INTEREST AND EDUCATION

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CHAPTER ONE.

THE GROWTH OF INTEREST IN EDUCATION.

To trace the growth of interest in Education is to trace the development of the chief tendencies of our educational theory and practice during the last two centuries. It is true that there were educators previous to this time who advocated certain of those principles which have been embodied in the so-called New Education, but to Rousseau, Pestalozzi, Froebel and Herbart must be given the credit for the inception of these great educational tendencies.

Rousseau (1712-1778) was an advocate of many lofty ideas which he failed to incorporate into his own life. He was an erratic, self-satisfied character, possessed of a roving, shiftless disposition. Perhaps some of his very weaknesses aided him in reaching and understanding his theories of education, for he came in contact with Nature at first hand;he met the common people and understood their ways. Even if we loathe the life of indifference which he led, yet we must respect the teachings which were of such a startling character as to be reported as an indirect cause of the French Revolution. The New Education did not come as a gradual growth out of the previously existing systems, but it came as a revolution-- a revolt against the formalism of the 18th century. Many of the so-called new theories of to-day were put forward by Rousseau. The beaten path of tradition became his "war-path". His work of Destruction was of a fine order. His condemnations were warranted. The Old

Education was found guilty on many charges.

The Old Education stood for long and tedious hours of uninteresting work. In the study of texts in a certain prescribed way; in the study of the Classics in such a way that the instincts were repressed instead of being directed; in the absence of subjects such as Nature Study and History to appeal to the pupil's daily life and experience through his naturally inquisitive disposition; in these, often with no thought for the pupil's physical well-being, consisted the pleasures of education. The Old Education was based upon a false conception of the psychological processes of the child's mind. This "faculty" psychology regarded the mind as being made up of several more or less unrelated faculties. Thus memory, reason, imagination, etc., were for the most part independent of each other. For the training of each of these, there were some particular exercises which were best adapted to suit the different needs. Mathematics trained the Reason, facts in history, science and language, unrelated though they might be and wholly uncomprehended by the pupil, were used to train the Memory. Out of this conception grew the Theory of Formal Discipline, which assumed that the knowledge exercised in any one faculty of the mind was capable of developing power which could be transferred without loss to any other department. The discussion of this large subject is not within the scope of this thesis. Suffice it to say that

Herbart, Hinsdale, Dr. Horne, Ziller, Thorndike, Bagley, Ruediger, (#) and others, while they concede that there is a certain transfer of power yet reject the Doctrine of Formal Discipline because it is based upon a false psychology and because the transfer is slight except in exercises that are similar in character. Moreover the native ability of the pupil is overlooked, as is also the content of the curriculum. Recently Spearman has re-opened the subject.

Besides being based upon a false psychology, the Old Education was based upon a wrong conception of the relation of social, religious and educational beliefs and practices towards the child. Education sought to force upon the child the traditional forms of thought, action and of emotional reaction. Religion claimed that the nature of man was depraved and hence all natural desire, instincts, and natural interests were to be shunned and eradicated. The child's will was to be broken. The senses were not trustworthy and hence were not to be used in the acquisition of Knowledge. The disciplinary value of a task consisted in its intellectual difficulty and in the fact that it was distasteful to the performer. This formed its educational value. It is little wonder that the Old Education was termed the education of "effort" and the school a place

(#) Thorndike: "Principles of Teaching" Chap. XV.
Ruediger: "The Principles of Education" Chap. Vl.

of "pain".

Such were the conditions against which Rousseau waged bitter war. He thought of the child as a child and not as an adult in ministure. His scheme of education "according to nature" is set forth in his Emile. Nature is used in a three-fold sense: --(1) Man governed by the laws of his own nature. (2) The instinctive judgments, the natural impulses and emotions. (3) The animal and vegetable life of the outside world. This great educational treatise setting forth Rousseau's ideal scheme of education has had a great influence over subsequent educators. In spite of the contradictions, the conflicting paradoxes, and the entirely unpractical nature of the system as a whole, yet it contains much that has since been embodied in our educational practice. What concerns us most in this discussion is the fact that Rousseau caused the natural interests of the child to serve as guides to his education. He realized that education was a natural development of the child from within, that the child's natural instincts and interests are the bases for all educational effort, and finally, that education was Life to the child and not a preparation for living later on, as the old conception held. Thus the education set forth was a direct negation of the education of the Renaissance.

Interest first found a permanent place in the Emile. Before this time an interesting process of education was

inconceivable. This is evidenced by Rousseau's contrasting statement in speaking of Emile now 12 years old:- "Emile has arrived at the period of infancy, has lived the life of a child and has not bought his perfection at the cost of his happiness. On the contrary, they have lent each other mutual aid. While acquiring all the reason suited to his age, he has been as happy and as free as his constitution permitted him to be" Rousseau started the psychological tendency in education in so far as he considered education as the development of the child's native instincts, tendencies and capacities. The CHILD is the centre of the New Education. In Rousseau's writings may be found the germs of the Kindergarten and Manual Training. He also emphasized the importance of Physical Education. He says again in part:- " O men, be humane, it is your foremost duty #### Love childhood, encourage its sports, its pleasures, it amiable instincts."

A plea is made for a happy childhood. Emile would be taught such things as interested him and as he found out through actual contact with nature, but directed educational processes are not entered upon until after the child is twelve years old. He should learn things by first-hand contact with them. Every boy should learn a trade. He would suit his education methods to the changing nature of the growing child. The two great facts revealed in Emile are:- (1) Nature (three-

fold) is to be studied and followed. (2) Education is a continual process extending from birth onward.

Rousseau had a penetrating vision of the educational needs of the time, but, as we have seen, his plan showed grave defects. His doctrine of interest was unrelated to other great phases in the life of man. His education was not democratic and it possessed a negative aspect that was not in accord with the child's mental nature. And thus the theory of Rousseau in so far as it was possible was made practice by others; his negative education made positive.

Of the work of Pestalozzi (1746-1827) we shall not have much to say, although he is an important figure in educational life, for he exerted a great influence through his pupils. Influenced largely by Rousseau's Emile, he undertook to establish schools under the new spirit of educational freedom breathed forth in Rousseau's writings. Credit is due Pestalozzi not so much for what he actually did as for what he attempted to do. Failure followed many of his efforts because of the emotional nature of the man incapable of practical effort and devoid of executive ability. Yet he was a noble and lofty theorist. His love for the common people led him to undertake much even under martyr-like conditions. His most popular educational treatise, "Leonard and Gertrude", describes his ideal system of education by depicting the simple life of the Swiss villagers. His

system foreshadows the co-operative system of Dewey's school in the latter's "School and Society". The school was to develop rather than to teach. Love was the keynote of discipline. The moral and religious influence of the mother in the home was to be continued by the educator. He believed that all instruction should start from the observation of the children themselves. The Individual was to be assisted through exercise, in his continuous and natural development by the love and faith of an efficient, qualified teacher.

