THE FAIRHOPE IDEA IN EDUCATION

MARIETTA JOHNSON

PUBLISHED BY
THE FAIRHOPE EDUCATIONAL
FOUNDATION

What Is Education?

THE schools are engaged in "raising children" and it is to the best interest of society to produce the finest type of child—strong of body, intelligent of mind, sweet and sincere of spirit. To do this requires a study of the development of the child and the nature and needs of childhood. The integrity of the nervous system must be preserved, the order of development must be followed. If the nervous system of the growing child is too delicate and unformed safely to engage in formal work of the primary school at an early age, why not postpone it? If the young child suffers from fatigue by being constantly directed, why not provide conditions for self-prompted occupations?

The Child Needs to Create

The mind develops through interest. The supreme question for the schools to consider is therefore: "What are the interests of childhood?" In general, we know that children are interested in things of sense. They should be allowed the free use of materials and be permitted to create things. Using material to express his own thought is a demand of the child's nature which we dare not ignore. Judgment and reason are developed through spontaneous activity in concrete situations. Personal interest sharpens the intellect. Therefore we must allow ample opportunity for meeting situations in which the child is keenly interested. The acquiring of information through the formal lesson and recitation plan gives little opportunity for the development of sound judgment.

True Growth Unselfconscious

Mere informational studies do not tend to develop the highest intelligence. All conceptions are gained through experience not from instruction. The moral development of the child requires a life of sincere, unselfconscious experiences. Working for grades, marks, promotions, etc., tends through false motivation to divide the unity of the being. He should study because he desires to know or needs the

information, not merely because it is required or because he will receive recognition. This is true growth.

Fearlessness is a demand of the spirit. Self-consciousness is a kind of fear. The child who is constantly marked and graded and measured develops an inhibiting self-consciousness which may become paralyzing in later life. Or, he may become wholly "externalized," depending entirely on outer suggestion, or he may become arrogant and egotistical. No doubt, the anti-social adults of today are in large part a product of this standardization of the process of learning.

Discipline

Discipline is necessary for strong character. The ability to persist and endure under unpleasant conditions for a desirable end is one of the most necessary elements of character. That he may acquire this moral power, every child must be allowed ample opportunity to work and struggle for an end which *is* to him of *supreme importance*. Working under constant direction, being allowed no freedom of choice, tends to weaken his will and makes him dependent on external influences. Stronger inner purpose is absolutely essential and must not be destroyed.

Better Methods Possible Now

It is not necessary for the school room to be overcrowded and so to prevent the intimate personal relation which should exist between teacher and pupil. There is plenty of money to provide a teacher for every twenty children in the public schools; the child's proper growth is of supreme importance.

It is not necessary to subject the child to the formal work of the present curriculum. He may safely be allowed to engage in all the activities and occupations which the nature of childhood demands. If he lives a wholesome, happy, intelligent life at eight, ten or twelve years of age, he is ready for the high school process at fourteen.

It is not necessary to subject the child's spirit to the pressure of external demands, grading, marking, etc. It is quite possible and practical to permit him to grow in an unselfconscious way, knowing that the information demanded by the curriculum will be acquired in due season.

Education Is Growth

No child should ever "fail" in getting an education. All should flourish and succeed. The school process must fit everybody. A sound, accomplished, beautiful body and an intelligent, sympathetic

mind, a sweet, reverent spirit—these are the immediate ends in education. In the measure that the school process tends to bring about these results, it is educational. In the measure that it does not, it is not educational, however informational it may be.

Not a "Do As You Please" Plan

This is the time for reconstruction in every department of human activity. Let us study the development of the child. Let us try to discover the nature of childhood. Let us try to find out the needs of the body, the needs of the mind and the needs of the spirit, and make an effort to provide these needs. Education is growth. The child is too unformed, too unripe, too immature to know what is best for him or to be permitted to "do as he pleases" in this matter of growth. We must insist on obedience, even using physical force, if necessary, but in doing so we must know that we are requiring the things that are best for his nature. When this is done, resort to force will be of rare occurrence with a normal child.

Right Conditions for Growth

A division of the intellectual and emotional life of the child is very easily attained. This division is wasteful. Too much praise or criticism develops this double motive. Children should be allowed to live their lives straight out. They should not hesitate to expose their ignorance. When children are stimulated to study for fear of failure to please the teacher or parent, to get a grade or to be promoted, a subtle influence is at work producing double motives. This not only interferes with the coördination of the nervous system, often resulting in ill health, but also prevents clear thinking, and most of all, interferes with that basic sincerity which is the fundamental condition of a fine moral life. I do not wish to minimize strong, fine, yes even thorough intellectual work, this is quite as real a need of the child as is good food. However, the art of the mother and of the teacher is to provide this intellectual stimulus. No reward is ever necessary for studying, or learning or thinking. They are their own reward. The educational system which we have built up demands explicit preparation for the next grade all the way along. This is absolutely unnecessary and constitutes one of the most formidable obstacles to normal growth. Parents are often unable to recognize intellectual activity in children. They are inclined to believe that a child is not having desirable intellectual experience unless he is studying books under the immediate direction of an adult. The finest intellectual growth is secured in the course of wholesome experiences where children are constantly meeting situations and mastering problems of their own. All creative work is intellectual. Every home and

school should be provided with an unlimited supply of material through which children may develop, not only the creative impulses and thinking power of the highest order, but may also experience social relations of the finer type.

We are all inclined to think of children as little adults and we often treat them as though childhood were a preparation for adult life. Would it be possible for us to think of childhood as a stage in the development of the individual, very important on its own account? We would then think of children as unique individuals demanding a unique environment suited to their peculiar needs. If we were able to provide the right conditions of growth in every stage of the development of the child the finest maturity would be assured.

When we think of the marvelous increase in weight from birth to fifteen years we are impressed by the tremendous importance of these years for growth. The main work of childhood is to elaborate and discharge energy. There must be developed a fine, bony structure, strong supple muscles and a coördination of the nervous system which will be the basis of a fine moral life.

The Test

No one knows perfectly the exact order of development of the child and no one dares to prescribe a scientific formula for his development. But it is our supreme duty to try to know. The test of the environment is the reaction of the child. If the program today has tended to invigorate and strengthen the body, has caused intelligent activity of mind and ministered to the sweetness and sincerity of the spirit, it has been educational. Let us change all institutions of learning into educational institutions.

Summing Up the Fairhope Idea

In a word, Organic Education seeks to know and meet the needs of the growing child. In doing this the following points are emphasized:

1. The fixed furniture in a school is replaced by chairs and tables or movable furniture, which permits a much more informal relation between the children and the teacher and between the child and his fellows. This results in a relaxation which is necessary to growth.

