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# THE TECHNE

LIFE WITHOUT LABOR IS A CRIME. LABOR WITHOUT ART  
AND THE AMENITIES OF LIFE IS BRUTALITY.—RUSKIN.

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VOL. XVI

JANUARY-FEBRUARY, 1933

NO. 3

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"The most beautiful thing we can experience is the mysterious. It is the source of all true art and science. He to whom this emotion is a stranger, who can no longer pause to wonder and stand rapt in awe, is as good as dead: his eyes are closed. This insight into the mystery of life, coupled though it be with fear, has also given rise to religion. To know that what is impenetrable to us really exists, manifesting itself as the highest wisdom and the most radiant beauty which our dull faculties can comprehend in their most primitive forms—this knowledge, this feeling, is at the center of true religiousness. In this sense, and in this sense only, I belong in the ranks of devoutly religious men."

ALBERT EINSTEIN  
in  
*"Living Philosophies"*

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PUBLISHED BY  
KANSAS STATE TEACHERS COLLEGE  
PITTSBURG, KANSAS

# THE TECHNE

Published by the Kansas State Teachers College of Pittsburg

W. A. Brandenburg, President

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VOL. XVI

JANUARY-FEBRUARY, 1933

NO. 3

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THE TECHNE publishes, for the most part, papers on educational subjects, though articles on closely related fields are also used. Part of these papers set forth the results of research; others aim at interpretation of current developments. Though some of the discussions will interest the specialist, it is hoped that in every number there will be something useful for the average teacher.

THE TECHNE is sent free to the alumni, school officials, libraries, and, on request, to any person interested in the progress of education.

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## HOW MAY SCHOOL EXPENDITURES BE REDUCED WITHOUT JEOPARDIZING EDUCATIONAL EFFICIENCY?

CLAUDE W. STREET, Department of Education

Schools everywhere throughout the nation are being confronted with the gigantic task of maintaining educational efficiency in the face of steadily declining revenues. The amount of money available for public education has fallen off materially through (1) non-payment of taxes; (2) decreased assessments; and (3) decreased tax rates. Recent data gathered by the United States Office of Education show conditions as follows in 41 cities of over 100,000 population:

"enrollment, up 1.63 per cent; teaching staff, down 2.59 per cent; teachers' salary budgets, down 14.62 per cent; current expense of operating schools, down 12.24 per cent (this seems to indicate that the teachers have taken up all the reduction in expenditure). . . .; assessed valuation on property for school revenue, down 14.12 per cent. . . ."<sup>1</sup>

Figures are not yet available for the smaller cities and rural districts but indications are that the situation in country regions is even more serious than in cities.

Unfortunately the retrenchments in school expenditures, which have been forced by the demands for lower taxes, have frequently been ill-advised. Too often popular misconceptions as to educational waste, rather than a consideration of educational values have determined the manner in which economies should be made. The result has been a loss to public education far greater than is warranted by conditions in the present crisis.

In administering the school budget the welfare of the children must be kept constantly in the forefront. If, in curtailing expenditures, the efficiency of the school is lowered, waste rather than economy results. Some saving can undoubtedly be accomplished in many schools by the elimination of waste and the adoption of more efficient methods. These, however, call for expert study of the whole educational problem and should be made only upon the advice of professional educators.

Generally speaking, school officials are honest and it is probably true that there is less waste of school funds due to dishonesty than in any other public field. Some waste, however, has undoubtedly resulted from the rapid growth of our educational system and from the rapid increase in the number of duties which have been taken over by the schools. It behooves all teachers and school administrators in times such as these to turn the searchlight onto their own school conditions in order to bring to light any wastes or leakages which may exist. Each service rendered by the school should be scrutinized as to its efficiency and relative value in the educational program. It is the purpose of

<sup>1</sup>W. D. Boutwell. *How Hard Have Our Schools Been Hit?* Journal of the American Association of University Women. Jan., 1933, p. 85.

this article to point out some of the common ways in which savings may be secured.

### ECONOMIES IN TEACHERS' SALARIES

Chief reliance for a curtailment of school expenditures is generally placed in the salary budget for teachers as this constitutes about two-thirds of the total cost in most schools. Three methods of saving on salaries are commonly employed: one, involving a reduction in the salary of each teacher; another, the employment of fewer teachers, and a third, the shortening of the school year. Of these the latter is the most objectionable because of its effects upon the children and for this reason it is usually resorted to only in extreme cases when funds are no longer available. A loss of a month from a ten months term may be of little consequence but the shortening of a seven or eight months term by several months, as has happened in many rural schools, is a serious matter.

If salaries must be reduced, probably the fairest way, provided the salary schedule is equitable, is to make a flat cut of a certain per cent, five to ten per cent, in the annual salary of each teacher. Reductions of more than ten or fifteen per cent should be avoided, if possible, as teachers' salaries have been low compared with those in other vocations requiring the same amount of training.

In cutting down the number of teachers the common practice seems to be to lop off some of the newer services such as health work, music, art, physical education, home economics and industrial education. This is a grave mistake as these services are essential to the realization of the seven cardinal objectives of education and are no doubt of greater value to the pupils than much of the traditional subject matter taught in the schools. In deploring this tendency, Boutwell of the United States Office of Education says:

"Instead of the crisis acting as a corrective agent removing the unfit, as depressions do in the business field, it has seemed to blight the most promising hopes of better education. Unless citizens speedily test the worth of each course in the curriculum with the aqua regia of their deepest wishes for their children, there is every prospect that the depression will throw our schools back toward 1890 instead of causing them to shed obsolete subject matter."<sup>2</sup>

The most feasible way to save on the teaching force in many schools is to increase the size of classes, eliminating as far as possible the small classes. Several recent studies indicate that small classes are but little, if any, more efficient than large classes. There appears to be no good reason why classes, both in the elementary grades and high school, should not have an average enrollment of nearly forty pupils instead of twenty-five or thirty as is now common in many systems.

In high schools the number of small classes may often be materially reduced by alternating elective subjects. A further saving may be made

<sup>2</sup>W. D. Boutwell. Op. Cit. p. 85.

in the smaller schools by having the superintendent act as high school principal. This can possibly be done without lowering the efficiency in schools where the high school enrollment is less than one hundred, provided the superintendent is given proper clerical assistance.

