TITLE OF THESIS
WASTE AND ITS ELIMINATION: AS REGARDS
"EXCEPTIONAL CHILDREN."

by

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I. INTRODUCTION:--

For centuries we have had a pedagogy of the normal children and until recently that pedagogy was well nigh exclusively directed both in theory and practice upon the average child, but psychological measurements of children show that pupils setting side by side in regular classes vary decidedly in ability and besides the normal we find the two extremes of the probability curve, one end representing defective or subnormal, the other end supernormal. It is obvious that methods of education have neglected at one end of the curve a certain per cent of individuals who have meager inherent capacities and who are eventually turned away from our schools upon society, a prey to it and a real drainage upon our resources. Such children are by no means brought to a state of efficiency and self support by our schools nor are they given the training which will make them a social and industrial asset to the community. On the other hand the supernormal, the pupil of brilliant mind is equally unfortunate. He enters school with capabilities two or three times as great as the average child and yet he must be moulded into conformity with him. He is habituated and disciplined in the routine of school adopted to
the child far below him in intellectual capacity and thus suffers retardation in his progress just as real and more pathetic than is experienced by his defective schoolmates. He is given little opportunity to grow to his full capacity, to develop clear up to his psychological and physiological limit. Throughout the whole history of our public schools youths of exceptional ability have been bored, drawer, sidetracked, discouraged and lost to society.

Within the past few years we have been forced to measure education by a new standard, the standard of individual achievement. This means that we have begun to differentiate the abilities of children and to estimate the success of school work, not in terms of general standard, but in terms of what each individual is able to do within the range of his own ability. This new standard is making necessary a great modification of school organization and we are now making provisions for gifted children, for ordinary children, for slow and backward children, for mentally defective children and within each group there are various forms of procedure for meeting more efficiently the needs of members of each group.

The present work undertakes the tasks of presenting this problem of maladjustment, with some of the plans now being tried in the larger system of schools with the idea of evolving a plan to meet the needs of the average small school system, based on the study of small school conditions.

One of the difficulties of this transition period
has been the vagueness of the terms used. Even after some years of careful study of the many classes of exceptional children, the terminology and classification employed are loose and arbitrary. The term "exceptional" as a general term, denoting all kinds of deviations from what has been called the ordinary average, has recently been adopted by many after it has been suggested by Dr. Groszman as many as ten years ago. But there is still much confusion and uncertainty in diagnosis and terminology.

In order that this paper may be of value its terminology must under understood and I submit the "Tentative Classification of Exceptional Children." suggested by Dr. P. E. Groszman, Educational Director of the National Association for the Study and Education of Exceptional Children, Plainfield, N. J. *

A. Normal Children (those who are in accord with the norm, or standard of human nature)

I. Typical Children (those who conform to the average human type, representing the present stage of civilization)

2. Pseudo-Atypical Children (those who seemingly deviate from the average human type)

(a) Children whose progress in school was hindered by:

1. Change of schools.

2. Slower rate of development without atypical retardation.

3. Temporary illness.

4. Slight physical difficulties such as lameness and minor deformities, slightly impaired vision and hearing.

*The National Association for the Study and Education of Exceptional Children.
adenoids, etc. (This last class is similar to Group 2 of the Pathological Classes, Subnormal Group only that it represents retarded instead of arrested development)

(b) Children of Unusually Rapid Development (Without genuine pathological) precocity—"bright children"

(c) Children who are Difficult of Management:

Naughty, troublesome, spoiled children without genuine perversity.

PSEUDO-ATYPICAL CHILDREN MAY BE RAPIDLY RESTORED TO NORMAL EQUILIBRIUM

3. Atypical Children Proper (THOSE WHO DEVIATE FROM THE AVERAGE HUMAN TYPE)

(a) Neurotic and Neurasthenic Children

Over stimulation and precocity, Genius, Irritability, Excessive imagination and lack of mental and emotional poise, Hysteria (Dementia Praecox), Lack of concentration, Negativism, Contrariness, Preverse tendencies, Sexual precocity, Fears and obsessions, Defective in-hibition, Tic, Motor disturbances, Vaso-motor, sensory and trophic disturbances.

(b) Children of Pathologically Retarded Development

Impaired conceptual ability due to retarded brain development, Physiological retardation due to growth rate. Special physical causes—Chronic catarrh, serious chronic affection of vision and hearing, chronic difficulties of nutrition, venereal infection. ANY OF THESE CLASSES, THRU NEGLECT MAY DROP DOWN IN THE SCALE OF DEVELOPMENT INTO LOWER CLASSES. IN OTHER WORDS THE INDIVIDUALS COMPOSING THEM, MAY LOOSE THEIR NORMAL CHARACTERISTICS AND DEGENERATE INTO PERMANENT
DEFECTIVENESS. IT IS A MATTER OF POTENTIALS AND THEIR DIRECTION. ON THE OTHER HAND HAVING THE NORMAL POTENTIALS ATYPICAL AND PSEUDO-ATYPICAL CHILDREN MAY BE RESTORED TO NORMAL EQUILIBRIUM.

B. Subnormal Children (THOSE WHOSE POTENTIALS ARE INCOMPLETE OR UNDEVELOPED)

1. Defective Children -- Heredity and congenital causes--Epileptics, blind, deaf, dumb, deformed, paralytics, crippled, etc. (THESE CHILDREN CAN NEVER ATTAIN THE PERFECT NORM OF HUMAN NATURE AS THEIR POTENTIALS ARE INCOMPLETE)

2. Children of Arrested Development (ACQUIRED ABNORMALITY OR DEFECTIVENESS)

(a) Pathological Causes--Children born apparently normal but having their development checked by--

1. Heredity causes, manifesting themselves at certain developmental periods.
2. Special Causes, as diseases, fright, accident. The arrest may be only partial as in case of children deformed by accident, then there will be mainly a condition of incompleteness as in Group I., Defective Children.

(b) Submerged Class, Environmental influences have prevented them from attaining full maturity.

CHILDREN OF ARRESTED DEVELOPMENT WILL REMAIN ESSENTIALLY SUBNORMAL NO MATTER HOW WELL THEY MAY BE EDUCATED WITHIN THEIR LIMITS
3. Children of Rudimentary or Atavistic Development.--
The primitive type representing mental, moral and social instincts and activities of the savage, barbarian or generally uncivilized level.

Atavistic individuals--They approach the abnormal level. They represent a reversion of instincts and capacities in spite of being born of apparently normal parents.

GROUPS A & B. CONSTITUTE HUMAN SOCIETY.

C. Abnormal Children.

(THOSE WHO DEVIATE FROM THE NORM OR STANDARD OF HUMAN NATURE)

Hereditity and Congential Causes. Cretius, Cretinoids, microcephalics, idiots, idio-imbecils, imbecils, and feeble minded, insane, criminals, moral imbecils and moral perverts.

(ABNORMAL CHILDREN STAND OUT-SIDE OF HUMAN SOCIETY AND REQUIRE CUSTODIAL OR INSTITUTIONAL CARE PERMANENTLY)

A normal type may be conceived as representing all functions in proper poise, all potentials of complete personality being present and unimpaired in growth and development. On this basis we may say that any perversion of function which shows a tendency to persist and interferes with the ordinary mass methods of instruction makes the ungraded class or supplementary individual instruction a requisite to school progress.

"Abnormal" children in this classification are those
who are distinctly feeble-minded, insane or moral
imbeciles and perverts and will need custodial care
thru life, being unfit to live independently in modern
human society.