"I want to psychologize education" said Pestalozzi. His knowledge of and sympathy with child life led him to adapt his teaching to the experience of the child. The work of the teacher is largely to remove any obstacles that would tend to impede the child in his natural effort of development. His psychological view point is indicated in this passage where he says in part;- "The knowledge to which a child is to be led by instruction must, therefore, necessarily be subjected to a certain order of succession, the beginning of which must be adapted to the first unfolding of his powers, and the progress kept exactly parallel to that of his development". We are not to infer that this unlettered educator was in possession of the facts, founded upon experiment, which physiological psychology places in the hands of educators to-day regarding the "unfolding of the powers" of the child, but to him is traced the first attempt to connect psychology and child-study with

the practical work of the school-room. The fact that he attempted to pass from the near to the remote from the concrete to the abstract, from the particular to the general, and from the known to the unknown, shows that in his method he was blazing out a rational pathway that all subsequent educators have followed. Through sense-perception by means of object lessons, nature-study, singing, gymnastics and co-related subjects, the child was to have inherent powers harmoniously developed for the sake of his true moral being.

Let us conclude the discussion of Pestalozzi by a quotation from one of his writings:- (#) "An interest in study is the first thing a teacher should endeavor to incite and keep alive. There are scarcely any circumstances in which a lack of application in children does not proceed from a want of interest; and there are perhaps none in which the want of interest does not originate in the mode of teaching adopted by the teacher. I would go so far as to lay it down as a rule that whenever children are inattentive and apparently take no interest in a lesson, the teacher should always look to himself first for the reason. ### But real interest taken in the task of instruction - kind words and kinder feelings--the very expression of the features, and the glance of the eye, are never lost upon children."

(#) Letters on Early Education, XXX. P. 150.

Although Pestalozzi rejected the old psychology, yet he was unable to build up a system to replace it. This task was undertaken by Herbart (1776-1841). According to his conception, the soul was a unity possessing the power of receiving through the nervous system those impressions which would bring it into relation with its environment. From sense-perception the whole mental life is developed. The mind is built up through ideas resulting from its own experiences. It is inherently neither good or evil. Education then, which is to control the impressions received by the mind is thus an important factor in determining character. The ultimate end of instruction is morality or virtue. The nearer aim is the development of a many-sided interest. "The word interest stands in general for that kind of mental activity which it is the business of the instructor to incite." The writings of Herbart and the Herbartians are chiefly concerned with the various phases of the doctrine of interest here set forth.

Closely associated with Herbart's doctrine of interest is the essentially important idea of "apperception". We define it as a process of mental assimilation. It is the act of relating new ideas to the ideas already acquired. It is the assimilation of the new with the old. This when taken into the field of pedagogy demands an instructor who is familiar with the interests of the pupil, who is aware of the pupil's

previous knowledge, who can co-relate the various parts of the subject-matter so that it is most readily acquired and retained.

Herbart defends the term "many-sided" from a possible misconception, by stating that he does not mean a "dabbling in many things", and would also modify the expression by prefixing the work proportionate. Interest then according to Herbart is the mental condition accompanying the process of apperception. Apperception influences volition and thus affects character. For this reason genuine interests are indispensable. From a proportionate many-sided interest, a proportionate and well-rounded character would result. Interest always calls for an object toward which the attention is directed and which calls for this mental state of curiosity, mental hunger or intellectual eagerness.

Herbart divides Interest into two classes -- "Erfahrung" and "Umgang". The former might be called the interest of "experience" or the interest in "things"; the latter the "social" interest or the interest in people. Each of these are again divided into three sub-divisions. The interest of experience is divided into (a) empirical, (b) speculative, and (c) aesthetic interest.

Empirical interest comes directly from the sense-perception. The world is full of objects which interest the child-the various sounds and sights with which the child comes

in contact. Speculative interest comes later when the child begins to see cause and effect, when he tries to explain his environment, when he makes use of his ever-recurring "why?". Finally comes the aesthetic interest which has to do with the beautiful in Nature, in art and in morality. This latter form of interest received a large share of Herbart's attention, for he believed that the child's aesthetic taste should be cultivated early.

The three divisions of the "social" interest are (1) the sympathetic interest, (2) the social interest proper, and (3) the religious interest. The sympathetic interest is manifested when the child shows sympathy with those of the home circle or school, in expression of joy or of grief. The social interest grows out of the sympathetic interest as the circle is widened from the home to the school and to society in general. It is the foundation for all social co-operation and social virtue. The religious interest which is the culmination of these interests reveals to the child his relation to his Creator. It is, as Herbart says, a feeling that God is a great Parent.

By carefully regarding one and all of these types of interest, by suitable knowledge and guidance, the child is to be developed into a broad-minded, many-sided, wide-awake individual.

Of Herbart's methodology, and of certain of his educational practices, mention will be made in subsequent chapters.

His great achievement was that of placing education upon a rational basis. He advocated and pursued an exhaustive type of child-study. He coupled theory with practice in his pedagogical investigations. He established the practice school in connection with the University of Konigsberg. He gave death-dealing blows to the old Aristotelian "faculty" psychology. Herbart's system of psychology, based upon a philosophy which was imperfect was predestined to certain modifications and in certain parts, complete annihilation; yet it gave rise to much of the educational advancement of the subsequent decades. Monroe in speaking of Herbart's psychology says (#) :- "The movement which Locke began in making the child the centre of educational endeavor and pedogogical theory; which Rousseau established in general form through his brilliant critical and destructive work in the form of investigative literature; which Pestalozzi brought down to the school-room and made concrete in the hands of every teacher; that movement Herbart made permanent by giving it an actual scientific basis in place of the imaginative one of Rousseau and the empirical one of Pestalozzi."

Herbart would have all instruction carefully presented to the developing child in accordance with his needs and his changing interests. He is free from the charge of a "soft"

(#) "Text-book in the History of Education." Page 625-6.

pedagogy. He believed that all instruction could be imparted to the child at such times and in such ways that by means of his direct and indirect interests, the process of assimilation would be complete and the learning process pleasant. To Herbart may be traced the "Culture-Epoch Theory" in its early stages. This is apparent in some of his educational practice. For instance, he would have the Homeric poems as a text-book for boys of a certain age because the boys are living over again at that time the counterpart of some previous primitive period in the life of the race. From this he would proceed to other subjects and studies which were so unified and organized that they would be in perfect harmony with the changing interests of the pupil. At the same time they must develop the child proportionately so that apperception might be complete and so that the principle of a many-sided interest might not be violated. The sciences of nature and of humanity properly presented produces the many-sided interest, and, through assimilation, volition; and hence the formation of character is assured.

