Training Normal.

The industrial and scientific courses at this institution have grown into two-year courses in civil, electrical, mechanical, and mining engineering. The completion of any of these courses leads to a diploma. Their purpose is to prepare young men for positions as foremen and superintendents of our industrial plants doing the work indicated by the title of the course. Many of the larger industrial companies have approved these courses and are ready to give employment to young men who have successfully completed any one of them. A large number of young men are taking advantage of the opportunity offered by these courses.

There is much need for vocational courses that do not require four years' work in school above a high-school course. Evidence of this need is shown by the various correspondence schools that are flourishing over our country, seeking to fit men for better positions. The apprentice system used by many large companies shows the necessity for the preparation of large numbers of men thoroughly trained in the scientific principles involved in their work, as well as skilled in the manual side.

The four-year engineering courses are built upon an acquaintance with the higher courses in chemistry, mathematics and physics, usually requiring a reading knowledge of a foreign language. These two-year industrial engineering courses are built upon the very minimum requirements in mathematics and theoretical science, thereby enabling the student to become familiar with engineering subjects from the practical side rather than the theoretical. The young man who completes one of these courses is expected to be able to do the work called for in the course. He is also expected to be able to direct the work of others, and in addition, to be able to decide the cheapest and best method of doing a definite piece of work. It is not the thought of these two-year engineering courses that they substitute for the four-year courses in engineering. Those who desire to prepare themselves for the highest type of engineering work should plan to take at least a four-year course.

The Normal has arranged courses so that a young man may do his freshman and sophomore work here and then enter the junior year of engineering at Kansas University. In this way a young man may find if his choice of an engineering course has been a wise one and continue

his work in a four-year course. The two-year industrial engineering courses are not the first two years of a four-year course, but are complete courses designed to fill the gap in educational training between a four- or five-year course in the old established schools of engineering and little or no educational training above the equivalent of that of a high school.

Successful Season in Football.

The football season of 1919 was the most successful in the history of S. M. T. N. Yet our new athletic director, Dr. G. W. Weede, was handicapped at the start of the season by having to introduce an entirely new system of play, and only having four former college players in his squad. Normal lost to Drury 12 to 7, and K. U. 43 to 0, in her first two games. Then the team began to come and took Springfield Normal into camp 14 to 0. This ended the non-conference practice game schedule and the team began its record of an undefeated conference season. Fairmount was beaten 34 to 0, and the Emporia State Normal 13 to 0. This last victory was Manual's first defeat of Emporia, and the team became a little over-confident for its next game, and Ottawa held her 0 to 0. This near defeat awoke the squad, and after beating Warrensburg Normal, another non-conference college, 14 to 0, the Manualites in turn took into camp Friends 7 to 6, Southwestern 10 to 7, and Cooper 39 to 6.

The Kansas athletic conference championship committee did not give Manual a tie with College of Emporia, which also had an undefeated team, but gave S. M. T. N. "very honorable mention," which is the next thing to a tie, as second place is never given mention as a general rule.

With a veteran squad back in 1920 and the addition of several prominent high-school athletes who have signified their intention of entering Manual, next season should be an even more successful one.

"M" MEN FOR 1919 FOOTBALL.

Paul J. Alyea.	Jess Matthews.	Lowell Smith.
Jack Doty.	Tom Mason.	Gerald Smith.
C. L. Hill.	Earl Opie.	John Wiedenmann.
James Hyndman.	Dewey Price.	George Wells.
Glen Leighty.	LeRoy Scott (captain).	Fred Vehlow.

MANUAL MEN MENTIONED ON "ALL-KANSAS" TEAMS.

Hill, guard.	Alyea, end.	Scott.
Hyndman, tackle.	Mason.	Price.

"All men are seekers, all traverse the wide world with hungry eyes, reaching out dumbly, vaguely for something. With some it is practical success, fortune, reputation, useful achievement; with some it is the mad, long desire to create what is beautiful, to leave behind them for the delight of men and the perpetuation of glory; and some seek love—the affection, esteem and admiration of their fellows, the devoted tenderness of a few who may be near them and cherish them. But of all the wide searches of life the most important, the most enduring, the most deeply fruitful is the search for God."—*The Youth's Companion*.

BIG OPPORTUNITY FOR TEACHERS.

Big Summer Session at State Normal, Pittsburg, Kan., Beginning June 7 and Closing August 6 to September 3.

College credit to the extent of 8 to 10 hours may be made during first session. During the second, or August session of 4 weeks, 4 to 5 hours college credit may be made. Last year for the first time the institution offered an August session. It proved so satisfactory, seemed to answer such a legitimate demand, that we have decided to offer the opportunity to those interested again this year. All courses in August session will be given by regular members of the faculty, thus insuring the same efficiency in the work as in that of the regular summer session.

Great things are being planned for the regular session. Some of the notable lecturers are: Dr. Willis C. Bagley, Columbia University; Dr. Hugh S. Magill, Bureau of Education, Washington, D. C.; Dr. F. D. Crawshaw, University of Wisconsin. Others being arranged for.

For the first time in years, S. M. T. N. will really be prepared to conveniently and adequately accommodate her big summer session. The large new science hall and auditorium are now finished and completely equipped. The big temporary gymnasium is now equipped and affords opportunity for these activities of the physical education department.

One-year state certificates are issued to high-school graduates who attend the summer session, and carry at least 8 Normal college hours. One-year state certificates are renewed, if candidates attend the summer session and carry at least 8 Normal college hours. Three-year state certificates are issued on high-school graduation and 32 Normal college hours.

Special state certificates are offered in the following: Manual training, domestic science, agriculture, commercial subjects, drawing and music.

Write for summer school bulletin, now ready for distribution.

W. A. BRANDENBURG, *President*.

S. M. T. N. Alumni.

THOS. B. SNOWHILL is instructor in manual training in Kansas City, Kan.

MISS MARY GREEN, '17, is teaching in the grades in Cheyenne, Wyo.

ANNA KAEMMERLING, of Chanute, and GEORGE O. SPRING, of Tulsa, Okla., were married January 3 at Sapulpa, Okla.

D. C. BROCK is superintendent of schools at Bushton, Kan.

MISS MINNIE ANDERSON is primary principal at Nogales, Ariz.

ANDREW B. STEELE, '14, was recently elected to the superintendency of the Liberal, Kan., schools at a salary of \$2,500. Mr. Steele is at present superintendent at Meade, Kan.

MISS REVE BREWER, '19, of Pittsburg, and O. K. SMITH, of Kansas City, Mo., were married at Pittsburg February 21. They are living at 8501 Paseo, Kansas City, Mo.