These we do not wish to consider, but rather the
handicapped, the normal child, the misfit in society, the
unfortunate child, the misunderstood child for whom most
can be done, and whom it pays society best to educate.
Such children thru neglect or wrong education, will help
to swell the ranks of abnormal, inefficient and disturb-
ing elements in our present day civilisation as they grow
up. It has been demonstrated that thru proper education a
large majority of them can be restored to normal manhood
and womanhood.

Many authorities claim that the number of abnormal
children has been greatly overrated. Dr. Goddard and
Gulick maintain that only 2 to 3 per cent of all our
school children are "abnormal".

The number of atypical and subnormal children at
a conservative estimate, according to Gulick would be
25% or five millions individuals.

While it is perfectly evident that sufficient pro-
visions must be made for the truly abnormal children, as
their presence in society constitutes a constant danger,
it is obvious that it is even more important to save the
potentially normal child from sliding downward in the
scale of development on account of preventable handicaps
and from becoming a fixed charge upon the community.
In the olden days of mining, the methods of separating the precious metal from the ores in which they were found were very crude and wasteful. A considerable portion of gold and silver remained in the waste portion and was thrown out upon the "dump". When it meant dollars and cents this waste could not be long endured. Modern methods must be introduced—and soon they were even making it pay to work the "dump".

Our old educational standard in too many ways resembles the early mining process in having too much waste. We have managed to take care of the average boy and girl, but the boys and girls who did not fit the system have been crowded out and dropped along the educational highway.

But the age of the child has dawned. Children are not only considered to be an entity in the family, but also in the school as citizens and mothers of the future.

We have not yet fully come to the realization of the fact that it is the duty of our public schools to take care of all children and that it is the right of every child to receive an education according to his capacity; but it must be clearly understood that this large class of children, if not saved for constructive activity, within their social setting, is in danger of becoming a destructive force in society.

The new standards must evolve methods by which this human waste can be avoided, just as modern processes of manufacture and industry have led to saving of what was formerly waste material and what is now often turned into products more valuable than the original object of production.
II. Historical Survey

A new word has come into the English language. The word is, Paidology and it is derived from two Greek words, meaning child and science, or the science of taking care of children. Its object is to study and collect all kinds of information concerning the bodies and minds of children. Especially does it seek to know and understand all departures from the normal standards, physical, mental and moral.

When the problem of the exceptional child first presented itself to the consciousness of educators, it was natural that those children who deviated most pronouncedly from the average attracted first attention. The development of the social conscience makes the responsibility of society toward its unfortunate, -- the imbecile, the idiot, the deaf, blind and dumb more and more felt and acknowledged. These were the first to be provided for but as the movement grows it extends into new and hitherto undreamed of avenues and the problem of the exceptional child is assuming increasing proportions as the result of our study of it grows.

A. Development of Auxiliary Schools in Foreign Countries.*

In the middle of the 19th century the Auxiliary Schools of Germany claim to be the first school for the feebleminded. Holle, Liepsig and Dresden all claiming the distinction, but it was not until 1894 that an official decree was passed by the Imperial Board of Education in Prussia authorizing the establishment of such schools for abnormal pupils of compulsory school age. A second decree 1901 laid out

* B. Maennel--Auxiliary Education
plans for a further extension. The growth of the Auxiliary class in Germany has been steady. It is extended to all kinds of mental defectives. In 1910 of the forty German cities having over 100,000 inhabitants, all had organized auxiliary classes. A great many of the cities of less than 100,000 have no auxiliary schools or classes but it is slowly being worked out until some of the smaller places have such classes. Wasurgen with only 5,000 inhabitants being the smallest system we could find any record of having auxiliary classes.

Great differences exist in the organization of the German Auxiliary schools, a few have eight grades, a few have one grade. A good many have three grades, some four, five, six or seven grades.

In England Auxiliary classes were made part of the public school system by the Defective and Epileptic Act of 1899. The aim of these schools is "to make every child profit by the instruction given, so that each according to his ability, may enter the ranks of the wage earning community."

The work has spread but the report for March 1910 claims that the effectiveness of the work of the special schools is at present nullified for want of a legal provision for the permanent detention of the worst cases in custodial homes. The plan of admission to the English Special Schools by expert examination and probationary period for observation before assignment is thought much safer than the German plan of leaving the defective child to vegetate or retrograde in the regular classes for one or two years before he is sent to the
auxiliary classes.

The auxiliary class idea has been taken up by other European countries, viz;--Austria-Hungary, Belgium, Holland, France, Scotland, Switzerland, Denmark, Norway, Sweden and Australia with varying degrees of success and excellency.

In Austria, connected with the schools in Vienna, is a protective bureau which keeps in touch with the pupils after they have left school and advises the parents as to situations for the children.

In Belgium there is a society which has done much to look after the children after they have left the auxiliary school. In order to remain in touch with these children, the society arranges for monthly conferences with them.

One is led to wonder at the slowness of France in taking up this line of work. Frenchmen were the first to formulate the principles for the training of the abnormal children and the first to carry out experiments in this line. "The names of these pioneers, Itard, Esquirol, Bethromme, Ferris, Falvert, Voisin and Sequin are regarded" says Binet,"As authorities everywhere except in France." Sequin as we all know was the first successful teacher of abnormal children and his book on that subject is still a classic. But it was not until 1909 that France passed a law permitting the establishment of special schools for retarded children. "Profiting by her lateness of this law", says Theodore Hiller, German authority on auxiliary schools, "places France at the head in regard to auxiliary school legislation."
The salient points are; it provides not only for auxiliary classes annexed to the regular elementary schools but independent auxiliary schools which may be connected with a boarding school, and children whose cases are too serious for their education to be carried on in the home may be admitted to membership in the boarding school.

They provide for separate divisions for the sexes, trained teachers with special fees, medical examinations, special inspection and management, State aid in defraying expenses. These lay the basis for its claim to primacy.

B. Development of Special Schools and Classes in the United States.*

While the United States is not so far behind Germany in recognizing the need for establishing such schools, as some writers would have us believe, we are nevertheless, far behind in really meeting this need. It is a fact, that the establishing of nearly all the special classes in the United States has occurred within the last fifteen years and the general majority are from three to five years old.

The state first regarded its most unfortunate wards as objects of charity, or as dangerous individuals, consequently the first institutions provided for them were called asylums, or charitable institutions and it is shown that they were not regarded as any part of the educational problem by the fact that they were placed under special boards of control and not under the department of public instruction. In many states they were under the same management as the state penitentiaries. Only in the last decade

* Holmes, School Organization and The Individual Child
has the problem for the various classes of exceptional children come to be regarded in any way as an integral part of public education, to be provided for out of public school funds and managed by regular city and state boards of education. So rare is it yet that most persons could not name the cities and states where the more enlightened view has been taken.

Undoubtedly compulsory attendance and a closer organization of schools has made this problem acute. When attendance was voluntary and schools were loose aggregations instead of organizations the misfit could be ignored. When school became tedious to him, he just eliminated himself. Now he cannot eliminate himself for he runs into the truant officer who runs him back in again.

What to do with the misfits in school is a question pressing for an answer throughout the United States. There is an entire agreement among educators as to the seriousness of the problems resulting from the presence of misfit children in the schools though there may be considerable disagreement as to the best methods of identifying and serving the best interests of such children.

Three institutions have become greatly famed for their advanced methods of study and training of the feeble-minded and atypical children. These are:--The one under the National Association for Study and Education of Exceptional Children at Plainfield, New Jersey, The New Jersey Training School at Vineland; The Psychological Clinic at the State
University of Pennsylvania. These schools have pointed the way by which all other benefactors of the particular unfortunates must follow. Already a few states have caught the inspiration and a great many cities in almost every state are groping and feeling their way toward the light, creating a great laboratory all over this broad land for a closer study of the child and his needs. Surely the child is at last beginning to come into his own.