In elementary schools where teachers have only one grade with fewer than thirty pupils each, a teacher may be assigned half of the next higher or lower grade, in addition to her own grade, thus eliminating about one teacher in three. In this case the plan of having annual rather than semi-annual promotions should be followed to avoid giving the teacher more than two class groups. In large elementary schools, especially where there is a shortage of space, economy may sometimes be effected along with an increase in school efficiency by adopting the platoon type of school organization.

It has been found in most cases that it costs more per pupil to operate small schools than large schools. This suggests the advisability of closing up small schools wherever possible and sending children to other larger schools where better advantages may be had at less cost. If small schools must be maintained, a saving may sometimes be made by placing one principal in charge of two or more buildings instead of having a full-time principal for each school. Itinerant teachers may also be used to advantage in small schools. For example, a music or art teacher may serve several small schools in nearby districts, giving them the benefit of special instruction at a minimum cost.

The worst feature attending a reduction in the teaching corps is that it means throwing more persons out of employment. The school may benefit to some extent from the reduction, provided the poorest and least qualified teachers are dropped. On the other hand the school may lose some of its best teachers if the reduction means the discharge of all married women teachers. Perhaps the most satisfactory way of handling the situation would be for a school to grant leaves of absence for study to teachers who have less than the standard preparation or who show the need for further professional training. In such cases the school should stand ready to re-employ the teacher on the completion of the stipulated training. Teachers retaining their positions might be willing to contribute a small per cent of their salaries toward a scholarship fund for the benefit of teachers on leave for study. If some such plan could be combined with a gradual raising of state requirements for certification, a long step would be taken toward increasing the efficiency of the schools as well as in solving the problem of a surplus in the teaching field.

#### ECONOMIES IN SUPPLIES

Very substantial savings may often be made by utilizing the most approved procedure in the purchase and use of supplies. Observance of the following principles should result in economy:

1. Supplies should be carefully standardized as to kind and quality so as to use as few kinds of supplies as efficient service will permit. The quality of supplies should be good enough to meet the demands of the service but need not be higher than that. For example the cheapest paper that will stand the test should be used for penmanship drill.

2. The quantity of each article to be supplied should be restricted to the lowest minimum consistent with effective educational service.

3. As a general rule supplies for the year should be purchased at one time. Bids should be requested from a number of reliable dealers in school supplies and the contract should be awarded to the lowest reliable bidder.

4. Cooperative purchasing can be used profitably in small schools, especially in rural districts. By pooling its supply orders with those of other schools, a district may get the benefit of large quantity prices on small quantities. Cooperative buying through the office of the county superintendent of schools has resulted in a saving of 50% on supplies in some California counties.<sup>3</sup>

5. Supplies should be checked carefully as to quality, quantity, and condition on arrival.

6. Supplies should be stored securely in a place where losses will not occur through pilfering or deterioration.

7. An efficient plan of issuing supplies should be worked out which will provide teachers with needed supplies at all times but which will guard against waste.

8. Pupils and teachers should be led to realize the importance of exercising care in the use of supplies and equipment and of avoiding waste whenever possible.

#### SAVINGS IN OPERATION OF SCHOOL PLANT

Savings in the operation of the school plant depend largely upon the efficiency of the janitors or custodians. A careless or incompetent janitor may cause great waste in the use of fuel, supplies and equipment. On the other hand, a janitor who is a skilled mechanic may save the district considerable expense by making necessary repairs or alterations without calling in outside help. Many schools are finding that it pays to establish high qualifications for the janitorship and to appoint janitors or engineers solely on the basis of merit.

A saving in light and power may often be effected by securing the cooperation of the entire school personnel. The consistent turning off of lights when not needed and the cutting off of electric motors when not in actual use will cut down these items of expense appreciably.

#### SAVINGS ON INSURANCE OF SCHOOL BUILDINGS

It is wise economy to guard against loss by fire by carrying adequate insurance on school property, but money is sometimes wasted by not

<sup>3</sup>Ward G. Reeder. *The Fundamentals of Public School Administration*. p. 285.

observing economical principles in the purchase of insurance. Economies in school insurance may be effected in five ways as follows:

1. By determining fair valuations at present replacement costs of school buildings and contents.
2. By insuring buildings for less than full valuation.
3. By securing lower rates by reducing fire risks.
4. By adopting the co-insurance plan.
5. By buying insurance on the three to five year plan.<sup>4</sup>

### CONCLUSION

If space permitted other ways of economizing on school costs without jeopardizing school efficiency might be suggested. Any alert superintendent or teacher by giving careful attention to the matter can doubtless discover various ways in which material savings may be made. In times such as these, it is necessary for every school to use the limited funds available for school purposes in the most efficient manner in order that the children of this generation may not be handicapped permanently by this depression.

In conclusion let us bear in mind the admonitions of President Hoover, in addressing the National Conference on the Crisis in Education, which he recently called:

"Our governmental forces have grown unevenly and, along with our astounding national development, we are now forced to make decisions on the merits of the various expenditures. But in the rigid governmental economies that are requisite everywhere we must not encroach upon the schools or reduce the opportunity of the child to develop adequate citizenship.

"There is no safety for our republic without the education of our youth. That is the first charge upon all citizens and local governments.

"Above all, may I ask that throughout your deliberations you bear in mind that the proper care and training of our children are more important than any other process that is carried on by our government. If we are to continue to educate our children, we must keep and sustain our teachers and our schools."

<sup>4</sup>*Practical Economies in School Administration*, University of Nebraska. Bulletin No. 94, March, 1932. p. 127.



## THE TEACHING OF CITIZENSHIP AND CIVICS

LULA McPHERSON, Department of History

Much is being said at the present time concerning the teaching of citizenship, but our results are not entirely satisfactory. Some schools have prepared courses of study that are available for other schools.

The Instructional Research Department of the Minneapolis Public School System has prepared a pamphlet on the teaching of citizenship in elementary schools. Elizabeth Hall of that school system thinks that our training should be more direct, particular, and practical. She says, "Character training has always been recognized as one of the major objectives in education. The problem has been how to secure results—immediate, recognizable results." In the past we have tried to bring about better citizenship through the right type of books, biographies, music, and pictures. These, no doubt, have had their effect but not necessarily resulted in the better citizenship as we had anticipated. Now we advocate greater pupil co-operation, participation, and responsibility such as will develop independence, self-reliance, and originality. Surely we should be able to help adjust the student to his environment.

There was created a United States Society for the purpose of furnishing high schools and colleges with current governmental information in order to train for better citizens. Calvin Coolidge, Elihu Root, John Grier Hibben, Newton D. Baker, and Owen D. Young were members of the Board of Advisers.