2. An effort is made to have all the work in the school minister positively to the health of the nervous system, and all work which is inimical to nervous coördination is omitted. This means that the

formal work of reading and writing is postponed until eight or nine or ten years of age.

3. All specialization for the undeveloped child is dangerous and may interfere with growth. Therefore, external efficiency in any skill or learning is minimized.

4. In order to preserve and perfect normal intellectual activity the interests of childhood are studied and an effort made to meet them. This means creative handwork as well as formal studies.

5. In order to preserve the union of the intellectual and the emotional life, not only the creative handwork must be provided but the purposefulness and initiative of the children must be respected.

6. Unselfconsciousness is necessary to the health of the spirit. All external demands, with external rewards, are excluded from the school program. Therefore no lessons are assigned, below the high school, but studies are pursued because of their interest, and inner satisfactions are the only rewards.

7. All grading, marking, and promotion tend to develop double motives. This is fatal to unity of being and sincerity. Therefore, the idea of grouping based on achievement or attainment is impossible.

8. As children must be grouped for convenience, and as grouping according to chronological age tends to eliminate self-consciousness either of superiority or inferiority this is the method adopted. The motive for work then is one of interest and pleasure or necessity which is easily discerned and the sincerity and freshness of intellectual attack is preserved.

9. The new education does not engage in a do-as-you-please program. The child is too unformed, too unripe, too ignorant, to know what is good for him. The new education insists on controlling and directing the child but studies to have this direction and control determined by the need of the child rather than the convenience of the adult.

10. The new education believes that society owes all children guidance, control, instruction, association, and inspiration, that is, schooling, through the primary, elementary, high school and college phases of growth. The whole question becomes, what are the needs of the body, the mind and the spirit? The new education is committed to answer these questions. In the measure that the institution provides activities and exercises which tend to bring about a sound, accomplished, beautiful body, an intelligent, sympathetic mind, sweet, sincere spirit, it is educational. In the measure that it does not, it is not educational however informational it may be. The new education identifies education and growth. It has small eye to the future and no eye to the market. It is concentrated upon immediate human ends. Growth is for growth. The process and the end are one.

History of the Organic School at Fairhope, Alabama

THE School of Organic Education at Fairhope, Alabama, opened in 1907 with six pupils in a little cottage. It has now a campus of ten acres, nine buildings and an average enrollment of 160 pupils.

This school has always been free to the children of the town of Fairhope, the desire being to conduct the work under public school conditions. In order to make this possible, the school has been supported almost entirely by voluntary contributions. Notwithstanding the handicap of uncertain support, the results have been gratifying.

At Fairhope three distinct things have been accomplished. First, the abolition of the fixed desk. There is not one to be found in the place. Some of the classes are held out doors and some in class rooms but in all the children move about freely. Secondly, assigned tasks have been completely abolished. The teachers do not think of assigning a set amount of work to be completed in a certain time any more than they would of requiring a child to eat any particular amount in a certain time. The Fairhope children work according to their individual capacity, and since every individual is unique there can be no other reasonable standard of accomplishment. Perhaps the most important of departures is the discarding of the usual requirements for promotion. At Fairhope a child may not do much in one or more subjects and still move ahead with his group without being required to make up or repeat these subjects. In this way he keeps with children of his age and avoids discouraging consciousness of failure. There is no greater fallacy in education than this one of the need of "making up" studies.

The children come to Fairhope at four years of age. They have, to some extent, the usual kindergarten work but the material is freer. They have at the beginning what all the Fairhope children have through their entire school life—creative hand work, music, story telling, singing, folk dancing and nature.

At six years of age they go into the "first life class" as it is called, but they still have no formal work that calls for close focusing of eye muscles or for any fine muscular adjustment. Their work includes crafts, gardening, projects, dramatics, nature, music and dancing.

Both girls and boys attend. All grades are represented from kindergarten through a complete high school course. There is also a two year training course for teachers. Graduates from the Organic School have entered many institutions of higher learning and have done well.

The Fairhope Educational Foundation

In August, 1913, a group of people interested in liberal education met in Greenwich, Conn., and organized the Fairhope League, with the primary purpose of supporting and developing the Organic School, and of assisting in introducing the principles of the Fairhope Idea in the general educational process. This idea, in brief, maintains (a) that education and normal growth are identical; that the end is inherent in the process, that is, the end in education is immediate growth—life itself; (b) that the school program to be educational must tend to create and preserve sincerity, fearlessness, and unself-consciousness of spirit, intelligent and sympathetic mental activity, and to develop a sound, accomplished, beautiful body; (c) that grades, marks, examinations or promotions are not necessary for growth, hence are uneducational as they often prevent growth; (d) that the institution must not ask "What do you know?" but "What do you need?" and the nature of the growing child indicates the answer; (e) that in the measure that the school program meets the needs of the unfolding organism at every stage of its development, it is educational; (f) that society owes the young guidance, control, instruction, association with others, and inspiration throughout childhood and youth.

In 1920, the organization renamed itself the Fairhope Educational Foundation, and in 1924, it became incorporated under the Membership Corporation Law of the State of New York.

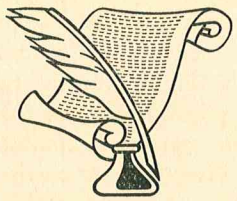
This step of incorporation was taken for the purpose of placing the Foundation on a sound basis so that it might solicit and secure substantial funds for its maintenance and support. By means of the "background" of the incorporation, the Foundation is able to assure prospective contributors of the stability of the work.

In the fall of 1926, a New York office of the Fairhope Educational Foundation was opened at 159 E. 33rd St., and a secretary engaged. The purpose of this office is, besides acting as headquarters for the various Fairhope activities such as the Summer School at Greenwich, the Winter School at Fairhope, Alabama; to conduct a persistent and practical drive for members of the Foundation.

There are four types of membership: life members contributing

one thousand dollars, sustaining members, annual dues one hundred dollars, associate members, annual dues ten dollars, and active members, annual dues of three dollars.

Besides the collection of funds for the support of the Fairhope School, the New York office will handle the advertising and publicity for the School and the Idea in general, with the hope that the School may eventually become self-supporting and that the Fairhope Idea may be used by other schools and that the whole educational system of the country may benefit by the investigations in child health made at Fairhope under the direction of Marietta Johnson.



A Chapter from

"Schools of Tomorrow"

By JOHN DEWEY

ROUSSEAU'S teaching that education is a process of natural growth has influenced most theorizing upon education since his time. It has influenced the practical details of school work to a less degree. Occasionally, however, experimenters have based their plans upon his principles. Among these experiments is one conducted by Mrs. Johnson at Fairhope, Alabama. To this spot during the past few years students and experts have made pilgrimages, and the influence of Mrs. Johnson's model has led to the starting of similar schools in different parts of the United States. Mrs. Johnson carries on a summer course for training teachers by giving a working object lesson in her ideas at Greenwich, Connecticut, where a school for children has been conducted as a model.

