A study of the research done on the gifted child during and after World War II.

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Service Paper

A Study of the Research
Done on the Gifted Child
during and after World War II

By

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CHAPTER I

INTRODUCTION
Statement of Purpose:

The purpose of this study is to summarize the literature and research done on the gifted children during and after World War II (1945) to the present day. This study is limited to the intellectually superior in the elementary school: those children with an intelligence quotient above 130.

The study proposes:

1. To examine in so far as it is feasible:
   a. All published material.
   b. All unpublished material.

2. To analyze the research and literature.

3. To summarize the data.
Justification:

Adequate education for all youth is a democratic ideal when each person has that opportunity provided by public expense; however, spending money is not enough. Each person should have the education he or she is best able to use. Education is that process which develops a person according to his or her unique needs and nature.

The gifted children in order to develop need the special educational opportunities they are best able to use. (By singling out the gifted for special attention casts no dim light on others and their need for special attention in the light of their abilities.)

Even that is not enough! The traditional attitude of thinking the gifted children belong to the "all queer" should be erased by educating the public and by giving guidance to the persons gifted. The results of such thinking is far reaching. "Many gifted persons hesitate to reveal their abilities for they are looked upon with hostility, jealousy" ¹/ and even shunned.

Therefore there is a great need for stimulating interest in the education of the gifted. This need is

¹/ The American Association for Gifted Children. The Gifted Child (Boston: D. C. Heath and Company) 1951. p. 272
being recognized by many leaders, especially after World War II.

The gifted children are the richest resource the United States has not yet fully developed.
The author wishes to call attention here to the fact that little can be written about the education of the gifted children without drawing much from two outstanding psychologists, Professor Leta S. Hollingworth and Professor Lewis M. Terman.

Since their time and after World War II much has been written; however, in comparison to the voluminous amounts on other exceptional children there are very few scientific informative materials. Much of what has been written contains almost the same food for thought that Professor Hollingworth and Terman had to offer.
CHAPTER II
A BRIEF HISTORY OF OPINIONS
TOWARD THE INTELLECTUALLY GIFTED CHILDREN
The first real record of interest in educating superior persons for leadership is found in Plato's *Republic* written about 400 B.C. In his book of utopian state, the citizens were to be trained to do that which they were best fitted for. Plato's reasoning had one fallacy—in his plan, his assumption was: only those of noble class could be superior. Other ancient peoples also had this idea.

During the Renaissance, the Reformation and the Industrial Revolution intellectual superiority was highly esteemed.\(^1\) However throughout these periods provisions (if any) were inadequate and unsystematic and did little actually to help the intellectually gifted children.

It was in England that a single man's thoughts awoke the interest of educators in the individual and his needs. In 1865 Francis Galton stated in his book *Hereditary Genius* that there was an answer to the question, why some become eminent and others do not. He stated that nature's laws pertained to intellectually gifted as it did to height or build. He also stated that it was not by pure accident that eminent persons

\(^1\) Ibid., p. 2
had the greater numbers of eminent relatives.

Galton took nothing for granted but collected and studied the data on superior persons.¹

During the nineteenth century few studies were made on the gifted child. Lewis Terman ² lists certain factors which limited the research on the gifted children.

1. The influence of current beliefs, partaking of the nature of superstitions, regarding the essential nature of the Great Man, who has commonly been regarded by the masses as qualitatively set off from the rest of mankind, the product of supernatural causes, and moved by forces which are not to be explained by the natural laws of human behavior.

2. The widespread belief, hardly less superstitious in its origin, that intellectual precocity is pathological.

3. The vigorous growth of democratic sentiment in

¹ Hollingworth, Leta A. Gifted Children (The Macmillan Company, New York) 1926. p. 4

² Terman, Lewis M. and Others. Genetic Studies of Genius; Vol. 1 Mental and Physical Traits Of A Thousand Gifted Children (Stanford University, California, Stanford University Press.) 1925 Preface
Western Europe and America during the last few hundred years, which has necessarily tended to encourage an attitude unfavorable to a just appreciation of native individual differences in human endowment.

4. The tardy birth of the biological sciences, particularly genetics, psychology and education.

Some of these factors are operating today, and might well account for the small amount of attention the gifted receive in our school.

John Bentley1/ divides this attention to the gifted in schools of the United States into three periods; namely,

1. -- 1867-1899 -- The period of flexible promotion.
2. -- 1900-1919 -- The period of recognition through acceleration.
3. -- 1920- -- The period of enrichment.