Ziller, Stoy and Dr. Rein although differing widely in many places, are essentially together as far as the doctrine of interest itself is concerned. They follow their master Herbart. De Garmo, an Herbartian, speaking of interest, says:- "For a genuine interest is nothing but the feeling that

accompanies this identification of the self through action with some object or idea." Again, in speaking of the teacher's qualifications, De Garmo says "He must know something of the child's previous knowledge and interests in order to utilize them; he must select his materials of instruction with respect to ultimate purposes and the pupil's comprehending powers; he must arrange the subject-matter, not only with respect to the pupil's acquired experience, but also with respect to that which he is going to acquire i.e., the studies must be brought into the best coördinate relation to one another, and he must adapt his teaching process so as to secure the quickest apprehension and the longest retention of the matter taught. All this has to do with the acquisition of new experience upon the basis of that already acquired." (#) Interest thus is a mental state due to the relation between the inherent and acquired mental content and the outside world of objects and ideas . This may be a natural relationship or a prepared one. Certain things of themselves produce this feeling of interest, due to the child's inborn tendencies. Other situations must be carefully prepared before there is the reaction of the child's mind toward them.

(#) "History of Education" p. 628...

Dewey lays more stress on the object itself than on the accompanying feeling, and says:- "Feeling, in so far as it is taken out of its isolation and put into relation with objects of knowledge, or ideals of action, is interest." He would make use of those objects and those pursuits in which the child is naturally interested. He would let the child experiment and investigate. He would try to bridge over the gap that exists between the school and the home. The child would be introduced early to those relationships in society with which he must, as an adult, come in contact. The child is essentially a social being, hence his social interests should be utilized. Dewey's scheme of education shall be dealt with more at large in a subsequent chapter.

Horne evidentally has the Herbartian idea of apperception in mind when he says:- "The doctrine of interest is concerned with finding points of genuine and intimate contact between the subject-matter and the vital experience of the pupils. ". (##) Discussing apperception, Horne makes this statement:- " ... Apperception means interest. Two things are uninteresting to pupils; monotonous old things and unintelligible new things. What interests them is the novel intelligible thing."

(##) Cyclopedia of Education: "Interest."

(#) Horne puts the chief emphasis on the feeling of interest rather than upon the object of interest. The interest lies within the individual but there must be certain qualities possessed by the object which call forth the activity of the self giving rise to the pleasurable feeling of interest.

Thus we see that interest has a two-fold nature. There is the subjective or feeling side and also the objective side. Either is impossible in interest without the other. The "activity of the self", of which Horne speaks is merely the response to the emotional stimulus. Pedagogically we are inclined to think that there is but one feeling in which interest is evidenced--that of pleasure. But on second thought we find that objects that call forth the emotions of fear, hate, love, shame, etc., in any marked degree, are by that very fact interesting. Within the school-room, however, the interest should be developed and held, due to pleasant stimuli. Happiness in the heart of the pupil means efficient work, which could never be obtained under a régime of pain.

We have said that interest may be viewed from a subjective or from an objective standpoint, according as we consider the feeling of interest or the object of interest. One supplements the other. Certain objects are interesting to the child at all times. The bright color, the rattle and the rapid

(#) Horne: Psychological Principles of Education, p. 110.

motion are interesting to the young child not yet a year old. Such an interest is termed native as opposed to acquired interest which may be developed in a child --- an interest in arithmetic may be created by introducing arithmetical calculations in games in which he has a natural interest.

We have attempted to trace briefly the rise of the New Education and its all-pervading spirit --- "Interest." It is not without a sense of its great importance nor a feeling that it is a theme requiring volumes rather than chapters, that we endeavor to show the further progress of Interest in education, and some of the points of connection between it and other vital educational forces.

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CHAPTER TWO

INTEREST and IMITATION.

In the young child there is a tendency to give expression to sensory impulses. The surplus nerve energy seems to aid in this work by removing all opposing tendencies that would prevent or hinder motor expression. Child - Study reveals the fact that there is a strong social instinct in the child in infancy and early childhood. The child is interested in human beings. Hence it is natural that he should imitate human actions first. Such imitations as yawning, smiling, and crying which occur within the first six months of the child's life are perhaps due to sensory stimuli largely, but later on, even though the child imitates other objects, he endows them with human characteristics. Much of the child's imitation in childhood is spontaneous. He sees the copy and imitates it unconsciously. Symbolic imitation is reached through imagination. The child imagines he is an adult and imitates his parent or teacher or other acquaintance. Froebel makes use of this type in the work of the kindergarten. Many 'make-believe' processes may give practice for later activities in the social world. In the school life of the child there are certain times when there should be voluntary imitation, as also in life outside of the school. In this case there is a certain end in view. The child must

imitate his elder in order to acquire certain processes of learning or of mechanical skill. The apprentice must imitate the master workman in certain trades. Writing and drawing involve a certain amount of imitation in order to master the use of the pencil or the brush.

Through spontaneous imitation the child acquires a great amount of knowledge of his environment. Objectively he becomes acquainted with a vast number of objects, phenomena, and facts concerning his environment. Subjectively he comes to know the characteristics of the objects (sound, movement, deportment etc.), through imitating them and thus putting himself in command of this knowledge. These processes of imitation become a part of the child.

Nor does the child imitate indiscriminately. Only those things which are of interest to him are imitated. As far as the spontaneous imitation is concerned, the child receives, as we have said, a great deal of useful information. Closely connected with this form of imitation is what is known as 'contrary suggestion' (#), opposition (##), or 'social contrast' (###) This has its rise in an instinctive tendency to rebel against imitation. It is an assertion of individual-

(#) Kirkpatrick: Fundamentals of Child Study p. 135.

(##) Morgan: Psychology for Teachers, p. 164

(###) Royce: Outlines of Psychology p. 277.

ity. Though apparently selfish, yet in reality it is a healthy, normal, intermittent process. Moreover it is not without its educational value. It shows up individual characteristics and inherited tendencies. It often leads to a desire to excel that involves careful application through preparation. The child may suffer such punishment for his apparent 'contrariness' that he will come to a knowledge that there are other people in his little world that are to be considered as well as himself. Thus he is taught his place in the school- group. Sympathy for others is fostered.

When the child imitates not the actual copy before him, not the actual sound heard but a moment before, but the sound or the movement which he heard or saw yesterday, he has passed over to the stage of symbolic or 'dramatic' (#) imitation. Nothing is beyond the powers of his imaginative and imitative actions. He transforms chairs into cars; brooms into horses; himself into a roaring lion, a bear, an engine, a post-man and what not. "The dramatic tendency usually begins in the third year and continues all through life, but is at its climax from about four to seven" (##).

(#) Kirkpatrick: Op. Cit. p. 131.