In the Spring of 1911, the New Jersey legislature passed a law requiring all pupils "three years or more below the normal, to be taught in special classes." The Law also requires that the number of pupils per class shall not exceed fifteen.

A few states and a large number of cities have medical inspection. A few states have psychologists provided to assist in the inspection. Chicago has had a child study department of the public school organization for over a decade.

The State University of Washington has a bequest of $30,000 to be used for the study and training of children "suffering from defects either physical or mental, especially such children as can, in spite of these defects, attend school of some sort and benefit by some form of school education and training."

It is planned to have a specialist in charge and spend a considerable amount of time visiting centres in the state giving aid and council to the various school authorities.

* N. A. S. E. E. C.
for establishing plans of work in their schools.

Plans are being matured in the University of Iowa to secure a trained psycho-pathologist who shall conduct researches and give similar council to school authorities.

Wisconsin's system of training the deaf and blind includes both state institutions and local schools.

The Illinois law gives district boards power to establish classes for the instruction of deaf children provided however that no person shall be employed to teach the deaf who shall not have received some special training for the work. Only one other state has made provision for insuring trained teachers.

California usually in the vanguard in school legislation, has the most enlightened stature enacted in connection with the prevention and discovery of all cases of abnormalities.

Many cities including New York, Chicago, Boston, Philadelphia, Cleveland, Buffalo, Washington, Baltimore, St. Louis, Kansas City, Tacoma and others too numerous to mention have special ungraded classes for the retarded and deficient pupil while not a few have classes for the deaf and blind under the control and supervision of the city boards of education. Now every large system makes some provision and the small schools would be glad to make such changes if they could be met from the financial standpoint.

By 1906 there were in the United States, twenty-seven state and twenty-eight private schools with three hundred and thirty-nine teachers and twelve thousand six hun-
dred students, and the work is growing year by year. Much as all this means, it is as yet only the little leaven. It has been introduced into our larger school systems. Next the small school must give opportunity to every child to have that training which his more fortunate unfortunate brother of the city enjoys.

In order to do this, the educational authority should have at its command all the agencies necessary for this purpose. Every public school should have on its staff a chemical psychologist, a physician and a statistician, who with the aid of a social worker and a trained nurse would be able to effect the proper co-operation between the home, the schools and the refractory child, thus making the public school the logical clearing house for detecting incipient subnormality, insanity, and criminality.
III. The Maladjustment.

I. Due to several causes:---

The problem of the exceptional child is the problem of how we may save the frightful human waste that is going on all the time. It is, put in a different way, the problem of success or failure in education. In these days when the tidal wave of child-study is taking due cognizance of the previously neglected types of exceptional children, it becomes perfectly evident that attention must be turned, primarily to the conductions productive of the exceptional child, rather than to the child itself, and thereby find out means of eradicating the cause, expecting that the evil will then naturally abate of itself.

Thus by a growing interest in the scientific study of children we are impelled to a more intensive study of causes to fight the evil at the beginning.

It seems sufficient to treat all of them under the following general heads:--

I. Natural Causes.

(a) Bad inheritance,-- It is an accepted fact that hereditary taints are transmitted from generation to generation. A great deal has been said recently on this very important phase of the subject.

It is so technical in its nature and the collection of data so very difficult that we have no vital statistics to speak of. Some authorities tell us the part heredity plays has certainly been over stated and that there has also been too much alarmism and over emphasis of obscure and insufficient-
ly proven data. But says Havelock Ellis,—"We must not for-
get that to a very large extent the child is moulded before
birth. There is no invariable fatalism in the influences
that work before birth but it must always make a great differ-
ence whether a man is well born and starts happily or whether
he is heavily handicapped at the very outset of the race of
life."

Eugenics, a new but a most valuable science is
sounding a warning that should be heeded everywhere.

(b) Bad mental conditions, viz:—feeble-minded, insane,
epileptic, want of balance, slow, weak to retain arrested
development, Many children lag not because of any sensory
defects, but because of the fact that their minds are just
slow to elaborate the stimuli furnished by the senses into
higher products. They suffer because their minds work so
slowly and sluggishly as to require more attention and drill.
Just deficient because they do not fit the mechanism of our
school. We are spending more time trying to make them fit
the machine than in trying to make the machine fit them.

(c) Bad physical conditions.

1. Ear and eye defects, Adenoids, Tubercular, Etc.
2. Sickness, —(producing late entrance or short
    and irregular attendance)
3. Under nourishment, anemia, poverty, etc.

The importance of the old Latin proverb, "mens sana
in corpora sana.", a healthy mind in a healthy body, is fully
recognized by the present generation. We are well aware
of the fact that there is an organic substratum for every
psychic manifestation" Special stress is laid upon the early detection and correction of physical ailments, in order to avoid their deteriorating influences on the mental development of the growing individual.

The dragnet again, of compulsory education, brought into the schools hundreds of children who were unable, to keep step with their companions, and because these interfere with the ordinary administration of our schools the cause was soon searched out. This led to an extension of the scope of medical inspection of school children to find out if they were suffering from such defects as would handicap their educational progress.

In conclusion we would say of these natural causes, that it is a most difficult part of the subject. It is a noticeable fact that in this field the most divergent and untenable conclusions are drawn by the various persons who write on the subject. It is evident that enthusiasm and bias form too important factors. Probably the most depressing effect of irrational conclusions, is the intolerance of their exponents toward other points of view. The study of this subject is too broad to be comprehended by any specialty or combination of specialties except the sum total of all specialties.

II. Environment.

Fatalistic has been the attitude of those who have accepted hereditary tendencies as excuses for the misfit and then left them uncared for without exertion on the part of any one. Many brilliant hopes have been buried, owing largely to the lack of knowledge of the influence of environment and education.
The way we regard the potent forces of heredity in relationship to education and environment is vital to the subject in hand. Is heredity the all important force that rules the destiny of the individuals or are we moulded entirely by our environment and education?

It is a most interesting study in itself. Eminent authorities could be quoted who emphasize both sides of the question.

The importance of this question is so paramount that it is almost the supporting beam upon which rests the superstructure of our educational claims for the exceptional child. Misfits are too often the victims of circumstances. It is too often the matter of unfavorable environment and the lack of opportunity determined by our modern civilization, that has been responsible for a vast amount of "exceptional" development of the undesirable order.

Any study of the causes of retardation of school children must include a study of their home environment and economic standing. Here investigation proves that a great deal of mental deficiency is caused by neglect, poverty, overcrowded homes, poor food, bad air and lack of play-grounds. There should be co-operation established between the home and the school, so that there can be a unity of educational method. Improper home environment creates temporary atypical conditions and this unity is practically impossible when the child changes from one set of environmental influences to the other and never gains an equilibrium of habits and attitude.
The atypical child who under favorable circumstances might rise to higher achievements and compete on equal terms with his normal fellows has great difficulty in asserting himself, owing to the present conditions of our civilized life. This is especially true in our large cities. Our life conditions are so complex and so artificial, and they change so rapidly that it is little wonder that the adjustment is extremely difficult for weaker members of society.

The atypical child has been defined by Dr. Grosman as one who has never had its chance. They have been the victims of bad environment rather than heredity, mental deficiency or other causes. They are misfits in the graded mass instruction not because of any fault of their own, but because of bad environment and that is not confined to the slums it is often found in palaces. Correspondence with environment is the best test of our modern life.