Since, but in a short time, our young people are to assume responsibilities, they must be given some civic training. Most educators believe that problems can be brought to the level of minds of our school population so that an interest can be created in them. Since the ten percent of our population who are responsible for the government operation must be selected by the other ninety percent, it is necessary not only that the leaders be trained but that the electorate be trained in order to make proper selection. Elihu Root has said, "The voters who govern modern democracies no longer find the first impressions of a simple life adequate as a guide; they must be informed specifically regarding the questions under discussions by neighbors who have made a study and who are qualified to be leaders of opinion."

Many of our schools are sponsoring the organization of constitutional conventions, congresses, nominating conventions, round table conferences, city councils, commissions, and legislatures. An interesting experiment comes to us from Colorado. It is that of seventy students from high schools of Colorado who met on April second at Adams State Teachers College to draft a new state constitution. The training which they received was valuable and was more important than the constitution that was adopted. The students saw the need of parliamentary law and learned to follow it. They studied their constitutions as never before. Their statements had to be accurate, not simply opinions. This

convention showed the weakness of our high school instruction in that the students were timid and had little initiative. As time went on, these weaknesses were overcome.

The charts made by students that show relationship of each bureau and department to the federal government, and also the workings of the state and of municipal government are beneficial.

Representative government is on trial throughout the world. Since the World War the governments of one-half of the people of the world have been overthrown by dictators, revolutions, or other non-constitutional methods. In a democratic government, the people must be educated or they will be misled by leaders of poor judgment and selfish principles. The students must get their training for citizenship in groups; in fact, after they finish school, their efforts are made effective only as they are a part of organizations.

All of our citizenship training should have as its object, service. Our motto should be, "Enter to Learn; Depart to Serve." Many are doing field work in connection with the study of city, township, and county government. If this work is done under the leadership of a wise teacher, students and community are benefited. Such teaching was not done when the teacher was in school and there is a tendency for her to teach as she was taught even though she knows better. We know that many high school students never enter college, so the high schools are their only training for citizenship.

Children should be given training in the manner they are best able to receive it. In primary grades the youngsters are in the period of imagination; intermediate grades, hero worship; junior high, reasoning; and senior high, judgment. The primary grades should be taught obedience, courtesy, truthfulness, courage, self-control, initiative, and orderliness. The intermediate grades should learn community cooperation. The teaching of citizenship should not be confined to the formal training period but should be done whenever the situation arises. If it can be done without the child's being aware of the lesson, so much the better.

The social science program must meet the needs of the brighter as well as the slower pupil. The Dalton plan makes this possible through accelerated progress and the differentiated unit plan through an enriched curriculum. By keeping the class together, the brighter student may be trained in principles of citizenship through helping the slower students.

In some of our high schools, there has been a decline in the teaching of civics and an increased interest in the teaching of sociology and economics. As a result of this movement, a round table discussion in connection with the American Political Science Association was held in Washington, December, 1931. This meeting brought out the fact that politics is not taught in some schools, since many as-

sociate it with the unpleasant side of government and think that the economic or social approach is superior to the political. Present conditions show that we must raise our political education. Some teachers are afraid to discuss controversial political questions in the school-room. Many interesting controversies are held in the Civics classes. Why not? Life consists of differences on the outside. A well informed, tactful teacher can lead such discussions so that they will be helpful.

Citizenship really means membership in a political society and surely nothing is more important than getting him acquainted with some of the political problems. Teachers should take more courses in political science in order to get the training necessary. Some state boards of education make as a requirement for certification, a course in American government or an examination in that subject.

There is not only an opportunity to teach American citizenship but world citizenship. The student should soon learn that he isn't the center of the universe with the world moving around him. To prove that the teachers are alive as to world problems, one will find model assemblies of the League of Nations, peace pageants, model disarmament conferences, school exhibits, debates, and bulletin boards—all inspired by internationalism. The teacher who sees one's country only from the standpoint of nationalism is fast disappearing and in his place is the teacher with the international viewpoint.

The student, through the teacher with the international mind, soon finds that in this world "we all share the same small planet." Frances A. Thomas, educational secretary of the League of Nations Association, says that the student "should be led to think of Briand of France, Stresemann of Germany, Nansen of Norway, Cecil of England, and our own Wilson, Root and Kellogg as international engineers, laboriously designing and building the peaceful and orderful substitute for war."

During the past ten years, students have been using much source material in history. The same material can be used in civics. Reports of local, state, and federal departments are of interest to the student. One cannot study legislative acts without copies of the original enactments. Bureaus and departments of the government are willing to furnish information upon request. Slides and films concerning child labor, improved living conditions, care of food, safety first and fire prevention may be secured.

A democracy like ours demands that our training for citizenship be better each year. Our forefathers were good citizens even though they had poor training in schools. The future presents greater responsibilities and more problems. Years ago each family was a unit in itself, but now with so many more contacts, one must be trained to meet the situations. The present day citizen will face problems that will call for much greater training and intelligence than was required by the citizen of several decades ago.

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David Snedden says, "But of conscious and purposive civic education based upon a clear diagnosis of probable needs of adults, we have had heretofore little indeed, beyond the instruction in vernacular reading which early became the central objective in all public schools." We must have more direct and purposive instruction and training in citizenship.

The citizen and the law maker of to-morrow are in our schools of today and we can truly say that education is an endless work in better government.

## BUDGETING FOR PROTECTIVE FOODS

FRANCES GILLUM, Assistant Professor, Department of Home Economics

Recently in nutrition classes of the Kansas State Teachers College much emphasis has been placed on balanced meals at low cost. More than ever before students are urged to use an abundance of milk and leafy vegetables, the foods designated first by Dr. E. V. McCollum as "protective foods." The application of the term "protective" to milk and leafy vegetables is based on the knowledge that these foods insure against vitamin and mineral deficiencies, constipation, and the mineral acid type of acidosis.

Meals planned by students in nutrition classes uphold dietary standards despite the financial depression. The meals, though balanced, have a tendency to be of the so-called starchy type or the type that falls under moderate or heavy forms of skeleton menus. To provide calories and to confine food selection to cheaper products, bread, potatoes, rice, macaroni, and other cereal pastes make the bulk of the diet. Tomatoes and carrots are added to the bland flavored dishes to make them more palatable. Combinations of one vegetable with another are made to extend the use of the more expensive food as a seasoning adjunct. For example, tomatoes are more often combined with toasted bread, rice or spaghetti than served stewed or as salad. The carrots more often appear as carrots and cabbage than as creamed or buttered carrots, since the carrots retail at higher prices.