1. The period of flexible promotion

As Superintendent of St. Louis Public Schools, William Harris initiated a rapid promotion program. It

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1/ Bentley, John E. Superior Children (New York: W. W. Norton and Company) 1937 p. 192-193
was at that time a big step in the recognition of individual differences. 1/

2. The period of recognition through acceleration

The stimuli for this period was the intelligence tests of Binet-Simon. It was a show to provide for the gifted. San Francisco, California; Worcester, Massachusetts, (Preparatory School); Los Angeles, California; Cleveland, Ohio; and Rochester, New York (in 1920) formed special classes for the gifted pupil. "The work of these classes was widely acclaimed as offering enriched opportunities and suitable challenge for the most capable pupils." 2/

This stimuli was felt in the universities too. At Stanford University and Teachers College, New York, funds were granted for this study. Much knowledge was gained in this period.

3. The period of enrichment

These previous efforts showed results and more attention was focused on the children called gifted. In 1930


the White House Conference of Child Health stated an estimate, "one and one-half million pupils of superior intelligence who varied so greatly from the average that they require special education." 

It was in this same period that two leading American psychologists began their investigations concerning the gifted children. Professor Lewis M. Terman on the Pacific Coast and Professor Leta S. Hollingworth on the Atlantic Coast of the United States started studies that were to be the foundations of study of the gifted. In 1925 Terman published his book and in 1926 Hollingworth published her book.

In his book Terman's purpose was to find the differences between the typical gifted and typical normal child, whereas Hollingworth's book concerns the "right" educational provisions for the gifted.

Paul Witty, Professor at Northwestern University, who himself has done much to awaken educators to the needs of the gifted, says, We are now in another period

1/ White House Conference on Child Health and Protection, Special Education - "The Handicapped and the Gifted" 1930


of renewed interest and concentrated effort. 1/
Before World War II the interest in education (concerning gifted) was at its peak.

The American Association for Gifted Children was formed to sponsor research and to disseminate information about the gifted children. The organization pledges to give guidance and aid to the gifted and their parents and the communities interested.

"To ascertain the relative amounts of attention given to the gifted, Mildred Mills, a graduate student at Northwestern University, consulted the Educational Index to discover the number of articles on gifted children listed for the years 1929 to 1948. She found a steady increase in the number of articles published from 1929 to 1939. The peak of interest was reached during the years 1939 to 1942. Throughout the period of World War II the number of articles decreased sharply. A decrease of interest in the gifted was shown in other ways; for example, in the infrequent discussion of the topic in professional books published during World War II and the following years. However, since the appearance of

Terman and Oden's book, The Gifted Child Grows Up, a renewed interest in the gifted has developed. Publication of articles and books has been stimulated, too, by the work of the American Association for Gifted Children. Another indication of current awakening of interest is the recent publication of the Educational Policies Commission of The Education of the Gifted.

This brief history of opinions toward the intellectually gifted contributes to the understanding of these children. Some of the leading educators realize and understand. Now the big problem is finding the program suitable and awakening other educators as well as parents and the communities to the nature and needs of the gifted in our democracy.


CHAPTER III

AN ANALYSIS OF RESEARCH PERTAINING TO THE POINTS INVESTIGATED

Section 1. Identification of Gifted Children
Section 2. Characteristics of Gifted Children
Section 3. Types of Administrative Devices
Section 4. Types of Administrative Defices
Functioning in the United States
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Chapter III
Section 1
An Analysis of Research Pertaining to the Identification of Intellectually Gifted Children
"Some gifted children find themselves by accident, but for everyone who will, there are probably many who will not. These superlative talents if not granted opportunities to develop and mature, probably do not wither away and die, but they remain hidden and unused in a world that sorely needs the help they can give." 1/

"The real retarded children in our school system are not the slow learners but the gifted who remain undiscovered or are not sufficiently challenged at school." 2/

Dr. James B. Conant, former President of Harvard University, before a Congressional Committee hearing on the National Science Foundation Bill, March 7, 1947, gave an excellent description of what our national educational objective should be. He said, "These men have to be located when they are young." 3/ Dr. Conant even suggested a National Commission for Identification of Talented Youth

1/ Lane, Albert T. "Some Aspects Of The Problem Of The Gifted Child" Massachusetts Teacher 11:149-151 February 1932 p. 149

2/ Marentz, I. "Understanding Unusual Children" Grade Teacher 69:16-17 October 1951 p. 72

3/ American Association for Gifted Children The Gifted Child (Boston: D. C. Heath and Company) 1951 p. 225
(that was suggested by one group of educators) sponsored by public school administrators and teachers be set up to focus attention to the gifted children. 1/

John M. Russell, executive director of the John and Mary R. Markle Foundation, has announced that a grant of $100,000 has been made to the Social Science Research Council; to be used to encourage research on methods of identifying talent in youth and discovering future leaders. The grant made is intended to stimulate research in developing new methods which will reveal more than current tests. 2/

Other eminent persons have recognized the responsibility of society. W. T. Russell, 3/ Dean of Teachers College, says, "Democracy or autocracy, socialism, communism, despotism -- no government will succeed or long endure which keeps stupid people on the top. We must devise methods to discover and educate the able, and for its own welfare give them positions of influence and power."