(##) Kirkpatrick: Op. Cit. p. 138.

Although voluntary imitation begins in early childhood it is not an important educational factor for a number of years. The child imitates and each time tries to make the imitation conform more and more closely to the original. The child who desires to accomplish a certain task is willing to try various means and make use of various devices in order to complete the work. The duty of the educator in this work is to show the child the importance of finishing the work which he has started. Perseverance and industry may thus be inculcated as habits into the life of the pupil. The child should be actuated in this voluntary imitation by the desire to know how to accomplish the task in order to attain unto a remoter end or benefit to which it will eventually lead.

Usually at the beginning of the teen-age the appearance of 'idealistic' imitation (#) is noted. It is the work of the educator to assist in every way so that the pupil's ideal or hero may be of the right type and that the pupil's conduct may compare favourably with that of his ideal.

Imitation is a genuine instinct, which is reflex and involuntary from birth until the fifth, sixth or even ninth month is reached, although Preyer mentions cases of genuine imitation occurring as early as the fourth month. From

(#) Op. cit. p. 141 ....

the ninth month until the child is two or three years of age this great educative process goes steadily on. It is a verification of Professor James's statement that "All consciousness is motor"(#). From this time onward the same process of spontaneous imitation is bringing the child into a close relationship with innumerable objects. He not only responds to the stimuli presented but he becomes conscious of the feeling that is occasioned by his reaction toward them. When the age of seven years is reached this instinct begins to wane.

Miss Caroline Frear has given us some interesting facts regarding the child's imitative instinct(##). From this work we select the following table dealing with the child of three years and also the child of seven years.

(#) Psychology (briefer course)

(##) "Imitation": Ped. Sem. '96/97. 381-6.

	3 years	7 years
What the child imitates.		
1. Animals	5%	10%
2. Children	10%	10%
3. Adults	85%	80%
Kind of imitation:		
1. Direct	35%	15%
2. Play	50%	80%
3. Idea	65%	75%
The characteristics imitated:		
1. Speech	15%	10%
2. Action	70%	80%
3. Action, speech and sound	75%	60%

From the above we notice the large part that the adult plays in the imitative processes of the young child. Play enters largely into these motor responses to the stimuli of his environment especially when we consider the element of play that is implied in "idea" of Miss Frear's classification. Nor can we but be impressed with the large part that is given over to action. The child is pre-eminently active and social. The above but emphasizes our previous statement that the child does not imitate indiscriminately, but only as his interest directs. It is the work of the school to direct and utilize these interests as they are manifested by the processes of imitation.

"It is not necessary that the act in itself should be interesting; in a most important class of cases the interest centres, not directly

in the external act imitated, but in something else with which this act is so intimately connected as virtually to form a part of it. Thus there is a tendency not only to imitate interesting acts, but also the acts of interesting persons. Dogs often imitate their masters. Men are apt to imitate the gestures and modes of speech of those who excite their admiration or affection or some other personal interest. Children imitate their parents, or their leaders in the play-ground. Even the mannerisms and tricks of a great man are often unconsciously copied by those who regard him as a hero" (#).

Professor Baldwin (##) has attempted to prove that imitation is the fundamental socializing element in human consciousness and Richard Steele (###) has tried to show that imitation is a very strong factor in all phases of our activities.

In concluding this necessarily brief discussion of imitation we shall merely mention the fact which King (####) emphasizes, viz:-- that what appears to the adult as imitation is not such in reality when considered from the child's point of view. For the child, it is not an act of copying but is

(#) Stout: Manual of Psychology. p. 270

(##) Mental Development in the Child and the Race "Imitation".

(###) "Imitation: the Mimetic Function".

(####) Psychology of Child Development. p. 122 ff.

merely a process by which different stimuli are obtained. The apparent repetitions in 'voluntary' imitation are really not repepitions for they produce differing sensations, otherwise the child would soon tire of the process and lose interest. The so-called 'circle of imitation' of Baldwin (#) is described by King as a 'spiral' process.

Although the objection is raised by King that we give an adult interpretation to the child's action and call it imitation, yet he does not tell us how we are to know the interpretation which the child places upon his own act, although King's interpretation fits in well with his idea of a 'functional' psychology. Whether we consider these actions of the child as merely an effort to "straighten out some of his own 'ill-organized' experiences" (##) without a knowledge that his acts closely resemble the acts of his 'copy', or whether we say that the child imitates, is of no great moment in the present discussion. The task for the educator is the same in each case.

(#) Op. cit 133 ....

(##) King: Op. cit p. 122 ....

CHAPTER THREE

INTEREST, ATTENTION, AND EFFORT.

A
Interest and Attention

William James (#) in dealing with the 'narrowness' of consciousness, calls attention to the fact that the mind can attend to only those things which interest us at the time. The attention is focussed, so to speak, upon a part of consciousness to the neglect more or less of the rest of consciousness which makes up the 'fringe'. Attention would then seem to be this selective power by which certain ideas are held out prominently before the mind to the neglect of other ideas which may tend to displace them. The relation between 'attention' and 'interest' is a very close one. It is evidently because we feel interested in a thing that we pay attention to it. Then from our previous discussion of interest, it would appear that our attention is directed toward and held by certain objects because we wish to gain certain further knowledge, or to adjust the 'feeling' of interest to our present understanding.

Although different classifications of attention have been made there are in the main two distinct types --involuntary and voluntary attention. There are certain things in our

(#) Psychology(briefer course) Chap. XIII. ....

environment which invariably attract our attention. These differ according to our experiences and growing knowledge of the things about us. The young child's attention is attracted to every strong stimulus. He seems to have no control over it. It is inherited. He is attracted now by a bright colour, now a flash of light, now a rattle, a moving object, a loud noise and so on. The animals are subject to the same power. It is a necessary precaution that nature has taken. It is expedient that man should pay attention to strong stimuli. His safety now, perhaps more than at any other time depends upon it. The warning whistle, unheeded, means death.

What is termed by some as non-voluntary attention is in reality a type of this involuntary attention. There are certain things towards which one's attention is constantly turning. The stimulus is not from without, but from within. Certain studies are constantly working their way into the focus of the consciousness of the true student; one finds his attention being continually drawn to certain persons or to certain themes in which he is interested. There is no effort expended -- no more than in the involuntary attention due to certain violent stimuli from our environment.

The other kind of attention, known as 'voluntary' is of more importance to the teacher. When we pay attention to an object or an idea not because of the compelling nature of the stimulus, but because we have another and remoter end in view,

we have risen above involuntary attention. An effort is required to keep our attention fixed upon the object and to force the other ideas which would intrude, below the threshold of consciousness. Voluntary attention cannot be long sustained, although we may be inclined to doubt this at first sight. Experiment reveals our error. It is rather by a series of efforts that we are enabled to pay attention voluntarily to an object for any length of time. We attend to the object because of the interest which is in the end. James (#) describes voluntary attention as the flitting of the attention back and forth paying attention to different details considered with respect to the end in view. This kind of attention may give place to a sort of involuntary attention. This is what Bagley means when he says that 'active attention' may pass over into 'Secondary passive' attention (##). That to which our attention was applied only by an effort, may by means of the ideas associated with it become of interest to us so that we have a type of true involuntary attention secured.