In menus planned for very limited incomes, students expect that protective greens, such as cabbage, spinach, turnip, lettuce, and celery, will be served only three or four times a week. Here the students plan that the vegetables will be eaten raw whenever acceptable in order that none of the unstable vitamins, particularly vitamin C, will be destroyed by heat or oxidation. When the food budget is not exceedingly low, one or more of the above green, leafy vegetables will appear daily in a dietary.

All menus are planned so that a child under twelve years of age will be given a quart of milk a day and an adult will receive a pint of milk a day. For families where income is very low these quantities are reduced one-half. Recipes are studied and calculations are made to use skimmed or evaporated milk in cream soups, white sauce, and desserts; for thereby some financial saving would follow, and the milk, if disliked, need not be consumed as a beverage.

Practical work in nutrition classes entails the observation of meals selected by patrons of cafes, cafeterias, restaurants, tea rooms, and other public places. For each meal studied the presence or absence of the protective foods is checked, and the price of the meal recorded. The report of a specific study follows.

Trays of patrons of a cafeteria were observed by students stationed in the cafeteria for one hour during each of the three meals. Precau-

tions were taken not to duplicate the count of trays. During the period studied lunch and dinner menus included salads made of lettuce, cabbage, and cabbage combined with carrot; vegetables at both meals included buttered spinach, asparagus and cabbage. No vegetables were served creamed or as souffles or in any combinations using milk. Servings of the vegetables were generous and probably measured one-third to one-half cup. Salads were the average size served in regular salad dishes. The vegetables were priced at six or seven cents a serving, and the salads sold for five or six cents each. The choice of beverage included green or black tea, buttermilk, sweet milk, and coffee. All beverages sold for five cents a serving. In addition to the above information, students recorded:

- (1) The number of individuals served during the period of observation;
- (2) The total cost of meals;
- (3) The number of trays with one or more protective foods.

Data were compiled and condensed into the following table:

TABLE I  
MEAL SELECTION AND COST AT A CAFETERIA

Items	Breakfast	Lunch	Dinner	Average
Service				
Number served .....	72	183	59	104
Cost of meals .....	\$11.01	\$40.78	\$8.65	\$20.14
Average Cost of meals	0.159	0.222	0.147	0.174
Milk, 1 cup .....	19	14	9	14
Leafy vegetables .....	....	57	14	35

Observations of meals at the cafeteria indicate that most meals of the patrons are low in milk and leafy vegetables. For the patrons observed, the nutrition classes concluded that more milk is drunk at breakfast than at any other meal. Slightly heavier consumption of leafy vegetables was observed at noon than in the evening, but even at noon the average consumption is low. For a day, the average total intake of protective foods for perhaps one hundred people approaches one-sixth cup of milk and one-third serving of leafy vegetables.

Results represented by the number of individuals choosing one or both types of protective foods appear significant. Thus far, studies made by students in the Home Economics Department have not been made on individuals but groups of students and teachers; therefore, no statement can be made regarding repetition of choices of protective foods by patrons of commercial eating places. Perhaps the patron who drinks milk at breakfast also drinks milk at noon and evening and eats leafy vegetables at luncheon and dinner. Choice of milk at breakfast by the group studied seemed moderately popular since about

one-fourth of the patrons drank milk at this time. From the study it appears that most patrons prefer not to eat leafy vegetables and drink milk at the same meal. Approximately one-fourth of the patrons observed selected one or more leafy vegetables whereas only about one-twentieth chose to add milk to a meal which already included leafy vegetables. If selection of protective foods is as limited as the study seems to indicate, physical impairments must be felt now or will be experienced in the future, provided the diet is not improved. Since it follows that many patrons of a cafeteria may take only one or two meals there, food selection at other meals may be better than that indicated in Table II.

TABLE II  
PROTECTIVE FOODS CHOSEN IN MEALS AT A CAFETERIA

Items	Bkfst. Individuals Per Cent	Lunch Individuals Per Cent	Dinner Individuals Per Cent	Average Individuals Per Cent
Milk, 1 cup .....	26.4	2.7	10.2	13.1
Milk, 1 cup, plus One or more leafy vegetables .....	—	4.9	5.1	5.0
One or more leafy vegetables .....	—	26.2	18.6	22.4
Per cent meals having protective foods .....	26.4	34.2	33.9	31.5

If data from observations of meals at the cafeteria can be taken as representing meals eaten in public places, it seems quite likely that from 66 to 75 per cent of these individuals are not selecting protective foods which are essential to a balanced diet. Furthermore, it seems reasonable to conclude that most patrons of public dining places who fail to secure some protective food away from home will not at home serve themselves liberally with these foods.

In the elementary nutrition classes stress is placed on budgeting of expenditures for certain foods. H. C. Sherman's well-known rules for distribution of money spent for food are discussed. Dr. Sherman states that as much money should be spent for milk, including cream and cheese as for meats, fish, and poultry; and that as much should be spent for fruits and vegetables as for meat, fish and poultry. The reported study of food selection of cafeteria patrons did not include estimation of expenditures for meat, fish and poultry, and for that reason use was made of another common budget practice, that of allowing approximately 20 per cent of the food money to be spent for milk. The cafeteria patron spent only five per cent of the cost of the meals for milk.

Allowance for cheese and ice cream would raise this figure a trifle, but it seems likely that even then the distribution of money spent for milk and milk products would be far from ideal.

If we consider that the allowance for fruits and vegetables be approximately 20 per cent of the total food budget and that this allowance be equally divided between fruits and vegetables, the expenditure by the average patron of approximately nine per cent of the food money for leafy vegetables appears very good until examination is made of the number of servings of leafy vegetables. Slightly more than one-fourth of the meals included leafy vegetables once during the day. Where the sum allowed for food is small, suggestions are made to serve leafy vegetables at least three or four times a week, indicating that an equivalent of approximately one-half serving is an ideal daily allowance..

The sum spent for food by the average cafeteria patron should be adequate for meeting body needs. The average expenditure of the patrons observed was found to be about fifty-three cents. If a 50 per cent allowance is made for overhead expenses, actual food cost approaches twenty-six cents. In emergency food relief pamphlets, published by the Bureau of Home Economics at Washington, \$7.50 per week is the lowest figure suggested for planning an adequate diet for a family of five. The Bureau's figures represent a daily per capita expenditure of about twenty-one cents for raw food. It is estimated that cost of the food chosen by the cafeteria patrons exceeds this figure by approximately 25 per cent. Selection of food in commercial places could be better and be made to meet body needs without increasing expenditure beyond that of the average patron.