1/ Ibid., p. 208
2/ "Markle Fund Research Grant" School and Society 75-348 March 31, 1952
It is, however, the responsibility of all persons with whom children come in contact to recognize and identify giftedness. Repeatedly Paul Witty and others (since World War II has ended) have called attention to the glaring fact, that these democratic states called the United States need effective leaders. Appropriate educational opportunities are needed if these children are to become good leaders. Paul Witty in a recent article says "As things are now large numbers of them enter occupations that do not require superior intelligence." Or they emerge as adults not fully trained according to their gifts (as case follow-up studies prove).

Since this thesis concerns itself with the intellectually gifted children the author will now consider the criteria usually used to identify these children: The criteria for objective appraisal are:

1. teachers' opinion
2. parents' opinion
3. age-grade status

4. achievement tests
5. intelligence tests

It is interesting to note here that Terman in 1925, and Hollingworth in 1926, and Carroll in 1940, and Witty in 1952 agree that no one criteria is best but a combination, superior.

The first criteria: teachers' opinion

The first criteria is very limited because teachers' opinions of giftedness are based on school achievement. Many opinions are given without realizing that achievement is not identical with ability or general intelligence. Lack of incentive, bad school experience, physical deficiency, and emotional blocking, influence achievement.

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3/ Carroll, Herbert A. "Genius in the Making"
New York: McGraw Hill Book Company


Teachers may err in their judgments by not considering the chronological age, which is usually the youngest, or next to the youngest in the class. Social development, even physical development where it may be superior to that chronological age, many times does not keep in step with mental development. 1/

Some other teachers set up rating systems which consider the curious, the original, and the independent spirited especially in behavior and thought as a "pest" instead of recognizing the very blazing characteristics of the intellectually (as well as other) gifted. "If only for the fact that serious emotional difficulties may develop from the thwarting of gifted children in their efforts to find satisfactory means of occupying themselves, the ability to detect giftedness becomes an important part of teacher's training in observation." 2/

The second criteria: parents' opinion

Parents' opinions although biased, inaccurate or

1/ Witty, Paul Op. cit. p. 6
2/ The American Association For Gifted Children Op. cit. p. 15
hazy are still valuable, because of the intimate knowledge upon which to judge. Parents have a great privilege but also a great responsibility, for as Edith Stern 1/ says, "Contrary to popular notions, that the bright youngsters can get along by themselves, they need as much or more special help and understanding as below average children."

According to Terman and Oden 2/ "Gifted children are likely to have parents who are themselves superior intellectually and therefore more likely to have insight into the ability of their children."

Carroll 3/ says "Some parents accept the accelerated development as normal. These parents do not recognize the superior ability of their children because they have no standards with which to compare development. These latter parents failed to keep in mind the total child population."

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1/ Stern, Edith "Is Yours a Gifted Child?" The Woman's Home Companion November 1949 p. 286


However these parents' opinions are of considerable value in identifying gifted children, for no teacher or other persons have so intimate and complete and long-period knowledge of a child.

The third criteria: age-grade status.

To clarify the third criteria; namely, age-grade status, only one quotation is needed (with explanation as to school system). Lewis Terman and Melita Oden \(^1\) in their most elaborate study of one thousand gifted children said: "If you are allowed only one method of locating the highest I.Q. in a classroom your chance of getting the right child is better if you merely look in the class register and take the youngest rather than trust the teacher's judgment." (Now with explanation as to the school system, in accelerated class this would work; but in enrichment class, this would not work.)

The fourth criteria: achievement tests.

Achievement tests are scored in terms of educational age, achievement age, educational quotient and

\(^1\) Terman, Lewis and Oden, Melita, *Op. cit.* p. 6
achievement quotient. This is "a test measuring the amount of knowledge or skill gained as a result of specific instruction." 1/ This kind of a test may be standardized for use in one school, one district or the country, given in one subject or covering the school curriculum.

What the child has learned in school is directly balanced by this child's mental and physical make-up. Therefore "achievement results from a combination of factors of which intellectual capacity is only one," 2/ and cannot be separated.