Child study shows us that there is no place in the world where this statement is better exemplified than in the school and the Juvenile Court. Authority from the Juvenile Court claims that environment counts for nine tenths of the problem. Probably it would be but little exaggeration to claim such a percentage for the school problem.

To find one's way and one's place among perplexing influences, circumstances and life problems; to find his groove and his vocation and then to meet in ruthless competition stronger members of society in this bewildering maze of transformation and complex tasks, presents a necessarily confusing problem and to be in correspondence with one's environment,

"Aye there's the rub!"

* Report N. E. A. 1904
III. Economics

The effects of the industrial revolution of the last one hundred and fifty years, with its attendant complexities of the modern modes of living have reached into fields where you would hardly expect to look for them. The change from the home economy, where the boy and girl learned in the home under the direction of their parents to do many things with their hands and to follow a trade that would fit them into a place in society, to the new where none of these things are done in the home, has thrown a new responsibility upon the school that it has not yet been able to meet.

The old course of study built upon tradition does not meet the actual needs nor does it demand the interest that it should. The school must prepare to become possibly the industrial unit and become the strongest influence in the training of children.

The following plainly shows some of the economic causes of exceptional children:--

(a) Long hours of work in factories and other industries for the mother weakens the physical inheritance of the children.

(b) The mother being absent from home results in the following:--

1. Neglect of Children
2. Improper nourishment of all.
3. Family life, with its training for moral standards is destroyed.
Improper housing, light, air and space are the essentials of a healthy normal childhood and of mental and moral development.

Child-labor, Another strong factor in the creation of atypical and pseudo-atypical children. That factory or industrial conditions which tax by its long hours and undermine the child's constitution, destroys his nerve control and develops a desire for unhealthy stimulus or excitement, so that he does not find satisfaction in healthy play, must soon be realized and put under control. Many succumb quickly to unfavorable conditions. The majority are irretrievably damaged in early life and physical, mental and moral development is more or less seriously retarded.

It is not out of place to treat as an economic problem the cost of elimination, when once public consciousness has been aroused.

Expert medical service, trained nurses, a chemical psychologist, a statistician, a social worker, a specially trained teacher, tax the school fund and it will doubtless be difficult to get the people to see that skilled instructions for the occasional case of retardation, is in the end a great economy to the schools and an educational stimulus to social progress. Society will be slow to realize that it is unjust to the teacher and normal pupils and means an enormous waste to them as well as to the exceptional child. It may require considerable expense and it may be difficult to smooth organization but it will save cost and difficulty to an undreamed of extent if we consider the enormous expense
imposed upon human society by pauperism and crime, by charity and correction, by judiciary and penal measures.

The material side of the question stands in an exaggerated light before a people who have ever been afraid of excessive taxation. Undoubtedly the time will come when facts will be marshalled to show even the most conservative community that the material side cannot long stand in the way and all will be aroused to appreciate this in other terms than money.

IV. Administration

(a) Organization:-- It interests us now to know that for centuries individual instruction was the chief instrument of learning and that class or mass instruction was little known. During the middle part of the last century individual teaching fell into disgrace and with the rise of the graded school the emphasis was placed on class teaching and class organization; with the result now that the rigid classification of the modern school, the "lock step system", which secures uniformity at the expense of adjustment to the individual needs, throws a great responsibility and a large percent of the waste into the administrative department. We have a splendid machinery and it works smoothly but it savors to much of the "steam roller" idea.

(b) Course of Study,--We have stated in a previous topic that the change in the industrial world has thrown a new responsibility upon the school. Our old course of study
built upon tradition has not kept pace in many places with the modern trend. Perry in his "Problems of the Elementary School", claims that "the movements of our pupils along the educational rails is a matter of route and speed." We must reform our course of study so that each pupil may take approximately that route which leads to his normal destination. This means that we must form our curriculum for the child booked for the elementary route and the one for the secondary route as well as for the one booked for the University.

We may state the criticism of our present system not too strongly as follows:— Into the same school, into the same classroom, we thrust those pupils to whom we must extend the opportunity of seeking a liberal education and also those in the substantial majority upon whom we are placing the duty of securing that minimum of instruction consistent with proper usefulness in a republic. The spirit of our democracy has given us a peculiar conception as a people, in the efficacy of law and education to equalize the unequal, and in our schools we find children from all walks of life, those with the good breeding and good fortune, those with the handicap of parental ignorance, those of physical robustness and those of physical weaknesses, those of alertness and those of mental inertia, those destined to the trades and those scheduled for a liberal education and the learned professions. Every possible type of child in the land we see in our schools today trying to be fitted into uniformity.

Year after year we see pupils spending an al-
lotted period on things he will never need, released at last, disgusted with school life and yet ill fitted for the real life that is before him.

The College or University has exerted its influence upon secondary schools to the end that they may properly prepare pupils for college entrance. The secondary school has extended its pressure down upon the elementary school demanding that they make adequate preparation for the high school. Hence the elementary become preparatory for the high and the high for the University. Next we find that 90% never go to high school and only 2% go to college. The 90% are prepared for something they cannot have and nearly every one knew all the time they could not have, and they are not prepared for that which is their inevitable work in life.

It is our problem to recognize our course of study so that the child that is scheduled for six or eight years of schooling and then an immediate entrance into vocational shall be given the education that should be his and not the education that belongs to the child that has before him a University career and the preparation therefor.

(c) Promotion Intervals, or the reforming of our speed laws:— We quote from Mr. Ayers of the Russell Sage Foundation. "The courses of study in our city school systems are adjusted to the powers of our brighter pupils. They are beyond the powers of the average pupil and far beyond those of the slower ones."

The average pupil in the average city school system progresses thru the grades at the rate of eight grades
in ten years." Unnecessary discouragement results to the average child because he cannot maintain the rate of speed prescribed. The system of promotion needs to be fitted to the individual differences and to be made more flexible.

All cannot travel at the same rate of speed, some will be lagging, others will be "marking time", both presenting a problem of maladjustment as our rates of advancement now stand.

By investigation Messrs. Ayers and Thorndike show that many pupils in our best systems are one, two, three and even four years behind what is called the normal age of their grade.

II. Is Evolving a Social Cost.

The children of today, it must be remembered, are the men and women of tomorrow, and it is worth while that more than a passing note should be taken of this large army about us. The question is,—"What proportion of these are not being brought to standards of efficiency?"

(a) Statistics

Ninety per cent of our pupils never go beyond the elementary school grade. Only ten per cent of these are scheduled for secondary schools and but one tenth of these ever go to college. *

By investigation, conclusions are drawn by Mr. Thorndike and Mr. Ayers, that only from one third to one half ever graduate from an elementary school of seven grades or more and both agree that less than one pupil in ten ever graduate from the high school.

* Ayer's Laggards In Our Schools.
The tendency of the city school systems is to keep all of the children only to the fifth grade and then to drop half of them by the time the eighth grade is reached. There is perhaps a tendency for small towns and small cities to retain their pupils better and to have less retardation than do the larger cities.

Then according to Gulick about two per cent of the school population are defective, that is so handicapped that they will never be able to take their place in normal society; and from five to thirty per cent of subnormals or about five million would be a conservative estimate. These are not feeble minded but are retarded from various causes and have a reputation of being dullards and by neglect sink into a lower level.

Again, only about 1/3 of all the children who leave school at fourteen have received a grammar education. Not more than one half of these have advanced sufficiently to graduate and so it comes that a great majority of children leave school knowing little more than reading and writing.