(#) Psychology (briefer course) Chap. XIII.

(##)"Educative Process" p. 140.

cf. also Tichener: "Primer of Psychology" p. 77.

The task of the educator is not to arouse attention, but to direct it. The child is seldom in a state of absolute inattention. He may however be attending to an anticipated base-ball game when he should be attending to his geometry. The proper interests must be developed. "The demand for attention avails only, if in the pupil's experience, obeying the demand has brought satisfaction or if disobeying it has brought discomfort" (1). When the attention is aroused by an effort, a genuine interest should be created.

The similarity of attention to interest is clearly apparent. Let us consider their exact relation to each other. Some Herbartians claim that attention is impossible without interest. Will is dependent upon voluntary attention, hence interest would become the master of the will,--the controlling power. (It is not within the scope of this essay to discuss the relation of 'will','curiosity' etc., to 'interest'). There seems to be a close connection between 'native' interest and voluntary or passive attention on the one hand; and between acquired interest and voluntary or secondary passive attention on the other. (See page 17.)

Baldwin says: "Interest is always manifested by voluntary attention to which it may be considered a stimulus or of which it may be considered a result" (2). We presume that there is a similar connection between interest and involuntary attention. Then the question arises as to whether we can apply 'stimulus and result'

(1) Thorndike: "Principles of Teaching" p. 105.

(2) Dictionary of Philosophy and Psychology, "Interest".

nomenclature to these activities. Do they not rather occur simultaneously? That is to say, are they not phases of the same mental activity? "Psychologically, interest is the pleasure-pain tone that accompanies attention. Interest and attention are very closely connected: we may call interest the aesthetic aspect of attention." (#). And again, Tanner says: "In interest the attention is concerned more with the object and less with the feeling, but either may pass into the other in any specific case" (##). Thus interest and attention would be regarded as the objective and the subjective aspects, respectively of the self-activity, by means of which the child endeavours to react towards the various stimuli of his environment.

But the question arises---"What about that gap that exists between non-voluntary and voluntary attention, and has it a counterpart in the theory of interest? This brings us to the subject for the next part of this chapter.

(#) J. Adams: Teachers Encyclopedia "Interest".

(##) "The Child" p. 215.

B.

INTEREST AND EFFORT

We noted the fact that certain objects and ideas did not interest the child (see page 14). When the uninteresting thing is met, the sails become lifeless and the boat is at a standstill unless a fresh breeze springs up, or unless the oars are seized by sturdy hands. The will must be brought to bear directly upon the uninteresting or a new interest must be developed. In the case of remote interest set up as an end in the learning process the attention is correspondingly remote and feint. At certain times the interest wanes or disappears, and the attention with it. Effort is the will power which resurrects this remote interest and waves it to and fro in the distance. Thus effort is the power which gives rise to voluntary attention to objects which tend to become non-interesting. This is truly a process of effort. It involves a 'strain', although it tends to develop habits of work. James says: "Keep the faculty of effort alive in you by a little gratuitous exercise every day. That is, be systematically ascetic or heroic in little unnecessary points; do every day or two something for no other reason than that you would rather do it, so that when the hour of dire need draws nigh, it may find you not unnerved and untrained to stand the test" (#). Bain also states that the be-

(#) 'Psychology' p. 149.

ginnings of knowledge are in activity and pleasure, but the culminating poing is in the power of attending to things in themselves indifferent" (#). In these cases, voluntary attention would be used not only to gain useful knowledge, but also as a mental discipline. Without effort we could have no acquired interests. Our instinctive tendencies and our needs shape our interests. The remote end and voluntary attention; in other words -- effort, these play their important role until an acquired interest in the immediate object or idea is developed.

Effort then is the steep grade that leads up from the plain of passive (non-voluntary) attention to the plateau of secondary passive attention. These 'steep places' are found along the road to learning. These two forces have been compared in various ways. Horne (##) describes the relation of 'interest' to 'effect' as that of 'love' to 'law'. Certainly they should not be considered as antagonistic. They are mutually beneficial and essential. Effort and Interest are co-existent. Might we compare them in this way:- Interest is a pleasant smooth pathway leading through the fields of knowledge. There are other roads which are not so pleasant, but which still lead by circuitous paths in the same general direction. These are

(#) 'Education as a Science' p. 178.

(##) "Philosophy of Education": Chap. 6.

the optional paths of effort. Finally, all these converge to a narrow rocky pass. The scenery is uninviting and the road is rough. The child thinks of turning back, but his fairy god-mother places the field-glass of Voluntary Attention in his hand and in the distance he sees a twinkling light. This is the glimmer of the Remote Interest or Thing to Be Attained. He plods on, but unless he keeps the glass to his eye he loses sight of his destination and with it, his desire to continue the laborious journey. But he peers through the gloom about him and as his eyesaccustom themselves to the new conditions, he discovers that he is in the midst of wonderful surroundings. He finds around him a Thing Intersting In Itself. The stony pathway is forgotten in his new interest and when he thinks of it again he finds that it has again become smooth and the sunlight of Attention reveals the beauties of the Land through which the pathway of Interest runs. The Pass of Effort was a necessary part of the journey. The Learner is strengthened by toiling over the rocky way. He will not fear the next one as he did this for he has found a reward for his labour.

Interest and Effort are, and should be, component parts of our Educational process.

CHAPTER FOUR

INTEREST AND THE PSYCHOLOGICAL DEVELOPMENT OF THE PUPIL.

or

INTEREST AND INTERESTS.

We have tried to make use of the word 'interest' in the previous pages in such a way that it would not be confused with the word 'interests'. It is now time to distinguish them Interests are instinctive powers possessed by the child They are racial activities and occur during certain fairly well defined periods of the child's existence. In this way we speak of collecting, constructing etc., as interests of every child. These are native and inborn and are hence called 'native' interests. On the other hand, an interest in an object may be acquired, as we have noted, through voluntary attention. A pupil may develop a permanent interest in literature because this was a subject to be mastered in order to obtain a certain standing or a certain certificate which was desired. Interests of this type, which are not the direct outcome of instinctive tendencies are said to be 'acquired' interests.

Interest is used to denote the 'feeling' side of the mental activity spoken of in the previous chapters. Interests are concerned more with the action which follows the attempt of the child to realize himself through his environment, than with the 'feeling' of interest.