While students are making provision for including protective foods in the diet, amounts of these and other foods are suggested as follows:

1. Use daily in cooking and in drinking the equivalent of a pint of milk for an adult and a quart of milk for a child.
2. Once a day take a liberal serving of leafy vegetables.
3. Serve potatoes, rice, macaroni, or similar starchy foods once each day.
4. Eat at least one serving of one of the following foods: meat, fish, eggs, cheese, dried peas, beans or lentils.
5. Use a fresh or dried fruit once each day.
6. Include in the dietary a minimum of one serving of any of these vegetables: cabbage, beets, string beans, carrots, onions, and turnips.

By adherence to this system of diet individuals will not be characterized as suffering from lassitude, chronic fatigue, and lack of resolution and initiative.



## THE ROLE OF THE CONCEPT IN READING ABILITY

PAUL G. MURPHY, Department of Psychology

One of the most fruitful fields of research in the psychology of reading has been that concerned with the analysis of specific psychological functions involved in reading. A cursory perusal of the literature reveals the fact, however, that the great majority of such investigations have dealt with the mechanical phases of the process, such as typographical factors, eye-movements, rate of reading, and related functions, leaving more or less untouched such processes as reasoning, conception, understanding, and the like. It was with the hope of shedding light on some of these untouched areas that the present investigation was undertaken.

Specifically, the study was designed to investigate the role played by the concept in reading ability. Taking our cue from the fact that the efficient reader is actually better equipped than the poor reader from the standpoint of vocabulary (which is assumed to be a measure of the individual's verbal concepts, at least), the problem was to make a more intensive study of the nature of this relationship. In other words, we were interested in finding out how the adequacy of a person's concepts reacts upon his ability to read.

The study was carried on principally through the medium of various comparisons between two groups of readers selected from the freshman class at the University of Iowa. The two groups were selected to represent the two extremes of reading ability. One group, hereafter designated as "good readers," was composed of individuals ranking at the 65th percentile or above in paragraph comprehension ability and at the 58th percentile or above in the ability to recognize word meanings, as these functions are measured by parts I and II, respectively, of the Iowa Silent Reading Test. The second group, hereafter referred to as "poor readers," was made up of individuals ranking at the 36th percentile or below in paragraph comprehension ability and at the 40th percentile or below in the ability to recognize word meanings. In order to be certain that such differences as might be brought to light were not attributable to variations in general intelligence rather than to variations in reading ability, the groups were also selected in such a way that the average scores of the two groups on the University of Iowa Qualifying Examination were approximately equal at the 50th percentile.

Having settled upon the method of divergent groups as the most appropriate approach to the problem, there still remained the problem of the specific techniques to be utilized in analyzing the concepts of the individuals selected for study. The solution of this problem appeared to demand a systematic description of the concept, so the following scheme was set up as the systematic cornerstone of the study. In the first place, attributes of both a *generic* and a *quantitative* order would appear to characterize the concept. While the nature of generic differences may not be clearly evident upon first glance, such differences as are exemplified

in concrete as opposed to abstract concepts seem to be of this order. The varying mental content of concepts might also serve as a basis for a generic classification of concepts. The applicability of quantitative categories is more obvious. From this point of view, each concept possesses a definite degree of *organization*; it possesses a given degree of *richness*, completeness, or fullness; it is characterized by a certain amount of *clarity* in the experience or mind of the individual; and it stands in a certain degree of *accuracy* or fidelity to the accepted meaning of the concept. In terms of this scheme, then, the purpose of this investigation was to determine how the concepts of good and poor readers vary, first, generically, and second, quantitatively, the latter category subsuming the attributes of richness, organization, clarity, and accuracy.

Let us consider first differences of a generic nature. The most obvious approach to this phase of the problem was to undertake a **comparison** of the concrete as opposed to the abstract concepts of the two types of readers. This approach will be considered later.

Another possibility that suggested itself as a basis for generic differentiation was the varying mental content of the concepts of the two types of readers. In order to investigate the potentialities of this attack it was necessary to undertake an introspective analysis of the concepts of the two groups. The procedure followed here was to ask each observer to define a series of 6 terms, 3 abstract and 3 concrete. Following the definition of each term, the subject was asked to report the mental processes involved in arriving at the definition, the purpose being, of course, to determine the nature of the mental processes accompanying the arousal of the concept in his mind. Without going into detail it may be said that, in general, the results of the experiment revealed no striking dissimilarities between the conceptual consciousnesses of the two groups. Possible differences were indicated; they were so slight, however, as to be of questionable reliability.

A third approach to the problem of generic differences was attempted in a comparative study of the types of responses exhibited by the two groups in a free association test. Fifty words selected from the Kent-Rosanoff free association test in such a way as to contain an equal number of concrete and abstract terms were presented tachistoscopically to the observers with the instruction to "respond each time with the first word that comes into your mind." According to Fisher's method for computing the significance of differences between the means of small groups, the two groups of readers did not differ reliably in any phase of this comparison.

As has been pointed out, the stimuli in both the preceding experiments were equally divided between concrete and abstract terms, thus affording a comparison of the concrete and abstract concepts of the two types of readers, as suggested above. Here again, however, no differences deserving of consideration were indicated.

To sum up, then, none of these three attacks upon the problem brought to light any clear-cut generic differences between the concepts

of good and poor readers. This is not to say that no such differences exist. If there are such variations, though, these experiments have not revealed them.

Turning next to differences of a quantitative nature, let us consider first the relative richness of the concepts of the two types of readers. By the richness of a concept we mean, theoretically at least, the number of items of knowledge included within such a concept. Upon the assumption that the richness of a concept is indicated by the richness and rapidity of the train of associations which passes through the mind of the individual as the concept is brought into the foreground of consciousness, both the continuous and discrete free association techniques were used as means of comparing the two groups of readers in this respect.

In the main experiment of this series 10 words, 10 short phrases, and 10 paragraphs of medium length, all equally divided between abstract and concrete materials, were presented visually to the 20 observers with the instruction to "respond with a series of words indicating all the things that come into your mind during the 30 seconds following the presentation of each stimulus." The results thus obtained are summarized in Table 1.

Table 1. Ave. No. Associations Per Stimulus in Continuous Free Association Test.