(b) Criminals,— The court of every city testifies that youth is the seed time of crime. In the children's court there are daily being revealed new responsibilities of the community to the child. "When a child is arraigned in Court there are always three delinquents, the child, the parent, and the community, and the last is the worst sinner, for it let the slum grow that wrecked home and child alike." In the children's court loom up the sins of the city rather than the sins of the children against the city. Mr. Earnest
Coulter, clerk of the children's court in New York after a near view of 70,600 cases positively asserts that it is environment that counts nine tenths in the whole proposition. *

There is too much prison regime and too little of truly educational training.

Children who have to face the unequal struggle in which their miserable little souls are daily crucified are very apt to be thievish and malicious. We find them every day in the children's court and unless this institution is given means to deal with the child in accordance with its individual requirements he will still be arraigned at the same bar with slugs, drunkards and the most vicious of the criminal class. The children's court is itself just the result of the recent awakening on the part of the community to a new consciousness of its duty to the child.

(c) Teachers, -- One mentally deficient pupil in a class is said to take more of the time and vital energy of the teacher than five normal pupils, with little or no result to show for the energy expended.

(d) Normal Children: -- If it were not for the fact that the presence of mentally defective children in the school room interfered with the proper training of the capable children, their education might appeal less powerfully to boards of education and the tax paying public. It is manifestly expensive to maintain small classes for backward and refractory children but the presence in a class of one or two mentally or morally defective children, so absorbs the

* Coulter's Children In the Shadow
energies of the teacher and makes so imperative a claim upon her attention that she cannot properly instruct the number commonly enrolled in a class. The rights of the more capable children are being sadly overlooked when fifty per cent of the energy of the teacher is expended on five per cent of the pupils of the class.

(e) The Bright Child:-- A class of children which is more neglected than handicapped and retarded children is that of the exceptionally bright children. And yet they are to become the leaders of our race in intellect, in culture, in constructive activity, in commerce, in politics, and the uplift of civilization generally. It is indeed at a social cost, when we neglect these that are to be the pioneers of the future.

Dr. Witmer, professor of psychology in the University of Pennsylvania, says, "The public schools are not giving the bright child a "square deal", He is marking time for the lame duck to catch up."

Dr. F. G. Bauser, Teachers College, thinks that perhaps "the worst kind of neglect in the schools is withholding appropriate advancement from those pupils who are most gifted, therefore of the most significance as social capital."

Dr. Wallin makes the assertion that the supernormal has been the most neglected of all due to the fact he thinks that there are not so many of them and to the fact that they do not trig the wheels of the school machinery."
Oswald in his study of great men has noted particularly the way they react, when young, to school and school work. In most cases he found that men of genius have reacted vigorously against school or perhaps been expelled or received little help from it.

The bright child is able to do the work you set for the average child in half the time the others can do it and the other half is left in which he may do the thing that may occur to his fertile brain (it may be annoying the teacher or other children, causing a double waste).

Many moral delinquents belong to the exceptionally gifted and they are morally delinquent because of inadequate educational treatment.

Some of the best minds are found in the so-called atypical children. Those that give to the world intellectual, artistic and moral qualities. Exalted intellectual power in the arts has been found in persons that began life under a cloud of early instability and deviation. These children compose the great mass of the "misunderstood" and thru ignorance of their needs they have been doomed to a life of pitiless drudgery because the atmosphere in which they moved was distasteful. The child loses much, but society may lose more. These children although endowed with special qualities are usually deficient in certain practical elementary features. Rarely are they well poised. A want of proper self control, some lack of emotional stability, some are not just ordinary children, some are extra-ordinary. Some times music, again
dramatic power, active imagination, marked mathematical faculties are found in a mind lacking in co-ordinating elements of mental processes. Neglect them in early adult life when these children find themselves out of tune, with their surroundings and they lose the incentive of their life work and live out an incomplete weaker sort of existence. They are robbed of their best inheritance and society loses her best leaders, muscians, artists, mathematicians, etc. Various authorities cite Mozart, Goethe, Lord Kelvin, John Stuart Mills, Leonardo De Vinci, Karl Witte, Weiner and William James Sidis as pathological cases.

III. Remediable by Reforms,

In dealing with the many reforms that may be suggested and tried to remedy the waste with regard to exceptional children, we can define in a general way two phases of this subject. The phase of cure and the phase of prevention. Of the two, the phase of prevention is the more important. The phase of cure, however, touches the present atypical children and belongs within the sphere of educational problems. The phase of prevention deals with the race to come and more particularly becomes the problem of the state, though both overlap. In some respects this problem of remedy is beyond the school alone; it is that of society as a whole. In its solution we must secure co-operation between the school and the state. The state must save those children who are exceptional by reason either of their innate individuality or because of peculiar environmental conditions. It must create conditions making for healthy and normal growth for healthy
and normal individuality.

In the treatment of causes in a previous topic, we traced the causes to heredity, environments, economic and administrative conditions. The reforms must remedy and remove the causes and follow the same lines.

(a) Heredity. It is difficult under the best conditions to control inheritance, and yet this lies at the foundation of our problem. No greater service could be rendered any civilization than that which bettered its inheritance.

Sometime we will perceive and appreciate the importance to a nation of having every child conceived and born under the best conditions, conditions of life and health. Soon we must realize that much we deplore in society may be prevented in the future by a cleaner and more intelligent parent-hood. If we could choose the parents of the next generation, if the choice could be made with such wisdom and received with such good will that only children of sound sane parentage should be born, then our most difficult problem of child training would be solved, most of the evils that pursue humanity would be banished. Knowing that degeneracy produces degeneracy, criminality produces criminality, we must prevent such from sending forth into the world some form of vitiated offspring. We will go further with reforms already begun in some states. Every one applying for a marriage license must undergo a thorough physical examination by expert observers and should the applicant be unfit he or she
should be forbidden to contract marriage. This with the segregation of those utterly unfit for the propagation of healthy offspring is imperative. Let us segregate all our existing criminals, feeble minded persons, habitual drunkards and the incurably insane and in a comparatively short time the output of the undesirable elements of our society will be materially reduced. Yet taking every precaution we know there are likely to be some who are physically weak and incapacitated. The reform cures must be worked out for these. Poverty must be branded as a shame to every community. By minimizing the degrading influence of poverty, we would diminish the chance of those born below par from being starved into criminality, distorted into cripples or overcrowded or driven into consumption.

The Forest Schools of Germany have done much toward restoring to the normal ranks many who were considered unable to do the work of the normal child. Closer medical inspection will restore many more.

(b) Environment,—Since we are aware that environment is the cause of nine-tenths of the juvenile delinquency and the community that permits bad environmental conditions to exist is the greatest criminal in the trio, we may expect here a great chance for remedy. Much is already being done but it seems to lack in efficiency and effectiveness. If the slums were removed more in reality than in vague plans and unenforced laws and replaced by houses that really had bright airy rooms in sufficient number to better accommodate the members of the family and boarders. If they
had small yards for gardens and playground, better sanitation in the homes and were taught cleanliness. If food that was plain but wholesome and sufficient for nourishment could be secured. Cheap ice and good milk insured. Better home life with higher moral standards. If we could get better laws and especially better police supervision, we would soon see much that is distressing in our society fade away. We are not altogether short of plans that might remedy the evil, but only short on the working out of the plans to show any real lessening of the ever pressing problem of the slums or the near slums.

(c) Economics. - Closely allied with the environmental conditions, is the economic pressure of present day conditions. We claim that many reforms here are possible for the removal of waste. I have to offer no new or original suggestions for reforms in this field.