With the Psychological tendency in Education came a growing mass of information concerning the child. His physical and mental processes were studied carefully through their many changes. His interests and activities were noted and carefully studied. Consequently physiological psychology and child study have given us a clearer understanding of the child's ways and a deeper sympathy for him than was possible before. It was found that Interests have points of maximum energy, at which time they could be utilized and directed by the educator. It was discovered that the boy is far from being a 'little man', physically as well as mentally. A man built along the same lines as a boy, all parts developing proportionately, would be a monstrosity as far as his physical nature was concerned. (#). Mental and physical conditions and development are intimately connected with each other. A careful comparison of the simultaneous development of these is of untold value to the educator who must see that the matter and method of instruction keep pace with the development of the child.

Luediger (##) enumerates the instinctive powers that enter into the activities of the school as follows:-

(#) See Oppenheim: The Development of the Child
Chaps. 11 and 111.

(##) "Principles of Education" p. 261.

1. Exercise of the senses. 2. Desire for activity. 3. Sympathy. 4. Fairness. 5. Sociability. 6. Friendship. 7. Love of animals, and moving things. 8. Desire to be noticed. 9. Emulation. 10. Fear. 11. Pugnacity. 12. Ownership. 13. Imitation. 14. Constructiveness. 15. Love of beauty. 16 Selective attention. 17. Desire to know. 18. Capacity to understand.

Dewey (#) gives the following impulses as those available in the school-room:---(1) Social instinct (conversation, communication, personal intercourse, language.) 2). The Inquisitive (finding out things, etc.,). (3). Instinct of Making (play, movement, make-believe, actual construction, etc.). (4). Expressive (art, etc., springing out of social and constructive instincts).

In looking over these lists of instincts which are responsible for a part of our interests, we notice the prevalence of 'activity'. King (##) suggests that genetically these may have been the primary elements, while the interests, as feelings, are the later conscious valuation of the activities. It is through the activities of the child that

(#) "School and Society" p. 59.

(##) "The Psychology of Child Development." p. 154. ff.

we judge his interests. These are the functional elements in the process by which the child's control broadens and deepens, and his personality is correspondingly enriched.

We cannot enter into the origin of the child's interests or a discussion of the Culture Epoch Theory at this time. Every instinctive tendency must be regarded in the light of the past, although its utility may not belong to any remote period. Thus the interests which have had their foundation in the past development of the race have their utility, application and their significance to the child in the present. The order in which interests develop has been the theme of much discussion and investigation. We know that the interests differ not alone in the activity manifested, but also in character, as the child develops. The first interests are instinctive and are followed by motor tendencies evidently due to the superfluous active impulses. Later there is a mental process involved so that the child's interests are consumed in mental activity, which later has the end in view.

If we picture the child at certain stages of his growth and examine his activities, we shall have an adequate idea of his interests. Investigators have agreed upon certain well-defined periods in pursuing their study of the child. Omitting early infancy, the first stage of childhood extends from two and a half years to about six or seven (♯).

(♯) Chamberlain: "The Child etc." Chap.4.

This period is essentially one of play. This latter activity is the exercise of impulses and instincts for their own sake. Objects mean to the child largely the activities with which they are associated. They are interested still in the use of objects and in activities. Soon the age of questioning comes and with it a beginning of the interest in the relation of one thing to another and in cause and effect. There is a desire to enter into the actual experiences of life. This along with the interest in imitation is a strong socializing factor with the child. The games from three to six, according to Gulick (#) are rarely spontaneous and are not competitive. Imitative games are highest at six. The child is interested during this period in individual details rather than in wholes. The collecting instinct from three or four years to eight is passing through its initial stages. It is not purposeful. The child collects those odds and ends that are handy. (##). This period also marks the height of interest in guessing games and original puzzles.

On the physical side, the interests of this period are manifested in activity for its own sake without much reference to any ends. The child is constantly at play and

(#) "Psychological, etc., Aspects of Group Games" p.155.

(##)"Burk:- "The Collecting Instinct". Ped. Sem. Volume V11 p. 179.

seems to delight in practising movements that are rather difficult for him. He makes use of rhythm and nonsense rhymes. On the mental side, he imagines and invents, he counts and measures and moreover he is a veritable "question mark". Social interests enter and imitation culminates.

At the beginning of the second stage of childhood, acquired interests begin to appear. Interest in details is possible, and the result of an action is considered before the action takes place. Individual but competitive games belong to the period from seven to ten or eleven. Group games are just beginning at ten. At this time, or a little earlier there seems to be a period of uncertainty, of disorganization, and of instability in the child's life. Some attribute this to rapid bodily growth, while others claim that it is due to the as yet imperfect adjustment of the child's mental activity to the change in passing from native to acquired interests. Undoubtedly, from ten to twelve there is a strong interest in physical activity due to rapid physical growth. The games are strenuous and full of restless activity. The child begins to have an interest outside of his own circle, although this interest is usually in persons. Thus there is a further social development. There is an interest in details in workmanship and in more and more intricate games, showing that the child is able to make finer and finer adjustments. He is interested in the world as a whole rather than in particular phases

of it. He has several vocations which he thinks he may pursue, as an adult. There seems to still be a keen delight in the exercise of the senses, and the love of movement is greatly increased. (#)

In the period that precedes adolescence we find that the Individualistic interests are giving way to those in which there is a social side. The "gang" or "group" interest appears, with its opportunity for team play. The child is adjusting himself to this new social world. From ten to thirteen seems to be the golden age for forming clubs and secret organizations. The need of co-operation is felt. There is great interest in physical activity and adventure. The collecting interest is at its greatest height. The child trades with othere and makes an attempt to classify the objects of his collection. The puzzle interest culminates at twelve. The constructive interest turns its energy to making things that are useful. The play interest is centred upon the out-of-door activities of savage life--

(#) Much of the matter for this chapter is taken from "The Psychology of Child Development", by King,P. 167ff.; Tanner: "The Child" Chap. X11; Kirkpatrick; Op. cit: Tracy: Op. cit; Sully: "Children's Ways etc". For the interests of adolescence the excellent volume by G. S, Hall; "Youth its Education, etc", is freely used.

hunting, fishing, swimming, etc; and these tend to develop endurance, courage, self-control, loyalty and enthusiasm.

At adolescence there are many changes in the Nature of the interests of the child. Along with the rapid growth in height and weight, there seems to be an abundant supply of energy. There is a keener interest in observation, in nature and in science. Many of the previously existing interests are broadened. The athletic craze appears, due to the rapid development of the muscular system. There is a broadening of the intellectual capacity, and the youth in interested in the various systems around him. The social interest deepens, giving a sense of his social responsibilities and his privileges. He desires to do good for its own sake. A natural desire to excel, showing the presence of emulation makes competitive games popular. The rhythmic function is in evidence in cheering, clapping, college yells, running, class gymnastics, etc., and games that are intense and concerted are popular, demanding attention and skill.