Her main underlying principle is Rousseau's central idea, namely: The child is best prepared for life as an adult by experiencing in childhood what has meaning to him as a child; and, further, the child has a right to enjoy his childhood. Because he is a growing animal who must develop so as to live successfully in the grown-up world, nothing should be done to interfere with growth, and everything should be done to further the full and free development of his body and his mind. These two developments go on together; they are inseparable processes and must both be constantly borne in mind as of equal importance.

Mrs. Johnson criticizes the conventional school of today. She says it is arranged to make things easy for the teacher who wishes quick and tangible results; that it disregards the full development of the pupils. It is arranged on the fatal plan of a hothouse, forcing to a sterile show, rather than fostering all-around growth. It does not foster an individuality capable of an enduring resistance and of creative activities. It disregards the *present* needs of the child; the

fact that he is living a full life each year and hour, not waiting to live in some period defined by his elders, when school is a thing of the past. The distaste of children for school is a natural and necessary result of such mistakes as these. Nature has not adapted the young animal to the narrow desk, the crowded curriculum, the silent absorption of complicated facts. His very life and growth depend upon motion, yet the school forces him into a cramped position for hours at a time, so that the teacher may be sure he is listening or studying books. Short periods of exercise are allowed as a bribe to keep him quiet the rest of the time, but these relaxations do not compensate for the efforts which he must make. The child is eager to move both mentally and physically. Just as the physical growth must progress together with the mental, so it is in the separate acts of a child. His bodily movements and his mental awakening are mutually dependent upon each other.

It is not enough to state this principle without carrying its proof into practice, says Mrs. Johnson. The child with the well-nourished, active body is the child who is most anxious to do and to know things. The need of activity must be met in the exercise of the school, hour by hour; the child must be allowed to move about both in work and in play, to imitate and to discover for himself. The world of objects around him is an unexplored hemisphere to the child even at the age of six years, a world constantly enlarging to his small vision as his activities carry him further and further in his investigations, a world by no means so commonplace to him as to the adult. Therefore, let the child, while his muscles are soft and his mind susceptible, look for himself at the world of things both natural and artificial, which is for him the source of knowledge.

Instead of providing this chance for growth and discovery, the ordinary school impresses the little one into a narrow area, into a melancholy silence, into a forced attitude of mind and body, till his curiosity is dulled into surprise at the strange things happening to him. Very soon his body is tired of his task and he begins to find ways of evading his teacher, to look about him for an escape from his little prison. This means that he become restless and impatient, in the language of the school, that he loses interest in the small tasks set for him and consequently in that new world so alluring a little while ago. The disease of indifference has attacked his sensitive soul, before he is fairly started on the road to knowledge.

The reason for having a school where children work together is that the child must learn to work with others. Granting this, Mrs.

Johnson has tried to find a plan giving the utmost liberty of individual development. Because the young child is unfitted by reason of his soft muscles and his immature senses to the hard task of settling down to fine work on the details of things, he should not begin school life by learning to read and write, nor by learning to handle small playthings or tools. He must continue the natural course he began at home of running from one interesting object to another, of inquiring into the meaning of these objects, and above all of tracing the relation between the different objects. All this must be done in a large way so that he gets the names and bearings of the obvious facts as they appear in their order. Thus the obscure and difficult facts come to light one after another without being forced upon the child's attention by the teacher. One discovery leads to another, and the interest of pursuit leads the child of his own accord into investigations that often amount to severe intellectual discipline.

Following this path of natural growth, the child is led into reading, writing, arithmetic, geography, etc., by his own desire to know. We must wait for the desire of the child, for the consciousness of need, says Mrs. Johnson; then we must promptly supply the means to satisfy the child's desire. Therefore, the age of learning to read is put off until the child is well grounded in his experience and knowledge of the larger relations of things. Mrs. Johnson goes so far as to prevent children from learning to read at too early an age. At eight or nine years, she thinks they are keen to explore books just as they have previously explored things. By this time they recognize the need and use of the information contained in books; they have found out they can get this information in no other way. Hence, the actual learning to read is hardly a problem; children teach themselves. Under the stimulus of interest in arriving at the knowledge of some particular subject, they overcome the mechanical difficulty of reading with ease and rapidity. Reading is not to them an isolated exercise; it is a means of acquiring a much-desired object. Like climbing the pantry shelves, its difficulties and dangers are lost sight of in the absorbing desire to satisfy the mental appetite.

Each of the subjects of the curriculum should be given to the child to meet a demand on his part for a greater knowledge of relations than he can get from studying objects. Arithmetic and abstract notions represented by figures are meaningless to the child of six, but numbers as a part of the things he is playing with or

using every day are so full of meaning that he soon finds he cannot get along without a knowledge of them.

Mrs. Johnson is trying an experiment under conditions which hold in public schools, and she believes that her methods are feasible for any public school system. She charges practically no tuition, and any child is welcome. She calls her methods of education "organic" because they follow the natural growth of the pupil. The school aims to provide for the child the occupations and activities necessary at each stage of development for his unfolding at that stage. Therefore, she insists that general development instead of the amount of information acquired, shall control the classification of the pupils. Division into groups is made where it is found that the children naturally divide themselves. These groups are called "Life Classes" instead of grades. The first life class ends between the eighth and ninth years; the second between the eleventh and twelfth, and since an even more marked change of interests and tastes occurs at the period of adolescence, there are distinct high-school classes. The work within the group is then arranged to give the pupils the experiences which are needed at that age for the development of their bodies, minds, and spirits.

Doing forced tasks, assignment of lessons to study, and ordinary examinations have no share in the Fairhope curriculum. Hence, the children do not acquire that dislike of learning and mistrust of what a teacher or text-book says, which are unfortunately so common among scholars in the ordinary school. They exercise their instincts to learn naturally, without that self-consciousness which comes from having been forced to keep their minds on examinations and promotions.

Bright and intelligent children often acquire a distaste for the schoolroom and what comes out of it, which they not only never wholly outgrow but which is a real handicap to them as they grow up, often preventing them from taking their college work seriously, and making them suspicious of all ideas not actually deduced from their own experience outside the classroom. Perhaps they grow so docile they acquiesce in all authoritative statements whatsoever, and lose their sense of reality. We tell our children that books are the store-houses of the world, and that they contain the heritage of the past without which we would be savages; then we teach them so that they hate books of information and discount what a teacher tells them. Incompetency is general not because people are not instructed

enough as children, but because they cannot and do not make any use of what they learn. The extent to which this is due to an early mistrust of school and the learning associated with it cannot be overstated.