Public conscience has been awakened and more glaring and flagrant abuses have been exposed in this field than in any other. It is also true that we content ourselves as soon as a reform is passed when greater activity is necessary to secure its enforcement. We are told that there is no page in the history of our nation so infamous as that which tells the details of the unbridled greed of the pioneers of modern commercialism, feeding on the misery and degradation of our men, women and children. In comparison with England, Germany, France, Switzerland and other European countries, United States is one of the backward countries in the matter of Economic legislature.
We quote from Mr. Carrol D. Wright* speaking of economic reforms in the United States, "To sum up its general features, such legislation has fixed the hours of labour for women and certain minors in manufacturing establishments: it has adjusted the contracts of labor: it has protected employees by insisting that all dangerous machinery shall be guarded----- it has created boards of factory inspectors, whose powers and duties have added much to the health and safety of the operators: it has in many instances provided for weekly payments: not only by municipalities, but by corporations-------- it has regulated the employment of prisoners, protected the employment of children, exemped the wages of the wife and minor children from attachment: established bureaus for statistics of labor: provided for ventilation of factories and workshops: established industrial schools and evening schools: provided special transportation by railroads for working men: modified the common-law rules relative to the liability of employers for injuries of their employees: fixed the compensation of railroad corporations for negligently causing the death of employees: and has provided for their protection against accident and death."

It appears that we have done more in this field than in all the other combined, but in reading this seemingly large schedule of labor laws, it must of course be born in mind, that this enumerates and combines all principal measures enacted in the different states of the Union, and that hardly any single state can boast of a labor code containing them all. Even in the most advanced states, factory legislature is on

* Industrial Evolution in America pp291-292
the whole only in its infancy and its practical achievements are insignificant compared with what still remains to be done in order to eliminate the waste of our industrial life.

We note the omission in Mr. Wright's list all mention of the Compulsory School Law, said by many to be the best and most effective of all factory reforms. It is not without criticism and has not reached its highest goal when it fixes the age at fourteen years instead of sixteen or eighteen, but we know reforms come slowly and gradually.

We would also recommend the universal extension of the working men's insurance and widows pensions as having been tried so successfully in Germany.

The Child Labor Problem is the vital point in the discussion at hand. "When children from the earliest youth work to a point of extreme exhaustion, without open air exercise or any enjoyment whatever and grow up, if they survive at all, weak, bloodless, miserable and in many cases deformed cripples and victims of almost every disease. The mortality is excessive and the dread diseases rickets and scrofula pass by but few in their path. Drunkenness, debauchery and filth could not but be the result. The moral cost of child labor to the working class is incalculable. It robs the working child of all joys and privileges of childhood, cripples his body, dwarfs his mind, takes the very life our of him and threatens to develop a generation of dull cheerless and restless workers. As mentioned before
the compulsory school law serves as a checking device up to the age limit. In general, the compulsory education laws apply only to children between the ages of eight and fourteen. This means that the compulsory phase of school provision concerns itself chiefly with only that grade of our school system, which we term, elementary and in the eight grade system this breaks down two years before the completion of even the elementary grades. This is without doubt the cause of the great loss after the fifth and sixth grades. We need laws that would hold the children at least until they finish the elementary grades and we think a two or three year course in the secondary school would not be radical even from the economic plane alone. We cannot deny that many children must work to live, but it is also true that many are at work not because of need but because of the spirit of the age and the eagerness of the parents and youth themselves to make money.

The age seems to be putting the emphasis in the wrong place and it is a question as to how far it becomes the duty of the school to be subservient to this wrong value or to hold on through this age to a higher, that is sure to dawn, when values will be placed differently. We must be very wise or the insistent demand will take the school all the way over and it will become the cause of the continuation of materialism.

(d) In considering the administrative ways of remedying the waste we are dealing strictly with the great
school maladjustment or that criticism that is being pronounced in all quarters that our schools are not "making good", up to the demands of the age. We have shown that many things have caused this state of affairs as they now exist and that the maladjustment in the home, in the street, the factory, the juvenile court all pile up abuses and then hand them over collectively to the school to solve. With its own readjustment to the kaleidoscopic combinations of environment of today we are convinced that the school problem is no small problem and we often wonder if so much can ever be done by one institution. I feel sure that the school working alone cannot, but in co-operation with society as a whole much may be expected by way of re-adjustment.

Confirming this part of the discussion to what the school can and must do alone, let us consider what seems a possible and practical means of eliminating the waste.

It seems the first change in our present system should be in the organic structure.

The nineteenth century recognized the evils of non-organization. It grappled with its evil and has left us a marvelous monument of itself in a magnificently organized school system. It is for the twentieth century to conserve and preserve that system but at the same time to rectify and perfect it: to take the pinch out of it and make every child safe in its mechanism.

This means a differentiating of the abilities of children and estimating the success of school work not in
terms of a general standard but in terms of what each individual is able to do, within the range of his own ability. One of the evils of the immediate past and indeed of the present is the worship of the "standard". Most principals and teachers agree that the standard must be kept up. "Pupils may come and pupils may go, but the standard must be kept up for ever." We meet this at the end of every term examination. Judged by report cards one would expect to find many anaemic, stupid weaklings; on the contrary they are a full blooded lot, clever of speech, and remarkably well informed on matters not in the school curriculum. A thoroughly likable group that had had some falling out with the school "standard".

On the other hand the greater the elimination of the weak, illformed or slow-witted the better the standard might be. Many should go to the "junk-heap" that the "standard" might be kept high.

Better the standard should come down. Every step in advance toward greater social and economic efficiency has seen a dropping of the standard. The achievement of free public education itself demanded a tremendous lowering of the standard. *The growth of the "belief in the" right of every child to his chance" as against the ideal of the "select few" is a vast lowering of the standard. We feel paid for the loss only in the thought that more children are redeemable now-a-days even if the standard for the whole is not so high.

It is an appalling mistake to mass exceptional children together with normal children in classes. The maintenance of which depends upon "lock step" methods of

* Report N. E. A. 1912
teaching. We cannot give up entirely the mass teaching the development of the nineteenth century, but we must add to it individual instruction. There is a problem of mass instruction and there is an entirely different problem of individual instruction. The special will not supplant the general features of the public school but will only supplement what is now found there. Several plans are submitted as having had success.

(a) The Batavia System, -- Class--individual instruction better known as the Batavia System had its origin in Batavia N. Y. and was worked out by Sup't Kennedy. It grew out of an over crowded building, a common experience to many a superintendent. The fortunate arrangement was made of putting two teachers in one room instead of taking a class out. One teacher was to work with the slower students and assist them in keeping up in the class instruction. After a few months of class individual instruction some pupils considered very dull began to improve and some were soon up among the leaders. Then it was soon noticed that not only their work was improving, but there was also a change in their attitude as well. The whole attitude of the room was changed. Another test in another room was tried and worked as the first experiment. So after thinking the matter out the credit was given to the happy blending of individual with class instruction. It was applied to the one teacher room by giving half time for individual instruction and half time for class instruction. Its success here was as marked as that in the two teacher room.

To be the success that it ought to be the teacher must be careful to work with the pupil and not for him, and
the person who thinks individual instruction means doing the work for the pupil misses the point.

The late Professor Hinsdale in his "Art of Study" tells us that nowhere in this country is the art of study properly taught. He tells us that children must learn to study by studying under intelligent direction. We can see how the Batavia plan properly directed helps the pupil to help himself. It is claimed that it gives the power to do independent work. Another good claim made for it is that the teacher tests that she may teach. She does not teach that she may test.

(b) The Maunheim Plan.