Individual pugnacity is increased at adolescence and must be guided and controlled through exercise. A new interest arises in those of the opposite sex and a normal and healthy interest of this type does much for the development of the youth. He is interested in those things which belong to the adult world. He has a new interest in adults themselves. His social self tells him that they are or should be, in a sense, his companions. He is coming into his social inheritance.

Such a brief survey of the interests of the child, during those years which belong to the period of directed educational effort, is by no means exhaustive. Interests exist which are not within the scope of the school-room. Others are available, of which but passing mention has been made. Enough has been said, however, to show us the variability of certain interests at different times. Some are short-lived; others remain through life. Moreover, they are not wanting in numbers. If interests are of use to the educator, they are already existent. They must be studied, exercised and, above all, directed.

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CHAPTER FIVE...

INTEREST AND METHODS OF TEACHING.

Up to this point we have been regarding interest as an existing activity, rich in latent possibilities for the educator. We wish now to give its practical setting in the class-room. A glance at the past will show us that in the constructive efforts of the founders of our New Education there is an increasing emphasis upon the Education of Interest. The Education of Effort was so entrenched within the educational life of the times that progress has been slow. The conservative attitude taken towards departures in educational content and method, while it is commendable on the whole, has doubtless been to blame for the fact that our recent industrial advancement has greatly outstripped our educational progress of the same period.

Rousseau, Pestalozzi, Herbart and Froebel have all given a prominent place to Interest in their methods, as they come to us from the writings of these men. Rousseau made the interests of the child the guide to his education. His extreme viewpoint is shown in this passage:- "Whatever may happen, abandon everything rather than have the child's tasks become irksome; for how much he learns is of no account, only that he does nothing against his will". Many of the educational practices suggested by Rousseau have found their way into the schools of to-day. Pestalozzi made the school life grow out

of the home. The object lesson was the core of his system of carefully graded lessons. He began with those things in which the child was naturally interested. He would teach geography from the school-yard outward until the whole was complete. The introduction of gymnastics was an innovation; nature-study was born, and music was given a place on the curriculum, not to develop musical talent, but for its influence over the feelings.

Herbart and his immediate followers like use of language or literature, combined with history, as a central core study. All other subjects were associated with these. If the child has an interest in the core study, and if all others are connected with this one, then his interest is sure to spread to the other subjects through apperception. So Herbart developed the so-called "formal steps". These are a guide in the teaching process. The method is independent of the content of instruction. Herbart's steps are:-Clearness, Association, System, Method: to correspond with the phases of Interest---Observation, Expectation, Demand and Action. Ziller would divide Clearness into two steps -- Preparation and Presentation. Although this is not a mould into which all instruction can be poured, but a tool to shape it all unconsciously falls then in a natural lead of his teaching. There must be a connection with the already existing ideas. There must be a preparation, through the arousing of interest, so that the new material on its presentation is assimilated. This

latter is compared with the former and its characteristic features noted. This comprises Association (Comparison). From the abstractions of the last step, generalizations are reached, denoted by System (Generalization). Finally the generalization is applied, giving us the step of Method (Application). (#).

Froebel (1782-1852) made of the school-life and activities, a miniature society. Through instruction the child was helped from his natural interests and impulses to certain approved ends. Play was given its proper permanent place in the life of the young. Through this natural activity, the child is led to form those desirable habits of thought, feeling and action. Social activities, virtues and ideals are developed in the kindergarten through play. The constructive interest is recognized in the large place given to handwork. The child creates, but he also expresses in outward form, the inner self.

(#) See McMurry: "The Method of the Recitation".

Nature Study is made to serve in many capacities. Not primarily for facts of Nature, but rather as a religious or moral influence over the child. Due to the natural interest in nature study it serves as the groundwork for language work, reading, writing, etc. The Kindergarten, with its graded and orderly 'gifts' and 'occupations' has established itself as an essential part of our elementary educational organization, due to the fact that it is founded upon the child's interests and activities.

The Montessori Method of Education has many features in which the interests of the young child are properly used. The exercise of the senses; the use of the many objects comprising the didactic apparatus of the school-room; the self-activity; the transplanting of the activities and conditions of the ideal home, within the school; all these are but natural ways of educating the child. Although this system, which Dr. Montessori advocates with such enthusiasm (#) may be more applicable to the schools of Europe than to the primary divisions of this country, yet the Froebelian 'occupations' might be better classified and organized by making use of the gradation that is employed to such an extent in the exercises with the didactic material of the 'Houses of Childhood'.

(#) See "The Montessori Method" tr. by A. E. George.
also "A Montessori Mother" by D. C. Fisher.

There are many features of our school systems of to-day that have had their origin in the principle of interest. A study of the child has done much towards putting our educational efforts in terms of the child to be educated. The 'method' must needs be governed by the 'aim' and by the 'content'. Interest has made its influence felt in the 'content' of our education. Doubtless Rousseau would make use of the story of 'Robinson Crusoe' as a text-book primarily because the lad Emile would be interested in the story of this shipwrecked man and the primitive life which he was forced to lead. Herbart would make use of the Homeric poems because the 'race' was interested in those activities in which the boy now has an interest. The young boy is not unlike the savage in his mental and emotional activities.

Nearly all modern writers of pedagogical literature advocate a broader and wiser use of Interest. Whether we read Spencer, with his 'scientific' viewpoint, or Dewey with his 'social' outlook; we find that the child's interests are to be extended and directed through suitable activities.

Educators have learned that the child's mind is not intended for a 'Dead Sea' There must be an outlet, to prevent stagnation. There is a natural desire for activity, for expression and for asserting oneself. While Manual Training and

Sloyd have utilarian values, yet their place on the curriculum is assured to them because they make use of this interest in 'construction' and moreover, they aid in the formation of habits of work that may lead later to higher and permanent acquired interests. Domestic Science fills a similar place in the lives of girls. The desire for activity and the interest in games are met in the school to-day by gymnasiums and play-grounds. More than at any other time, the social and competitive interests of the youth are being cared for by school athletics. The formation of clubs and societies among the boys and the girls of secondary schools gives a safe vent for the energy that the 'gang' interest possesses. Art, Nature Study and Physical Science employ the interests in Nature, in expression and in activity.

Dewey (#) would make certain elementary industrial pursuits, (weaving, spinning, etc.) serve as a core of studies. Thus his criterion of the value of a subject is"the extent and way in which it brings a pupil to consciousness of his social environment, and confers upon him the ability to interpret his own powers from the standpoint of their possibilities in social use." It is from this viewpoint that he makes the

(#) "School and Society".