The students at Fairhope will never have this handicap to contend with. They are uniformly happy in school, and enthusiastically proclaim their "love" for it. Not only is the work interesting to the group as a whole, but no individual child is forced to a task that does not appeal; each pupil may do as he pleases as long as he does not interfere with any one else. The children are not freed, however, from all discipline. They must keep at work while they are in school, and learn not to bother their neighbors, as well as to help them when necessary. Caprice or laziness does not excuse a child from following a healthy or useful régime.

Mrs. Johnson feels that children in their early years are neither moral nor immoral, but simply unmoral; their sense of right and wrong has not yet begun to develop. Therefore, they should be allowed as much freedom as possible; prohibitions and commands, the result of which either upon themselves or their companions they cannot understand, are bound to be meaningless; their tendency is to make the child secretive and deceitful. Give a child plenty of healthy activity. When he must be disciplined, do not appeal to a sense which he has not got, but show him by a little pain if necessary what his naughty act meant to his playmate. If he is to share in fun and good things with his family and friends, he must behave so that they will want his company. This is a motive which a young child can understand, for he knows when his friends are agreeable or disagreeable to him. There is less in such a scheme of discipline that impels the child to shirk or conceal, to lie or to become too conscious of his acts, than in a discipline based on moral grounds, which seems to the child to be a mere excuse for forcing him to do something simply because some grown person wants it done.

Lack of self-consciousness is a positive gain on the side of happiness. Mrs. Johnson's scheme of discipline contributes toward that love of school and work which all teaching aims to establish. When work is interesting, it is not necessary to hamper children in their performance of it by meaningless restrictions and petty prohibitions. When children work willingly they come to associate learning with the doing of what is congenial. This is undoubtedly of positive

moral value. It helps develop a confident, cheerful attitude toward work; an ability to face a task without dislike or repulsion, which is of more real value in character building than doing hard, distasteful tasks, or forcing attention and obedience.

The division into age groups or "life classes" takes away that emphasis upon the pupils' failures and shortcomings which is bound to be more or less evident where pupils are graded according to their proficiency in books. The child who is slow mentally is not made to feel that he is disgraced. Attention is not called to him and he is not prodded, scolded, or "flunked." Unaware of his own weaknesses, he retains the moral support of confidence in himself; and his hand work and physical accomplishments frequently give him prestige among his fellows. Mrs. Johnson believes that the recitations and examination of the ordinary schoolroom are merely devices to make the work easier for the teacher; while the consciousness of what he does or does not "know," resulting from marks and grades, is harmful to the child just as an emphasis of his failures is harmful.

Especially marked is the contrast of the classroom exercises at Fairhope with recitations where, sitting still with their books closed, the children are subject to a fire of questions from the teacher to find out how much they remember of a lesson they are supposed to have "studied" alone. To quote again from Rousseau: "He (the teacher) makes a point of showing that no time has been wasted; he provides his pupils with goods that can be readily displayed in the shop windows, accomplishments which can be shown off at will. . . . If the child is to be examined, he is set to display his wares; he spreads them out; satisfies those who behold them, packs up his bundle, and goes his way. Too many questions are tedious and revolting to most of us and especially to children. After a few minutes their attention flags; they cease to listen to your everlasting questions and they answer at random." At Fairhope the children do the work, and the teacher is there to help them to know, not to have them give back what they have memorized. Tests are often conducted with books open, since they are not to show the teacher what the child can remember, but rather to discover his progress in ability to use books. Lessons are not assigned, but the books are open in the hands of the pupils and with the teacher they discuss the text, getting out of it all the joy and information possible. This stimulates a real love of books, so that these children who have never been assigned a lesson to study, voluntarily study the text after the

class work. They are not tempted to cheat, for they are not put in the position of having to show off.

The result of this system of discipline and study over and above satisfactory progress in the "three R's," is freedom from self-consciousness on the mental and moral side; the ability of a child to put all his native initiative and enthusiasm into his work; the power to indulge his natural desire to learn; thus preserving joy in life and a confidence in himself which liberates all his energies for his work. He likes school and forgets that he is "learning"; for learning comes unconsciously as a by-product of experiences which he recognizes as worth while on their own account.

The following activities have been worked out at Fairhope as a substitute for the usual curriculum: physical exercise, nature study, music, hand work, field geography, story telling, sense culture, fundamental conceptions of number, dramatizations, and games. In the second class map drawing and descriptive geography are added, for reading is acquired, and the number work is modified by the knowledge of figures. Each lesson is planned as a concrete experience with a definite end in view, appealing to the child as desirable. As would be expected from the emphasis put upon following the development of the child, physical exercise plays an important part in the day's work. It comes every day, during the regular school hours and usually in the first part of the morning while the children are fresh and energetic. For an hour the school is outdoors in a field the children call "the gym." Bars, horses, etc., are scattered about, and there is some one there to help them try new things and see that the work is well balanced, but formal gymnastics in the accepted meaning of the term do not exist. Mrs. Johnson believes that the distaste of children is sufficient reason for doing away with them, and that, since the growing child is constantly seeking of his own accord opportunities to stretch and exercise his muscles, all the school needs to do is to supply the opportunity, seeing to it that this is not indulged to the point of harming the child. The children fall naturally into groups; those who want to swing on the bars and rings, those who want to climb, to jump, or run, or throw, etc. Running usually takes the form of races; a tree is used as a target in the stone throwing contests. The children themselves have invented games to use on the apparatus, and the hour in the "gym" is one of the busiest in the day. It leaves the children eager and stimulated for their mental work, since it has meant no overworking of one set of muscles, no dull repetition of meaningless movements

at some one else's command. Besides this regular time for exercise, the children may study outdoors, and many of the classes are conducted in the open air. Indoors there are games, handwork, and dramatizations, all of which contribute to the physical well-being of the children. There are no cramping desks, the pupil may sit where or how he pleases, or even move from place to place if he does not disturb his fellows. The classes go on in a room in which two groups, each of fifteen or more children, are working, and the necessary quiet and order exist.

Nature study and field geography are conducted almost entirely out of doors. The children go into the fields and woods and look at the trees and flowers, ask questions about them, examine the differences in bark, leaves, and flowers, tell each other what they think, and use their books to answer questions that the trees and plants have suggested to them. They learn the meaning of the words pistils, stamens, and petals with flowers they have gathered, or watch a bee carrying pollen from plant to plant. Individual pupils are encouraged to tell the class what they may have learned at home, to bring flowers from their gardens, or to tell of things they have seen. The class visit a neighboring truck farm, recognize as many vegetables as they can, and learn the names and characteristics of the new ones. When they are back in the schoolroom those that can write make a list of all the vegetables they can remember, thus combining with their nature lesson a lesson in writing. There is a garden in the school grounds where the pupils learn to plow, rake, and plant, watch their seeds come up and grow and flower. In a little plot of ground that is their own, they observe all the phases in the cycle of plant life, and besides get the benefits of the moral training that comes from carrying through a piece of work that lasts several months and demands constant thought and care. This sort of work plays a large part in the curriculum of the younger children, for it seems to belong particularly to their world; to the world of definite, concrete objects which they see about them every day, which they can handle and play with, and which consequently arouse their curiosity.