This plan was worked out in Germany to meet the individual needs in the Volkschule and seems practical for adoption in our American schools. It consists of a system of special classes running parallel to the regular classes of the Volksschule. In these special classes or "furthering classes" as they are called are placed pupils who for one reason or another show themselves too slow or too weak to do the work of the regular classes. Such pupils are grouped in classes that form seven grades running parallel to the seven regular grades. They are organized on the same plan as the regular and do the same work though less extensive. It has been found that a special course of study could and should be arranged for these seven grades. This gives a plan that seems to make the "furthering classes" almost exclusively for a special class of children who have little hope of gaining the regular classes, only 52% of the number enrolled being
able to accomplish that end. It does seem to solve the problem of handling the exceptional children along with the normal children without branding them in the manner of separate schools.

The chief argument against it seems to be that so much extra machinery is not necessary to give the best results both to the bright pupils as well as to the backward.

(c) We find in the school system of Newton, Massachusetts another method of attack that seems to be a near approach to the realization of the ideal. The work at Newton under Dr. F. E. Spaulding is planned on the theory that it is possible and even necessary for pupils to work as hard, as actively, and as independently as to advance as rapidly as his sound and well balanced development requires. It means to insure that no pupil shall be dragged suddenly or kept beyond his depth, but that each one shall build a stable foundation on which he can advance and rise securely if ever so slowly.

The plan of reaching the individual is made effective by the employment of unassigned teachers. The days work of an unassigned teacher may be something like this-- For the first half hour in the morning there come a little group of half a dozen children from the third grade because they are having trouble, perhaps in some process in Arithmetic. She strengthens them by additional work individually or in the group. They return to their class work able to do the work.
The next half hour comes a group from the seventh grade. They are not having trouble with any subject but need more work than their class as a whole is capable of. She may prepare them to skip a grade and strengthens them for the work they are about to enter.

This period over she received a group from the fourth grade who are temporarily behind in their work perhaps following an epidemic of measles.

Thus the work of the unassigned teacher goes on throughout the school day. This plan may be even carried into the high school. The great drawback here as in other lines is the difficulty of securing experienced teachers who are fitted for this special work.

(d) One more plan that gives a more flexible system of promotion and one that is fitted to the individual differences is presented.

The system of promotion has been the most rigid part of the mechanism of our graded system. The semester plan, the quarterly plan, or the plan of dividing class until the intervals average about six weeks are more nearly ideal but they require special conditions to operate successfully. — under the last two mentioned there must be one of two things, —more teachers or more classes for a teacher— and there are but few places where such conditions can be provided for.

What is needed in the average small school is a system that will give students an opportunity to do the work in six, seven, eight or nine years according to their ability, and will be so systematized as to be operated with no ad-
ditional teachers.

The nearest approach to this would be two parallel courses, articulating with one another in such a way as to come together at different points and thus afford means of transferring back and forth to a slow or rapid rate as may be necessary. The resultant of this would be in reality several routes or courses varying in length to fit the individual cases of different capabilities.

The following plan has been in successful operation in Le Mars, Iowa for three years and Odebolt for seven years and seems to be within the practical course for small systems.

The two courses of study are made out covering the same identical work and differing only in the length of time it takes to do any portion of the work. The work is outlined to run parallel and articulate with one another at different points along the line. Classes can be so graded by means of the two courses of study to come together at different periods allowing the pupils at these points to be transferred from one course to the other without loss of any of the work whatever. And in addition the intervals are so short as to permit transfers practically at any time.

The two courses are a six year course and a nine year course. This offers the opportunity whereby a bright pupil may take the course in six years. Then by three different routes one may make it in seven years; by three routes in eight years and by one route in nine years and in none of these is he required to repeat any part of the course.
The results of the two courses working together is shown in the diagram. The nine year course is represented by the grades indicated by the numbers and the six year course by grades indicated by letter. Grades I. and A. begin the primary work together. Grade 4 and C. begin the intermediate work, and Grades 7 and E begin together the grammar work. Hence pupils may be transferred at these points from one course to the other without loss or repetition of any of the work whatever and continue from that point either at a more rapid or a slower rate as may be desired.

Under this plan there are four kinds of promotions; the "regular" promotion by which a pupil is passed from one grade to the next higher in the same course; The "transfer" promotion by which the pupil is placed in the next higher grade of the opposite course and this occurs at the end of the year; The "advanced transfer" promotion by which the pupil is transferred out of course to the next higher grade of opposite course, and the "retarded transfer" pro-
motion by which pupil is placed in a lower course and given
the benefit of a review before taking up advanced work (but
without loss of time) and may occur at any time of the year.

The intervals between two classes is never more
than twelve weeks and for most of the time only four to
eight weeks. Thus opportunity is afforded frequently to
adopt the courses to the needs of both the slow and the quick
child. The pupil of superior ability is not compelled to
mark time. The pupils of slower development are not compell-
ed to hurry over the work. The course is pliant at all
points. The pupil is promoted on the estimate of the teacher
and as soon as the work at any point in the course becomes
too hard or too easy the pupil is reclassified.

Two significant results of the two course system,—
First and by all odds the most important, the standpoint of
the child. Second, the result as seen from the standpoint
of the tax payer.

The results shown in Obebolt, Iowa, where it had
been in operation for over six years, were that twenty nine
percent of the pupils did all their work in the six year
course; Twenty two percent did theirs in the nine year course;
while forty-nine per cent worked in both courses. Of the
forty-nine percent who worked in both courses it would be
safe to say that one fourth will do the work in seven years
and one fourth in eight years. In round numbers, therefore,
one fourth finish in six years, one fourth in seven, one
fourth in eight and one fourth in nine.

Then is it not worth while to break away from
the lock step method so common in the regular eight year one course system when three fourths of the children attending school are not given the opportunity they are entitled to and might as well have?

Now from the standpoint of the financial saving of the two course system one fourth of the pupils will need but six years, thereby saving two years of attendance in eight. In a school of 800 this would mean fifty pupils less to take care of or that any school having had the two course system in operation a sufficient time, the enrollment will be decreased six and a fourth per cent, thereby decreasing the expense.

(e) The Course of Study, From the old time course of instruction, including reading, writing and arithmetic, the curriculum has undergone many modifications and received additions until it has lost all resemblance of its former self. But these changes have not been brought about except after strenuous conflict between conservative and radical forces. A technical terminology has developed. We discuss "The essentials", "the utilitarian", "the cultural", "the form and content subjects", "the enrichment," "the impoverishment". We experiment, then protests take the convenient form of attacking the "fads". Indeed someone has said, "The chief fad of the day is pounding the fads." The two contesting forces, the utilitarian and the cultural compromise, take joint guardianship of the child with the result that each of these good Samaritans has him by the arm tugging at him to direct his attention this way or that.

We have the dangers of overfeeding and indigestion and malnutrition with the sad realization that the school
fails to hit the nail squarely on the head. Then we put in new subjects. New York stands pre-eminently with twenty-five subjects offered in the place of the three old time ones. We discuss, we experiment, we tug and still the course of study variant both as to time and to place needs the final word yet to be spoken.

We have already noted the fact that ninety per cent of our public school pupils do not go beyond the elementary school. For these, one would consider, must be the chief interest in manufacturing a course of study for the elementary school. Their needs are varied for they are destined to enter many walks in life. Hence it follows that the course of study can be rationally determined only by a study of life and the child's needs in meeting the conditions of that life. Tradition and custom should count for nothing.

The public schools attempt too much.

The rudiments of an education are few and these alone should be given the child in his earliest years. Train him in obedience, to rightful authority, self-control, self-respect, perseverance, and awaken in him a thirst for knowledge and culture. Thus equipped he is better prepared to make the most of his natural powers and secure an education outside the public school than under its present curriculum.