	Good Readers (N—10)	Poor Readers (N—10)	P
Words .....	7.65	7.82	87
Phrases .....	7.18	6.41	48
Paragraphs .....	7.87	7.69	90

Assuming that P must be 5 or less for a difference to be significant, it will be noted that none of the above differences are significant. (P, in Fisher's formula for computing the significance of differences between the means of small groups, indicates the number of chances in 100 that the obtained difference is due to chance.)

Additional evidence on this point was afforded by the measurement of reaction times on the discrete free association test (adapted from the Kent-Rosanoff test) mentioned in the previous section on generic differences. The results of this analysis are as follows:

Table 2. Reaction Time Per Response in Discrete Free Association Test (100th's of a second)

	Good readers (N—10)	Poor readers (N—10)	P
Ave. Median Time .....	196	188.	66
Ave. Mean Time .....	237	220	47

Both the mean and median times were computed because it was felt that the mean unduly weighted extremely long reaction times which appeared occasionally in the results of both types of readers. As will be noted, though, the relative standing of the two groups is approximately the same in both cases. In neither case is a significant difference indicated.

It seemed to the experimenter that it might be worthwhile to approach the problem from a somewhat different angle by determining the relationship between the richness of an individual's concepts in a specific field of knowledge and his ability to read material taken from that field. The data for such a study were available in the scores made by University of Iowa freshmen on certain of the Iowa Placement Tests. Accepting the training series of these tests as measures of the richness of the individual's informational background or concepts within specific fields, the problem was to determine the correlation between certain of these training examinations and the reading tests in the related aptitude series. This was done in the chemistry and mathematics series. A high gross correlation was found between the training tests and the reading sections of the aptitude series; however, when general intelligence was partialled out the net correlations became insignificant. This attempt, too, then, secured no evidence that richness of concepts is at all related to reading ability.

These findings are so diametrically opposed to the generally accepted notion that the richness of a person's vocabulary is one of the major determiners of his ability to deal with language materials of any kind that one is somewhat hesitant about accepting them. It may well be, however, that our concession of a position of primary importance to the quality of richness has been due to a failure to distinguish clearly between this and other qualities of the concept. Further experimentation on this point is needed.

Coming to a consideration of the quantitative characteristics of the concept, organization, we understand by this the availability of concept-meanings for immediate use, or the closeness of association between the concept-symbol and the meanings which it symbolizes. In the light of this interpretation of the attribute of organization, the controlled association test seemed to be the most adequate measuring instrument available for use in this phase of the study, the degree of organization being assumed to vary inversely with the length of the association time. The main experiment in this series, wherein three controlled association tests adapted from the Woodworth-Wells series were utilized, yielded the results summarized in Table 3. Here again the occasional appearance of exceptionally long reaction times made the computation of both median and mean times imperative.

Table 3. Ave. Median Reaction Time Per Response  
(100th's of a second)

	Good readers (N—10)	Poor readers (N—10)	P
Part-whole test.....	163	192	03
Opposites test.....	195	223	07
Analogies test.....	276	313	07

Ave. Mean Reaction Time Per Response (100's of a second)

	Good readers (N—10)	Poor readers (N—10)	P
Part-whole test.....	223	249	27
Opposites test.....	296	381	02
Analogies test.....	341	380	18

While some of these differences are not sufficiently large to satisfy the demands of significance, in practically every case, regardless of whether we consider the mean or median reaction times, the chances are quite high that the observed difference is a true one. And in every case without exception the results point toward the more efficient organization of the concepts of the good readers as compared to those of the less efficient readers.

In a desire to substantiate this finding, if possible, with additional lines of evidence, the completion test included in the 1929 edition of the American Council of Education Psychological Examination was hit upon as an additional measure of what the investigator has chosen to call the organization of concepts. This test, which consists of some 40 definitions, is essentially a measure of the testee's ability to complete each statement with a word indicating the concept which is being defined. Without going into a discussion of the assumptions involved in the utilization of this test as a measure of organization, a highly significant difference between the average scores of the two groups on this test was indicated. This provided additional substantiation for the contention that the concepts of good readers are more efficiently organized than those of poor readers.

The most direct measure of the clarity of an individual's concepts, and one whose validity has a certain amount of experimental substantiation, is to have him indicate the degree of certainty accompanying the identification of various concepts. After a consideration of various vocabulary tests, one of the word-recognition tests making up the College Aptitude Test used by the Association of Minnesota Colleges was selected as an adequate measuring instrument for use in this experiment. The test was administered to the 20 subjects of the regular experimental groups, with the double instruction, first, to select the correct answer from the five alternative answers provided for each stimulus-word, and

second, to indicate on the basis of a three-point scale the degree of certainty accompanying each reaction. The average degree of certainty accompanying the responses of each subject was then computed by totaling the "assurance scores" and dividing this sum by the number of items attempted. The results of such an analysis are contained in Table 4.

Table 4. Degree of Certainty Accompanying Each Response in Clarity Test (on scale of 3).

Good readers (N—10)	Poor readers (N—10)	P
2.60	2.38	01

This is unquestionably a real difference, indicating that, in so far as this technique measures the clarity of concepts, the concepts of good

readers possess a significantly higher degree of clarity than those of poor readers. Statistically stated, the chances are 99 in 100 that the tendency here revealed is a true one.

Coming to the consideration of the fourth and last of the quantitative attributes of the concept, accuracy, here again an accumulation of evidence from several different sources was available. The first group of data was provided by an analysis of the scores made by the 20 observers on a test modeled after a familiar intelligence test technique, wherein they were requested to point out differences between such closely related concepts as haste and speed, poverty and misery, etc. The difference between the average scores of the two groups on this test was in favor of the good readers. The chances that the difference was a true one were found to be only 76 in 100, though, which is not significant. On the other hand an analysis of the performances of the two groups on three different vocabulary tests from the point of view of the percentage of items tried that were correct revealed, in every case, a significant superiority on the part of the good readers. An examination of the scores made by the two groups on one part of the English Training Test of the Iowa Placement Series, wherein the testee is required to select from three alternative statements that one which most accurately illustrates the specific meaning of a given word, also showed a highly significant difference in favor of the better group. The conclusion would seem to be warranted that the concepts of good readers are more accurate than those of poor readers, at least in so far as the methods of analysis here used measure this attribute.

By way of summarizing the results of the investigation as a whole, then, it has not been shown that either the generic nature or quantitative richness of an individual's concepts reacts in any way upon his ability to understand and read the printed page. On the other hand, the study has demonstrated a definite relationship between this latter capacity and those aspects of the concept which we have referred to as organization, clarity, and accuracy.