The field geography is conducted in much the same way. Even the very young children acquire a good idea of the different sorts of rock formations, of the action of the wind and rain, of river currents, by direct observation; if textbooks are used they come afterwards, to explain or amplify something the pupils have seen. The soil about the school is clay and after a rain the smallest stream

furnishes excellent examples of the ways of rivers, erosions, watersheds, floods, or changing currents, while an explanation of tides or the Gulf Stream is made vital by a little trip to the Bay. A gully near the school building not only furnishes a splendid place for play but serves as a text-book in mountain ranges, valleys, and soil and rock formation. All this serves as an excellent foundation and illustration for the descriptive geography which comes later. The more advanced geography is principally commercial geography; and with the scientific background that the pupils have already obtained, the real significance of the relations between climates and crops, industries, exports and imports, and social conditions is much more likely to be understood.

The value of handwork is strongly emphasized at Fairhope, consistently with the emphasis put on physical growth. The little child must go on learning to coördinate with more and more skill his muscular movements if his body is to be developed to the highest standards of health and efficiency, and nothing contributes to this better than the controlled and rather delicate motions necessary for making things with the hands. The fact that he is making things gives just the stimulus the child needs to enable him to keep on at the task, to repeat over and over the same efforts of mind, hand, and eye, to give him real control of himself in the process. The benefits of handwork on the utilitarian side are just as great. The child learns how to use the ordinary tools of life, the scissors, knife, needle, plane, and saw, and gets an appreciation of the artists' tools, paint and clays, which lasts the rest of his life. If he is a child with initiative and inventiveness he finds a natural and pleasant outlet for his energies. If he is dreamy or unpractical, he learns a respect for manual work, and gains something toward becoming a well-rounded human being. Boys and girls alike do cooking and carpentry work, for the object of the work is not to train them for any trade or profession, but to train them to be capable, happy members of society. Painting or clay modeling play quite as large a rôle, even with the little ones, as carpentry or sewing, providing they serve a purpose or are sufficiently connected with other work to hold the pupil's interest. A sense of the beautiful is not consciously present in small children and must be developed through their handling of every-day objects if it is to become a real force in their lives. Therefore "art" is taught as part of the handwork, the story telling, the dramatization, or the nature study. The youngest children in clay modeling, painting, weaving paper mats, making paper or wood toys,

etc., are asked as much as possible to suggest things they want to make. With the acquisition of skill, they go on making more and more difficult objects; pupils of nine or ten make raffia baskets, boats, and dolls' furniture.

The story telling and dramatization are very closely connected and (up to the age of about ten) take the place of the usual book-work. Stories of literary value, suited in subject matter to the age of the pupils, are told or read to them, and they in turn are asked to tell stories they have heard outside of school. After the ninth or tenth year, when the children have learned to read, they read stories from books, either to themselves or aloud, and then the whole class discuss them. The Greek myths, the Iliad, and the Odyssey are favorites at this age, and very frequently without directions from the teacher, a class will act out a whole story, such as the Fall of Troy, or any tale that has appealed especially to their dramatic imagination. The school believes that this is the true way for young people to approach literature, if they are to learn to love and appreciate it, not simply to study the text for strange words and figures of speech. The pupils are not allowed to use books until the eighth or ninth year, and by this time they have realized so keenly their need, they beg for help in learning. The long, tiresome drill necessary for six-year-old children is eliminated. Each child is anxious to read some particular book, so there is little or no need to trap his attention, or to insist on an endless repetition. Mrs. Johnson believes also that it is better for the natural physical and mental development of the child, if learning to write and figure is put off as late as possible. Then pupils approach it with a consciousness of their real need for it, of the help it will be to them in their daily life. Their background of knowledge of things and skill acquired through handwork renders the actual processes of learning comparatively simple. Mrs. Johnson is convinced that a child who does not learn to read and write in her school until he is ten years old, is as well read at fourteen, and writes and spells as well as a child of fourteen in a school where the usual curriculum is followed.

The fundamental conception of number is taught orally. The smallest children begin by counting one another or the things about them. Then perhaps at the blackboard they will divide a line in half, then into three parts, then quarters. By means of objects or lines on the blackboard they next begin to add, to subtract, to take three-fourths, even to divide. The oral drill in this kind of work

is constant, and the children become thoroughly familiar with the fundamental processes of arithmetic, before they can write a number or know the meaning of the addition or multiplication sign. Then when the time comes, at about the age of nine, to learn to write numbers, the drill is repeated by using the conventional signs instead of lines or objects. The school has found that this method does away with the usual struggles, especially in learning fractions and their handling. Long division and the other complicated processes are taught after the pupils can write well and easily, and no emphasis is put on formal analysis until repeated drill has made the children fairly familiar with, and proficient in, the process. Games and contests of all sorts invented by the individual teacher are used to make this drill interesting to the pupils.

Sense culture means the specific training of the child's body and muscles to respond accurately to the desire to perform definite muscular or other sense acts; or more technically it means motor-sensory coördination. Besides the general training coming from handwork and physical exercise, special games are arranged to exercise the different senses. The youngest class does relatively most of this sense gymnastic. The whole class sits motionless and in absolute silence; some child tiptoes from his seat to another part of the room, and then with his eyes shut every other child tries to tell where he is; or one child says something and the others try to guess who it was, by the voice. To train the sense of touch, a blindfolded child is given some ordinary objects, and by touching them tries to recognize them. One of the favorite games of the whole school was invented to train muscular accuracy. Children of different ages, divided into groups, throw stones at a large tree in the yard. This game has all the zest of competition, while teaching the eye and hand to work together, and exercising the whole body. The unusual physical control of the Fairhope pupils is seen best in the carpenter shop, where even the youngest children work and handle full-sized tools, hammers, saws, and planes and do not hurt themselves. There is a foot power jig-saw in the shop and it is an instructive sight to see a child of seven, too small to work the pedal, holding his piece of wood, turning and shaping it in the saw without hurting himself.