If we would make one criticism more than another we would claim that we make too much of clearing the path of difficulties and hardship. We give too little practice in surmounting obstacles. The pupils in our high schools are too much inclined to sit down and wait for obstacles to get
out of the way. We need to give a training that will cause the boy to set his jaw and clamber over, regardless of difficulties and hardships for we believe that this is what he will find in life. Most boys will buck the line on the football field but refuse to buck the line of a hard lesson. Let us study life for a basis of our course of study. It will teach us not to smooth the way so much.

One more demand is for a more vital contact between the school and the community; and while this may take many forms such as the use of the school plant for civic purposes, and the development of vocational guidance as a part of the school system, what I have chiefly in mind is the tying of the school to the community by actual contacts. Teach vocational activity through cooperation with the citizens and tradesmen and not apart from them. A half day in the school acquiring the knowledge and a half day in the vacation in actual practice with the tools of their educational requirements. Then train for citizenship by co-operation of the school with community activities.

If our conception of the mission of the common school is true then the schools must in some measure be reformed not only on the administrative side and the securing of better trained teachers, but also through changes in the course of study.
IV. An Example, --- A small school.

The problem of "exceptional children" is a condition effecting all of our schools to some extent but varying greatly in degree in different localities.

The community, the class of people, the industries with their environment all must be taken into consideration in a practical survey of a school.

The school system of Liberty, Missouri to be cited as an example must be considered with these facts in mind.

The number of inhabitants 3,000 with a school enumeration of 864. It is an old community with rather a permanent population. Bound up in its traditions, it is inclined to be too conservative for its own proper advancement, and is too much afraid of taxation for its own best interest. But to offset this it is a school town and at all times has centered its pride on its schools as its chief asset.

The home of a college for boys since 1858 and a college for girls since 1890. In comparison with the average place a large proportion of its inhabitants are college graduates and the school idea dominates.

Outside of negroes it has no foreign element to speak of. About 700 negroes by the last enumeration and they maintain a separate school plant not included in this survey.

Attendance 120.

No factories, or large groupe industries. No poverty in the extreme sense but enough to show slight malnutrition and irregular attendance for want of proper clothes.
Near enough to a large city to appreciate and secure its advantages, and to give it a cosmopolitan view-point.

The school plant for the elementary system is a modern $50,000 structure with modern heating and ventilating system. Number of rooms, twelve with a seating capacity of 400. Twelve teachers are employed. Six teachers in grades one, two, three. Three teachers in grades four and five. Two teachers in sixth and one each in the seventh and eight. The organization is maintained on the eight grade single course of study plan and promotes once a year.
The following table shows the age and grade distribution in the elementary school.

Table No. I.

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</table>

Under Normal

|         | 3 | 8 | 3 | 7 | 7 | 7 | 3 | 1 |

To the left of the heavy line shows the normal age pupils.

Table No. 2.

Shows age, Grade and Progress Record

<table>
<thead>
<tr>
<th>Grade</th>
<th>Enrollment</th>
<th>Overage</th>
<th>%</th>
<th>Repeating</th>
<th>%</th>
<th>Elimination</th>
<th>%</th>
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<td>22</td>
<td>48</td>
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</table>
The general opinion now is that the over age problem may not be considered serious enough to be recommended teaching in special classes until the student is "three years or more below normal". Then the same law requires that the number of pupils in the class shall not exceed fifteen.

The above table shows sixteen pupils "three years or more below the normal age.", enough to maintain one special class. We have retardation and elimination enough to cause investigation, and the seeking of other methods of solution outside of the special class.

These statistics do not, either singly or taken together measure the efficiency of the school system. They are only symptomatic. A large degree of elimination is significant, mainly in showing the need for change in the curriculum, or in the school organization, in calling attention to a lax enforcement of compulsory education law, or in showing a need for modification in the standards employed by the school system. If they are just backward and slow from preventable causes that gives greater reason for clearing away the difficulty as far as possible.

In seeking the causes for the sixteen cases of "exceptional class" we find:

Heredity --- Four
Environment---Six
Economics ---Four
Administrative---Sixteen
The list of causes for slow and backward pupils:--

1. Late Entrance—?
2. Changing School—Four
3. Sickness —One
4. Physical defects—Five
5. Indifference—Three
6. Mental Deficiency—Three
7. Irregular Attendance—Six

II. What is being done here toward readjustment.

Under the very able service of Miss Ruth Mitchell, Principal for the last three years, much has been done toward lining up with the modern trend and freeing the system from its old love of tradition. The untiring effort and thought she has given it shows to a marked degree the lack of the "fad" element and seems to me to be well grounded in the best pedagogical theories.

The Course of Study and its manipulations, seems to be deserving of comment in the value and time elements of the "Essentials" the "utilitarian" and the "cultural".

The essentials are given the morning and until two o'clock. Manual Training, Shoe Repairing, Cooking and Sewing are provided for in the upper grades where this is practical.

After two o'clock no real school work, as we are in the habit of thinking of school work, is done. Recreation, Play, Art Appreciation, Story Telling, Lessons in Hygiene, Nature Work, Agriculture, Music, Reading, Drawing, Weaving and Folk Dancing are all provided for in the last two hours
of the day. Not all subjects coming every day but several times a week in a well worked out plan. By use of the Radio-Optican, Pictures, Displays, and Victrola, the story-telling, music, art, and nature study work is made interesting to the very young children.

Departmental Work prevails above the fifth grade. School gardening has been introduced with a garden inspector, who visits the home gardens throughout the summer. Many vacant lots having been tendered for use of school.

Story telling has been planned in connection with the Chautaugua movement to hold its sessions throughout the summer vacation.

The Agriculture work in the school has been placed in the hands of a well qualified farm adviser teaching in the school in the morning and visiting the farms if desired in the afternoon. In this way the pupils go to the farm and the farmer learns to co-operate with the school thus tying the interests of the school and the community closer together.

The Juvenile Improvement Club is made up of the boys of the sixth, seventh and eight grades. They hold meetings twice a month and receive training in parliamentary law and are interested in the improvement of the boy. They invite speakers to address them, and take pride in entertaining and knowing men worth while.

The Bird Club for the younger students for study and appreciation of birds, bird houses, etc.

Medical Inspection is given, but primarily for the detection of communicable diseases and for the protection
of the community.

The Parent-Teachers Association is arousing a spirit of closer understanding and co-operation on the part of the parents and the school.

Recommendations:— What has been done seems to be altogether along the right line so far as it goes. As yet nothing has been done particularly for the individualization of the child. And no provision has been made for expert means of detecting and determining the immediate need of each individual child. It is done, only as the teacher, without special training, with her experience can diagnose the case and provide the remedy.

It seems from the study of the situation that one such trained teacher could serve the whole system and revolutionize the results of the whole system along the line of individual differentiation. With Henry H. Goddard for authority, we quote, "No system of 500 children can afford not to have its specially trained teacher."

I believe too the system of promotion need to be fitted more to individual differences and made more flexible. I believe the two course system of grading and promotion as used in the Le Mar system would greatly modify the retardation condition and the one teacher saved thereby could accommodate the special teacher demand. With a different adjustment of the twelve teacher to the eight grades it seems one could be unassigned and do her work supplementary to the class work of the other teachers as described in the Newton plan as before
At the present time, the whole problem is really in the stage of initial consideration, -- One cannot expect an adequate system to be organized for some years to come, but summing up the small school situation, I believe it possible with 500 students and twelve teachers to provide for a two course system of promotion, one specially trained teacher for special class work, and one unassigned teacher trained to individual teaching to supplement all the work, thus making the individual child the focusing point of the whole school system.

Finis.
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