## KANSAS STATE TEACHERS COLLEGE OF PITTSBURG AND THE DEPRESSION

Since the crash of 1929 practically all business in the United States has been at a standstill. It has been a distinct triumph on the part of the firm or institution to have been able to stay in business, let alone being able to show some signs of progress or profit. Schools have suffered along with industrial concerns. Budgets for the State Educational Institutions in Kansas have been cut 25% or more. Parents have found it increasingly more difficult to send their sons and daughters to college. Under these conditions I believe you will be interested in knowing just how your own school has weathered the storm thus far.

Undoubtedly the biggest factor to be taken into consideration in measuring a school's progress is enrollment. During the past two or three years parents who planned to send their sons and daughters to college have given more thought and attention to the selection of a school for higher education than ever before.

The standing of the college, cost of attendance, type of preparation, faculty, physical equipment, social life, all have been subjects to which careful consideration have been given by prospective students and their parents.

In giving our enrollment figures only full time resident college students are counted:

October 1, 1929.....	1263
October 1, 1930.....	1164
October 1, 1931.....	1294
October 1, 1932.....	1284

The above figures show an actual increase in enrollment in 1932 over that of 1929.

Now you may wonder how many students were able to complete the work for their degrees. The following are the Bachelor Degree classes for the past three years:

1930 .....	289
1931 .....	275
1932 .....	281

The Legislature of 1929 gave the Teachers Colleges of Kansas the right to grant an M. S. degree. K. S. T. C. at Pittsburg immediately set up a graduate curriculum and the enrollment for graduate work for the past three years is shown in the following figures:

1929-30 .....	85
1930-31 .....	156
1931-32 .....	253

## M. S. Degrees granted:

1930 .....	11
1931 .....	19
1932 .....	45

A total of 75 Master's degrees issued to date.

Another interesting fact about our enrollment is the steadily increasing percentage of men, as shown by the following figures:

In 1930, 45% of college enrollment was men.

In 1931, 48% of college enrollment was men.

In 1932, 51% of college enrollment was men.

For 13 years the music department of the college has been sponsoring an Interstate High School Music Contest. In 1930, 54 high schools sent entries. In 1931, 47 schools were entered, and in 1932, 50 schools were represented in this great contest. We have a college band which is recognized as one of the outstanding organizations of this entire section.

In 1930-31, this band had 40 pieces.

In 1931-32, 50 pieces, and at the present time, 62 students are members of this splendid organization.

Naturally one cannot speak at length of the accomplishments of a college without discussing the athletic situation. We feel that we can point to the standing of our Athletic Teams with justified pride.

The following figures may help you visualize the high rating which our college has in the fields of athletics. These figures are based on the records of our Contests since 1921:

Football—won 52, tied 6, lost 36.

Basketball—won 171, lost 58.

Track (Dual Meets)—won 30, lost 5.

Wrestling—won 15, lost 5.

Out of 37 Conference Titles awarded during this period, K. S. T. C. has won 16 and tied for 3.

During the past three "depression years" our football team has won 11 games, tied 3 and lost 8.

In basketball we have won 60 and lost 4, in the meantime annexing 3 conference titles. (This year's team has won 16 games and lost 3 to date.)

In track we have been undefeated in all dual meets, placed high in the major relay meets of this section of the U. S. and have taken three conference titles as well as Three Missouri-Kansas Meet Titles.



In order to make all these accomplishments possible, a College must have more than a campus and class rooms. Under the stress of existing conditions, discriminating people are investing only in those things of unquestioned stability and worth. Perhaps we can find in this tendency the answer to the question "How has K. S. T. C. of Pittsburg, through the past three or four years of adversity, been able not only to hold her own but to show unmistakable signs of progress and achievements?"

## THE EDUCATIONAL CRISIS

(From the Springfield, Mass., Weekly Republican)

Educators throughout the United States, especially public school men, are showing more anxiety over the future of education than before since the beginning of the economic debacle. As municipal and state retrenchment in expenditures advances, with increasing severity, they are plainly fearful lest the educational progress of a whole generation be sacrificed.

The educational survey published in summary form in adjoining columns gives expression to a genuine alarm. The scope of the survey is national; and the conclusions correspond to the scope. Much that is presented would still be true in many states of the Union had no depression fallen upon the American people. The inequality of educational opportunity for children in the different localities of a state, as well as in the different states, had challenged attention years since, and in Massachusetts certainly state aid for rural schools has become an established state policy. The report concludes that nationally the shifting of the burden of the support of education from local communities to the commonwealth is a fundamental change now required in the interest of the nation.

That an educational crisis is impending, to be measured eventually by the duration and future intensity of the financial strain upon the taxpayers of the country, is not now a sensational view to take. All public functions are being searchingly examined for possible economies—rightly so. The special peril arising is that the finest products of our civilization may suffer unduly and unfairly in the crush and jam of services aroused to a frantic competition for public support.

If the curtailment of public functions is to be intelligently done, with the least possible loss not only to the present generation but to the generations to come, there must be an evaluation of the social services of the various governments, local, state and national, to which class selfishness and temporary political power and the drives of organized groups shall not be the sole contributors. So far as the schools are concerned, everywhere an appreciation of the importance of educating the young, if civilization is not to receive a catastrophic throwback, needs to be emphasized and cultivated.

Civilization as we have known it could be lost within 50 years if the educational process should be paralyzed. That will not happen. But, in this connection, it is desirable not to forget that some functions of government are actually more important than others; that, if there is not to be a subsidence of the whole social order in this country sufficient to halt all progress for a century, we must be prepared to sacrifice, to the limit of endurance, for the children and their educational opportunities.

## ABOUT THE CAMPUS

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Dr. Harry Laidler, executive director of the League for Industrial Democracy, spoke three times at the College Jan. 19. He is an author, lecturer, and economist of national fame. His addresses were under the auspices of the Y. M. C. A. and Y. W. C. A.

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The Gorillas took the two Emporia basket ball teams "into camp" in hard fought battles on the Emporia courts at the Christmas Holidays.

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Powell Weaver, Kansas City organist, gave a concert at the College Tuesday, Jan. 24. He has been organist of Grand Avenue Temple in Kansas City, Mo., since 1912. His concert, under the auspices of Sigma Alpha Iota, women's music fraternity, was a great treat to music lovers.