The Fairhope pupils compare favorably with pupils in the ordinary public schools. When for any reason they make a change, they have always been able to work with other children of their age without extra effort; they are apt to be stronger physically and are much more capable with their hands, while they have a real love of books

and study that makes them equally strong on the purely cultural side of their work. The organic curriculum has been worked out in detail and in use longest for the younger children, but Mrs. Johnson is convinced the principle of her work will apply equally well to high school pupils and is beginning an experiment with high school children. Under her direction the school has proved a decided success. Time and larger opportunities will undoubtedly correct the weak spots and discrepancies that are bound to appear while any school is in the experimental stage. The school has provided conditions for wholesome, natural growth in small enough groups for the teacher (as a leader rather than an instructor) to become acquainted with the weaknesses of each child individually and then to adapt the work to the individual needs. It has demonstrated that it is possible for children to lead the same natural lives in school that they lead in good homes outside of school hours; to progress bodily, mentally, and morally in school without factitious pressure, rewards, examinations, grades, or promotions, while they acquire sufficient control of the conventional tools of learning and of study of books—reading, writing, and figuring—to be able to use them independently.

Should Children Under Ten Learn to Read and Write?*

By Prof. G. T. W. Patrick
The University of Iowa

THERE are certain propositions about education so evidently true that probably no parent or teacher would question them. For instance, the best school is one in which the course of study is progressively adapted to the mental development of the children. Again, certain subjects are adapted to children of certain ages or stages of development, and others are not. One would not recommend the study of logic or of the calculus to the average child of ten, nor would the teaching of English be wisely deferred until the age of fifteen. Finally, if the courses of study in our present school system shall be found to be arranged without regard to the order of mental development, they will sooner or later be modified in accordance with it.

Now the educational system in practice in the two or three hundred thousand public schools in the United States is a somewhat definite one, with a somewhat fixed order of studies through the different years or grades. In a majority of the States children are admitted to the schools at the age of six; in more than one third of the States children of five are admitted. In a general way we may say that during the first four years of school life the principal subjects occupying the time of the children are reading, writing, and arithmetic. To be more exact, we may cite, for instance, the city schools of Chicago. Exclusive of recesses and opening exercises, there are in these schools thirteen hundred and fifty minutes of school work per week. Of this time, in the first and second grades, six hundred and seventy-five minutes are devoted to reading, seventy-five minutes to writing, and two hundred and twenty-five minutes to mathematics. Seventy-two per cent of the total time is therefore consumed by these subjects. In the third grade the proportion is the same; in the fourth grade it is somewhat more than fifty per cent. I have mentioned the Chicago schools because this is one of those school systems where a liberal introduction of other subjects such as Nature

* Reprinted from the Popular Science Monthly, January, 1899.

study, physical culture, singing, and oral English, has somewhat lessened the time given to reading, writing, and arithmetic. Other cities, with few exceptions, will be found to give more rather than less time to these subjects. In the country schools, and indeed in a vast number of town and city schools, practically all the time during these early years is given to reading, writing, and arithmetic.

We must conclude, therefore, if our educational system is a rational one, that reading, writing, and arithmetic are the subjects peculiarly adapted to the mind of the child between the ages of five and ten. It is worth while to inquire from the standpoint of child psychology whether this be true. It should be observed, in the first place, that the manner in which our educational system has grown up is no guarantee that it rests upon a psychological basis. Our schools are exceedingly conservative. Any innovations or radical changes are resisted by the parents of the children even more strenuously than by school boards, superintendents, and teachers. Notwithstanding numerous and important minor improvements, the school system as a whole remains unchanged. Our children of seven and eight years are learning to read and write because our grandfathers were so doing at that age.

We can not here discuss the origin of our present school curriculum, but, as explaining the prominence given to reading, writing, and arithmetic, it is worthy of notice that originally, the elementary school existed to teach just these three subjects. The primitive schoolmaster was not superior to the parents of the child, usually not their equal, in anything except his knowledge of "letters." So the child was sent to school for a short time to learn letters. It was not at all the funcion of the school to *educate* the child in all that was necessary to fit him for the duties of life. Afterward, as the scope of the school was enlarged, other subjects were added, and these were put *after* the original ones, and the schoolmaster, furthermore, came rather to take the place of an educator than a mere teacher of letters. It is conceivable, therefore, that the present accepted order of studies in our elementary schools rests upon an accidental rather than upon a psychological basis. It is true that modern educators have expressly considered the subject of the order and correlation of studies, as, for instance, in the case of the Committee of Fifteen, and that, while recommending minor changes in the school curriculum, they have not usually thought of questioning the position so long held by reading, writing, and arithmetic. In the report of the committee just referred to we find this expression: "The conclusion is reached that learning to read and write should be the leading study of the pupil in his first four years of school." But, again, it was not the function of this committee to suggest

sweeping changes, nor to raise the inquiry whether the system itself rests upon a psychological basis. Even if it did not rest upon such a basis, expressions like the above would not be unnatural on the part of committees appointed by bodies representing the system as a whole.

We may not, then, conclude *a priori* that our system of primary education is a sound one. They have indeed been other wholly different systems giving excellent results in their time, as, for instance, that of the ancient Greeks, where music and gymnastics, not reading, writing, and arithmetic, were the principal subjects occupying the time of the pupils.

Much attention has recently been given to the subjects of the physiology and psychology of children. These studies have been systematic, painstaking, and exact. It seems, indeed, to many people improbable that anything very new or very remarkable should just at this time be found out about children, and there have not been wanting either prominent educators or psychologists who have given public expression to warnings against the new "child study." But this, again, is not conclusive, for students of history may recall that every advance in science has met just such opposition—for instance, bacteriology, organic evolution, chemistry, and astronomy. Furthermore, when we reflect that scientific advance in this century has ever been, and inevitably, from the simple to the complex, and, further, that the brain of the child is the most complex thing in the whole range of natural history which science will ever have to attempt, it is not difficult to understand that scientific knowledge of it with its pedagogical implications has not belonged, at any rate, to the past. It will belong to the future, having, perhaps, its beginnings in the present. An educational system which has not reckoned with an accurate knowledge of the brain of the child may by accident be a correct one, but until such reckoning is made we can not be sure.

Our increasing knowledge of the child's mind, his muscular and nervous system, and his special senses, points indubitably to the conclusion that reading and writing are subjects which do not belong to the early years of school life, but to a later period, and that other subjects now studied later are better adapted to this early stage of development. What is thus indicated of reading and writing may be affirmed also of drawing and arithmetic. The reasons leading to this conclusion can be only very briefly summarized here.