(##) Dewey: Ethical Principles Underlying Education" p. 18.

statement that literature is to show the development of the industrial arts.; quoting Penelope as an example. Surely Literature has a higher mission than this. The 'aim' determines the value of the various subjects for the particular educator. Our purpose is not to discuss Interest in its relation to the various aims of education, nor yet with reference to the 'content' of the curriculum in detail; but rather with respect to 'method' in general.

There are certain interests which we should use as ends. Certain others ~~(which)~~ should be used only as means to other ends. Certain native interests, when considered as ends, have no place in the school activities; indeed, they should be discouraged in some cases. There are many desirable acquired interests to create and to develop. The native interests are the foundations upon which the superstructure must be built. Nature has made provision for a noble edifice, but the foundation must be utilized betimes, or crumble and decay will set in. Pugnacity is one of the interests which must NEVER be considered as an end. Yet it must not be suppressed, as is commonly supposed in certain schools. It should be directed towards those objects which are truly worthy of our hatred. The child who is taught to hate and despise underhandedness and graft and other sins, will later become a strong force in the social

uplift of his community. This is the work of the teacher — to build higher and ever higher interests upon the ones already possessed. The interest in 'collecting' may be used as a means in 'elementary science. The interest in ~~'collecting' may be used as a means in 'elementary~~ activity and adventure may be turned into a valuable interest in history or literature.

It is essential that the teacher have an accurate knowledge of the child. He must know the characteristics of mind and body, as the child passes through the different stages of his development. He must find a strong native or acquired interest to serve as the 'stock'. Then begins a process of mental grafting, as it were. The subject-matter should be presented in accordance with his natural development. The pupil must be made to feel the need and the value of the material studied. He should never be left to grope his way in the dark. Interest should be the immediate aim of all work. Interest creates interest. The teacher who is not suffused with interest in the work need not expect the pupils to be. Appeal to the child's native interests whenever they are prominent and will be of assistance in reaching the end in view.

There is a strong desire for activity. Whenever circumstances permit exercise this impulse. Experiments have shown that 'pupil self-government' (#) has many decided advantages. The teacher should know the borders of mental fatigue;

(#) See Cronson: "Pupil Self-Government"; also swift: "Learning by Doing".

but this too may be detected by the interest that is shown by the pupil, according to Tanner(#)

Baldwin (##) says: "The Doctrine of Interest is that the interest naturally attaching to the ends for which pupils study should be awake in the studies as means for reaching them. And, conversely, that permanent interest in the end should be fostered through the means". If there is a genuine interest in the means we need not fear for the interest in the end. The adjustment of the new to the old is a process requiring skill on the part of the teacher. Assimilation accomplishes this if it receives the necessary co-operation of the teacher. The new must be presented in terms of the old. Yet, the new must not be without its difficulties. The child must feel that he has an opportunity to react towards and to acquire something else in his environment.

The power of voluntary attention should be developed by a strong interest in the end to be attained. This will create an interest in the means. In speaking of attention, Hughes (###) makes these remarks:- "The young child should not be expected to attend to subjects to which

(#). "The Child p. 40 (##) "Dictionary of Philosophy and Psychology." (###) "Attention".

he is indifferent -- On the other hand, the teacher should fit his pupils for grappling with and mastering difficulties, even though distasteful."

The teacher should be in sympathy with the pupil. He can study him in no better way than to associate with him on the campus. There the child is essentially himself. The old espionage system is dying out and pupils, feeling that they are placed on their honour, rarely abuse the priveleges which this entails. Cultivate the friendship of the pupil, hold his respect, and you will find that manliness and womanliness will be fostered. They find it hard to deceive a friend or to cause him trouble. The mere fact that the teacher shows his interest in a pupil may be the incentive that will make that pupil's work a success. Only an interesting teacher can feel repaid for the work which he has done. Only an interesting teacher can know the difference in energy expended in teaching lessons in which the interest of the pupils is thoroughly aroused, and lessons which were devoid of such a burden-lifting force.

The subject of 'special' method is too large to be undertaken at this time. The method used in teaching the various subjects on the curriculum depends, as we said, upon the ultimate aim or end of education. Child study tells us when certain subjects would be most readily learned. For example, psychologists tell us that from eight to twelve are the habit-forming years. Hall (#) in speaking of this period says:- "It is the

(#) Op. cit. p. 5.

age of external and mechanical training. Never again will there be such susceptibility to drill and discipline, such plasticity to habituation, or such ready adjustments to new conditions. Reading, writing, musical technic, drawing, manual training, foreign tongues and their pronunciation, the manipulation of numbers and of geometrical elements, and many kinds of skill have now their golden hour; and if it passes unimproved, all these can never be acquired later without a heavy handicap of disadvantage and loss....The method should be mechanical, repetitive, authoritative, dogmatic. The automatic powers are now at their very apex, and they can do and bear more than our degenerate pedagogy knows or dreams of."

Be this as it may, we still contend that it is school economy for the child to receive instruction served on the tray of interest. Those facts have been retained longest and most vividly which were acquired through interest. In the method of teaching geography, for example, everything should be taught out from the child. He is interested in natural phenomena from his own environment take him to larger and larger fields of travel, of adventure and of commerce. By means of foreign products exhibited, by carefully prepared sketches, by the use of the kinetoscope if possible, present to the child the conditions under which the people of the various countries live.

This possibly brings up the question of school devices. Devices for securing interest in any subject are harmful if an interest is developed in the device itself rather than in the subject-matter at hand. The teacher must look well to this.

All of this is necessarily suggestive and not complete. The principles underlying the various subjects are the same. Whether the end of education is regarded as social preparedness, or the acquisition of knowledge, or the formation of character, or complete living; in any or in all of these, the pupil should have valuable permanent interests formed. His broadened social interest should place him in sympathy with all classes of men; his interest in intellectual attainment should find scope in the pursuit of those attainments which represent the best of the efforts of the race; his creative and social interests should combine to urge him to think and to think deeply, and then give to society and to the generations to follow some worthy contribution of brain and hand that shall raise to higher and ever higher levels the life of the past.

We have not advocated the alchemy of Interest. There are times when it will fail in spite of our best plans and efforts. However, we would not divorce the term 'work' from interest..

As Horne says:- "Interest is effortless activity, engrossing occupation, a joyous attainment, attractive and compelling work, discovering the line of greatest attraction." On the other hand, the practice of interest is not an educational child's-play. The subject-matter is chosen by the adult, then re-organized from the child's point of view. In so far as it can be made to give desirable activity to the interests of the pupil, or be made to develop higher interests, it is filling its place in educational practice.

It remains for the State; for us, to seek out those high ideals and lofty aims which perforce belong to the aim of education. We must remember the child as an individual, and we must not forget the Society of which he must be a unit. There are many voices heard, some are scarcely audible in the distance. Others are unheard of. In the fusion of the noblest ideals lies the solution.