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Irvin Luthi, president of the Student Council, attended the annual convention of the National Student Federation of America held in New Orleans Dec. 28-31.

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Michael Johnnedes, a native of Palestine who spoke at a joint meeting of the Y. W. C. A. and Y. M. C. A., stated that the best means to obtain a perfect civilization would be the unification of the Eastern and the Western worlds.

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The Phi Sigma Epsilon annual frolic Feb. 9 was one of the bright spots in the winter's entertainments. Margaret Mary Mackei of Pittsburg was chosen as the beauty queen in a contest sponsored by the fraternity in connection with the frolic.

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Miss Velma Schumard of the Kansas Gas and Electric Company and a K. S. T. C. alumna gave several demonstrations of food preparation by means of electricity in the Home Economics department the latter part of January.

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Prof. I. G. Wilson, head of the English department, was a guest speaker at the Pittsburg Shriners' noonday luncheon recently. He discussed George Peabody as a philanthropist of the common people.

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The Y. W. C. A. held a novel ceremony early in January at a cabinet meeting at which were burned mortgages on the association's house and notes which had been paid. This ceremony erased all old debts against the organization.

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Greek men about the campus were worrying about their taxes after the ruling of the State Supreme Court subjected their houses to taxation. There were many theories advanced by the officers as to how these taxes would be met—and they are still wondering.

The Festival Orchestra under the direction of Walter McCray recently gave concerts in Joplin and in Fort Scott. Philipp Abbas, cellist, and Rhetia Hesselberg, violinist, were the solo artists. Concerts are to be given in other cities.

The Joplin and Pittsburg Railway Company discontinued street car service in Pittsburg and to the College Feb. 25. This change caused many students to be late for their classes the following Monday morning as they had not judged the "walking distances" any too well. A bus service is operating tentatively until a permanent franchise may be had.

Twenty-six members of the College faculty, representing almost every department, attended meetings of the Kansas State Teachers Association in Topeka Feb. 10 and 11.

The Southeastern Kansas section of the American Chemical Society meets from time to time at the College. Dr. O. W. Chapman is secretary-treasurer of the organization.

Dr. C. W. Street, head of the Department of Education, has published a book entitled "State Control of Teacher Training in the United States." The book was printed in the K. S. T. C. School of Printing. Dr. Street wrote the book in partial fulfillment of requirements for his degree of doctor of philosophy at Columbia university.

Dr. Albert E. Winship, lecturer, editor and educator who died at his home in Cambridge, Mass., recently, had lectured at the College on an average of twice a year for nearly twenty years. His interesting addresses were a source of inspiration to thousands of K. S. T. C. students.

College debaters met a Drury College team in a dual meet here Feb. 22. The question for debate was: "Resolved, That the United States should agree to the cancellation of the Inter-allied war debts." The K. S. T. C. team consisted of Lois Hallacy and Lucy Mae Ericson, affirmative, and Beulah Ware and Vivian Ison, negatives.

The Rural Song Fest, in which children from the fifth to eighth grades of about 50 schools participate, is to be held at the College on March 17 this year, under the joint auspices of the Music and Rural Education departments. The objectives of this song festival are to interest rural children in wholesome music, to provide an opportunity for variety in their school work, and to get the rural schools in contact with the College.

Dr. John Ise, head of the Department of Economics at University of Kansas, gave a talk on "War Debts" and "Technocracy" to the College students Jan. 13.

A concert by the Men's Glee Club Jan. 26 in the Auditorium was well received. The concert was under the direction of Prof. Otto Booker.

The Dramatic Art class pleased a large crowd with a varied repertoire Jan. 20 in its presentation of three one-act plays. Miss E. Madge Jones, assistant professor of speech, directed the plays.

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Walter M. Wallack, who received his degree here in 1924, has recently been appointed to head the reorganization of the educational system on the state reformatory at Elmira, N. Y. Mr. Wallick is known as one of the foremost young educators of the country. He directed vocational education in Haiti for about two years before American officials were withdrawn there.

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A new curriculum, Business Administration, has been organized in the Commerce department. The first two years work are chosen largely from the College of Liberal Arts, while the senior work consists principally of Business Administration, Economics, and Statistics. The Bachelor of Science degree in Commerce will be given upon completion of this curriculum.

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Thirty-one students are enrolled in the evening class in astronomy, conducted by Prof. J. A. G. Shirk, head of the Mathematics department. The class meets from 7 to 9 o'clock on Monday evenings to avoid conflicts in schedules. In addition, Professor Shirk is conducting a series of lectures at Joplin on Wednesdays at 2:30 for the Joplin chapter of the A. A. U. W. Last semester five delegations of students from neighboring schools visited the observatory for instruction in astronomy.

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An exhibit of a series of wood-block cuts, the work of Margaret Whittemore of Topeka, was held in the art room of the Music Hall during the week of Feb. 13-19, sponsored by the Art club.

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In the Kanza friendship contest held recently, Esther Sharp, junior, of Oswego, and Carl Jackson, sophomore, of Carthage, were chosen the most friendly girl and boy on the campus. Full-page photos of the Friendly King and Queen will be in the Kanza. The friendship theme is being carried out in this year book, which is dedicated to Dean Hattie-Moore Mitchell.

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Dr. Charles Wakefield Cadman, internationally known American composer, authority on Indian music, and pianist, will conduct a College chorus of selected voices in a program of his own compositions at the Music Festival this spring. Dr. Cadman is probably best known for his compositions, "At Dawning" and "From the Land of Sky-Blue Water."

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Plans for the seventh annual High School Scholarship Contest to be held here April 22 are being made by a special committee of which

Edgar Mendenhall is chairman. These contests tend to give due emphasis to scholarship in academic subjects and in a measure check the efficiency of high school instruction. Contestants from Kansas, Missouri, and Oklahoma high schools are eligible.

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Miss Jane M. Carroll, principal of the training school, spoke before the Kansas State Art Association at Topeka Feb. 11 on "How Art Should Function in the Elementary Schools."

First Summer Session

June 5--August 4

Second Summer Session

August 5--September 1

This summer will be an opportune time to attend summer school. K. S. T. C. is noted for its high standards of instruction and low cost of living. This summer it will offer during the first session:

Large and complete faculty.  
Instruction in all departments.  
Graduate work in ten departments.  
Eight or nine hours of credit.

Four hours of credit may be obtained in the second session.

Almost a semester's work may be done by attending both sessions.

For further information write

Kansas State Teachers College  
Pittsburg, Kansas