As regards reading, writing, and drawing, they involve, in the first place, a high degree of motor specialization, which is not only unnatural but dangerous for young children. Studies in motor abil-

ity have shown that the order of muscular development is from the larger and coarser to the finer and more delicate muscles. The movement of the child are the large, free movements of the body, legs, and arms, such as he exhibits in spontaneous play. The movements requiring fine coördination, such as those of the fingers and the eyes, are the movements of maturer life. If we reverse this order and compel the child to hold his body, legs, and arms still, while he engages the delicate muscles of the eyes and fingers with minute written or printed symbols, we induce a nervous overtension, and incur the evils incident to all violation of natural order. The increasing frequency of nervous disorders among school children, particularly in the older countries, is probably due in part to these circumstances. If we consider the brain of the child of seven or eight years, our conclusions are strengthened that he should not be engaged in reading and writing. At this age the brain has attained almost its full weight, and is, therefore, large in proportion to the body. Its development is, however, very incomplete, particularly as regards its associative elements—that is, the so-called association fibres and apperception centers. Such a brain constantly produces and must expend a large amount of nervous energy, which can not be used centrally—that is, psychologically speaking—in comparison, analysis, thought, reflection. It must flow out through the motor channels, becoming muscular movement. The healthy child is, therefore, incessantly active in waking hours, the action being of the vigorous kind involving the larger members. Hence we can understand that, of all the ways in which a young child may receive instruction, the method through the printed book is pre-eminently the one ill fitted to him.

The evil of this method is aggravated by the fact that, before the child can receive instruction through the book, a long time—several years, in fact—is spent in the confining task of learning to read. It comes about, therefore, that the child, at the very age when he should be leading a free and expansive life, is obliged to fix his eyes upon the narrow page of a book and decipher small printed symbols, in themselves devoid of life and interest. With respect to writing and learning to write the case is worse. A considerable amount of motor specialization is involved in forming letters upon the blackboard, but when the pencil and pen are used it becomes of an extreme kind. In the whole life history of the man there are no movements requiring finer coördination than those of writing with pencil or pen, yet our school system requires these of the child of six or seven years, makes them, indeed, a prominent part of elementary school life. In addition to the motor specialization of reading and writing is the physical confinement in the narrow seat and desk which is necessarily connected with them. The child of six or

seven has not reached the age when such confinement is natural or safe.

The injuries which I have mentioned relate to the nervous system as a whole. There are other injuries resulting from the reading habit in young children which concern the eyes directly. So much has been said and written lately about the increase of myopia and other defects of the eyes among school children, that I shall merely refer to this subject here. Upon entering school, children are practically free from these defects. Upon leaving school, a strikingly large percentage are suffering from them, more, however, as yet, in European countries than in America. The causes are many, but it is scarcely doubted that the chief cause is found in bending over finely printed books and maps, and fine writing, pencil work, and drawing. If pencils, pens, paper, and books could be kept away from children until they are at least ten years of age, and their instruction come directly from objects and from the voice of the teacher, this evil could be greatly lessened.

If the above reasons for not teaching reading and writing to young children were the only ones, the objections could to a certain extent be overcome. Writing might, for instance, be practiced only on the blackboard with large free-hand movements, and letters could be taught from large forms upon charts. But we have to consider the questions whether reading and writing are in themselves branches of instruction which belong to the early years of school life, whether they may not be acquired at a great disadvantage at this period, and whether more time is not spent upon them than is necessary. It is a well-known fact that a child's powers, whether physical or mental, ripen in a certain rather definite order. There is, for instance, a certain time in the life of the infant when the motor mechanism of the legs ripens, before which the child can not be taught to walk, while after that time he can not be kept from walking. Again, at the age of seven, for instance, there is a mental readiness for some things and an unreadiness for others. The brain is then very impressionable and retentive, and a store of useful material, both motor and sensory, may be permanently acquired with great economy of effort. The imagination is active, and the child loves to listen to narration, whether historical or mythical, which plays without effort of his will upon his relatively small store of memory images. The powers of analysis, comparison, and abstraction are little developed, and the child has only a limited ability to detect mathematical or logical relations. The power of voluntary attention is slight and can be exerted for only a short time. All this may be stated physiologically by saying that the brain activity is sensory and motor, but not central. The sensory and motor mechanism has ripened, but not the associative. The brain is hardly

more than a receiving, recording, and reacting apparatus. It would be inaccurate, however, to express this psychologically by saying that perception, memory, and will are the mental powers that have ripened at the age of seven. This would be true only if by perception we mean not apperception, which involves a considerable development of associative readiness, but mere passive apprehension through the senses, and if by memory we mean not recollection, but mere retentiveness for that which interests, and if by will we mean not volition, but only spontaneous movement and readiness to form habits of action, including a large number of instinctive movement psychoses, such as imitation, play, and language in its spoken form.

Following out, then, somewhat as above, the psychology of the child, what kind of education would be particularly adapted to his stage of development? We ask not what *can* the child be taught, but what studies are for him most natural and therefore most economical. In the first place, from the development of the senses and the perceptive power above described, we infer that the child is ready to acquire a knowledge of the world of objects around him through the senses of sight, hearing, touch, temperature, taste, and smell. His education will have to do with real things and their qualities, rather than with symbols which stand for things. If we wish a general term for this branch of instruction, we may call it natural science, or, to distinguish it from science in its more mature form as the study of laws and causes, we may call it natural history, or, more briefly, Nature study. Although the appropriateness and economy of this study for young children has been known and proclaimed for more than a century, it is still in practice the study of later years, while young children study *letters*.

In the second place, from the development of the retentive powers of the child we infer that he is qualified to gain acquaintance not only with the real world around him, but with the real world of the past. We may call this history. History is now studied later by means of text-books. It may be studied with far greater economy during earlier years by means of direct narration by parent or teacher. It is wonderful how eagerly a child will listen to historical narration, and how easily he will retain it. This method of teaching history forms a striking contrast to the perfunctory manner in which it is often studied in the upper school grades, with the text-book "lesson," "recitation," and the "final examination." Upon the minds of many young people the study of history has a deadening effect when the history epoch is passed and the mathematical epoch has arrived. It has already been proposed, at a conference of educators lately held in Chicago, to extend the study of history downward

into the lower grades, a proposition fully sanctioned by psychological pedagogy. In what I have here said about history for young people I refer not to the philosophy of history, which comes much later in the life of the student, but to history as a mere record of facts and events, the kind of history which is now studied in the grammar and high schools, the kind which many educators who would make all children philosophers are now saying should not be studied at all.

In the third place, what studies correspond to the development of the will in the child from five to ten? It is the habit-forming epoch. It is the time when a large and useful store of motor memory images may be acquired, and when permanent reflex tracts may be formed in the spinal cord and lower brain centers. This is the time to teach the child to do easily and habitually a large number of useful things. If we use the term in its broadest sense, we may call this branch of instruction morals, but it will also include, besides habits of conduct, various bodily activities, certain manual dexterities, and correct habits of speech, expression, and singing. But here some restrictions must be observed. The habit-forming period begins at birth and continues far beyond the age of ten, and the period from five to ten is not the time for the formation of all habits. The order of muscular development must be observed, and all dexterities involving finely co-ordinated movements of the fingers, or strain of the eyes, should be deferred beyond this period, or at most begun only in the latter part of it; such, for instance, as writing, drawing, modeling, sewing, knitting, playing upon musical instruments, and minute mechanical work, as well, of course, as the plaiting, pricking, stitching, weaving, and other finger work still practiced in some kindergartens and primary schools.

We have thus seen that there are certain branches of instruction for which the mind of the child from five to ten has ripened, and which may, therefore, be taught most economically and safely during this period. Concerning the teaching of language I shall speak presently, but thus far we have found that from the psychological standpoint there are at any rate three subjects which are strikingly adaped to this period, namely, natural science, history, and morals, using these terms with the latitude and restriction already explained. Certain branches of Nature study and one branch of what we have called morals—namely, manual training—have in recent years been introduced into our best elementary city schools, and in a few schools history is taught systematically in the lower grades by means of stories. They have not, however, crowded out reading, writing, and arithmetic so much as crowded into them. But if we consider the great mass of schools in city, town, and country throughout the

land, the subjects which practically complete the elementary school curriculum—reading, writing, arithmetic, and geography—are, with the exception of the latter, found to be subjects which do not naturally belong to this period at all. Mathematics in every form is a subject conspicuously ill fitted to the child mind. It deals not with real things, but with abstractions. When referred to concrete objects, it concerns not the objects themselves, but their relations to each other. It involves comparison, analysis, abstraction. It calls for a fuller development of the association tracts and fibers of the cerebral hemispheres. The grotesque "number forms" which so many children have, and which originated in this period, are evidence of the necessity which the child feels of giving some kind of bodily shape to these abstractions which he is compelled to study. Under mathematics I do not, of course, include the mere mentioning or learning a number series, such as in the process called "counting," or the committing to memory of a multiplication table. Further more, in this and in all discussions of this kind it must be remembered that there are exceptional children in whom the mathematical faculty, or musical faculty, or literary faculty, develops much earlier than with the average child. If possible, they should have instruction suited to their peculiarities. But it is evident that, so long as children are educated in "schools," there must be a general plan of education, and that it can not be based upon exceptional children.

What we learn from physiology and psychology about the ripening of the child's mind is confirmed by the study of the social development of mankind. It is well known that in a general way the development of the child, both physical and mental, is an epitome of the development of the race. If we compare the physical and mental activities of the modern civilized man with those of the more primitive member of the race, we may learn what forms of physical and mental activity are natural in the different periods of child life. Some of the things which are characteristic of the modern as contrasted with the primitive man are sedentary habits, manual dexterities requiring finely coördinated movements both of the eyes and fingers, increasing devotion to written language and books as contrasted with spoken language, the lessened dependence upon the memory, the increasing subjectivity of mental life as contrasted with the purely objective life of the savage, and the increased importance of reflection, deliberation, and reasoning, with decrease of impulsive and habitual action. These things, then, we should expect to belong to the later period of child life, and studies which involve these activities will not be economically pursued in the elementary school grades. These laws are wholly overlooked in our traditional school curriculum. In practice we are saying to the

young child: "Man is a sedentary, reading, writing, thinking, reasoning being, possessing the power of voluntary attention. I am to educate you to be a man. Therefore, you must learn to sit still, to read, write, think, reason, and give attention to your work." The child of six or eight years is therefore given a book or pen, and put into a closely fitting seat and left to give attention to his work. This is precisely as if the mother should say to the infant at the beginning of the period of creeping: "You are a man, not a brute. Men go upright, not on all fours. You must walk, not creep."

I wish to call especial attention to the fact that it is only late in the history of the race that language has passed to its written form. Man is indeed now a reading and writing animal, but only recently has he become so. It is only since the invention of printing and the wide dissemination of books, magazines, and newspapers that reading has become a real determining factor in the life of the people. Even now the human organism is engaged in adapting itself to the new strain brought upon the eyes and fingers in reading and writing. We can understand, therefore, that it will demand a considerable maturity in the child before he is ready for that which has developed so late in the history of the race. The language of the child, like that of the primitive man, is the language of the ear and tongue. The child is a talking and hearing animal. He is ear-minded. There has been in the history of civilization a steady development toward the preponderating use of the higher senses, culminating with the eye. The average adult civilized man is now strongly eye-minded, but it is necessary to go back only to the time of the ancient Greeks to find a decided relative ear-mindedness. Few laboratory researches have been made upon the relative rapidity of development of the special senses in children, but such as have been made tend to confirm the indications of the "culture epochs" theory, and to show that the auditory centers develop earlier than the visual.

More and more attention is given in our elementary schools to the subject of language—more, as some think, than the relative importance of the subject warrants; but without discussing this question, it is indubitably shown by child psychology that it is the spoken language which belongs to the elementary school. The ear is the natural medium of instruction for young children, and all the second-hand knowledge which it is necessary that the child should receive should come to him in this way. It should come from the living words of the living teacher or parent, not through the cold medium of the printed book. In the elementary school, then, the child may be instructed in language as it relates to the ear and the tongue, and this is the real language. He may be taught to speak

accurately and elegantly, and he may be taught to listen and remember. He may study in this way the best literature of his mother tongue, and get a living, sympathetic knowledge of it, such as can never come through the indirect medium of the book. Indeed, this language study need not be limited to the mother tongue. There is no age when a child may with so great economy of effort gain a lasting knowledge of a foreign language as when he is from seven to eleven years old.

When the spoken language has been mastered in this way, and when the child has arrived at the reading and writing age, language in its written form may be acquired in a very short time, and that which now fills so many weary years of school life will sink into the position of comparative insignificance in which it rightfully belongs. Reading and writing have usurped altogether too much time. In the schools of today there is a worship of the reading book, spelling book, copy book, and dictionary not rightfully due them. By dropping the study of letters from the lower grades much needed time may be found for other timely and important subjects, such as Nature study, morals, history, oral language, singing, physical training, and play.

One of the greatest goods which would follow the banishing of the book from the primary and elementary schools would be the cultivation of better mental habits. Children suffer lasting injury by being left with a book in their seats and directed to "study" at an age when the power of voluntary attention has not developed. They then acquire habits of listlessness and mind-wandering afterward difficult to overcome. They read over many times that which does not hold their attention and is not remembered. Lax habits of study are thus acquired, with the serious incidental result of weakening the retentive power which depends so much upon interest and concentration. With the substitution of the oral for the book method, reliance upon the memory during the memory period will permanently strengthen the child's power of retention.

The period between the ages of five and ten years is an important one in the child's life. It is the time when the "let-alone" plan of education is of most value, for the reason that nearly all our educational devices beyond the kindergarten are more or less attempts to make men and women out of children. If the child at this age must be put into the harness of an educational system, his course of study will not be impoverished by the omission of reading and writing. To teach him to speak and to listen, to observe and to remember, to know something of the world around him, and instinctively to do the right thing, will furnish more than enough material for the most ambitious elementary school curriculum.