Several interesting facts have come to light from research studies on achievement tests and "typical or average gifted child." 3/

1. Educationally the gifted child is accelerated in grade placement about 14% of his age.
2. In mastery of school curriculum the gifted child is accelerated about 44% of his age (based on 3 hour test of subjects in grade 2 to 8).

3. The net result is that the average child is held back below the level which he has already attained.

4. The achievement quotient of the gifted child is not equally high in all school subjects. However, in no school subject is the average achievement quotient of the group below 130 (or as low as 100).

5. The greatest show of superiority was in reading, language usage, arithmetical reasoning, science literature and the arts.

6. The length and regularity of attendance in the earlier years have little effect upon the gifted child's achievement.

7. There is no law of compensation whereby the intellectual superiority of the gifted tends to be offset by inferiority along nonintellectual lines.

8. The amount of deviation upward is not the same in all traits.

The author cautions the reader to remember that gifted children come in a variety of patterns in different settings.
The fifth criteria: intelligence tests.

Intelligence tests were devised to measure as objectively as possible the innate ability to acquire, arrange, and use facts. A numerical score is given when the exercise of intelligence is made. Therefore the author considers the knowledge of classification on basis of I.Q. suggested by Lewis Terman in 1916-1921 still valuable in designating the gifted.

Gifted

( Genius has I.Q. above 140
( Very Superior has I.Q. 120 - 140
Superior has I.Q. 110 - 120
Average has I.Q. 90 - 110

The limitations of this kind of a test are usually recognized by those who use it.
1. The first limitation is: It is not a true, whole complete picture because the child is influenced by:
   a. experiences previous to the test.
   b. persons giving the test.
   c. the physical condition of self.
   d. the mental condition of self
   e. the testing environment. \(^\frac{1}{1}\)

\(^\frac{1}{1}\) Allen, Margaret, Lecture, Tests and Measurements, Boston University, 1952
2. The second limitation is: tests contain over learned material and the "response is predictable instead of original creative reaction."  

3. The third limitation is: cultural background is often a barrier to clear communication. (Words and concepts of children may not be those used by test. Cultural bias may be removed from the test but not the school curriculum.)

With all these limitations Leta Hollingworth 2/ from whom so much of the body of facts concerning the gifted has come, considered "an individual intelligence scale in the hands of a competent psychologist as the most important single tool for the identification of the gifted." She stated, "Nothing can take the place of such tests in making a census of the gifted."

Jean L. Block 3/ and Lowell Hattery 4/ also urge the use of this system of identification.

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John C. Sullivan while he does advocate the use of this test, says it takes more than I.Q. to become outstanding. Herbert A. Carroll states that there are many possible ways of identifying gifted, no one of which is completely valid, but by far the intelligence test is the best. Harvey Zorbaugh stated that basically the I.Q. test revealed the rate at which a child acquired knowledge and power to solve problems. In a recent article in a popular magazine he gave nine clues on "How to Spot A Super Kid." They are as follows:

1. Vocabulary
2. Curiosity
3. Independent thinking
4. Imagination
5. Physical development
6. Creativeness
7. Versatility
8. Love of reading
9. Emphasis on reality


Paul Witty \(^1\) in several writings points out that intelligence tests with their limitations are good in combination with other means of identification.

**Summary**

This problem of identifying the intellectually gifted is **not** a matter of one test at one particular time. It is a problem that needs continuing attention. "Cumulative records of test scores, school marks, anecdotal reports, and teacher judgments should follow a pupil through school." \(^2\) It is especially important that children who are rated as near-gifted be reexamined a year or two later to determine whether or not they should be classified as gifted. Other circumstances meanwhile could change the performance on the tests.

Leonard Carmichael \(^3\) and Arnold Gesell \(^4\) in 1946

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\(^1\) Witty, Paul, "Some Considerations In the Education of Gifted Children," Educational Administration and Supervision, 26:512-521, October, 1940.


supported the theory stated by President James B. Conant of Harvard University, that personality patterns possess a degree of permanency at an earlier age than was believed possible even a decade ago.

The identification of talent is a field of research that has been neglected because the problem is so complex it seems to defy solution. Techniques of identification need to be more refined. The Social Science Research Council has accepted the challenge of the Markle Fund Research Grant for Identification of Talent 1/ and has established working committees. However the improvement of educational practice need not wait for further research. The greater use of what already is known should be put into practice. The accurate identification of the gifted (children) is of such crucial importance in conservation and development of human talent that great efforts should be made to increase further our knowledge.

Chapter III

Section 2

An Analysis of Research Pertaining to the Characteristics of Intellectually Gifted Children
There are many superstitions concerning the intellectually gifted children. One such superstition is that they are likely to be very grave or unstable in school and at home. Another superstition is that they deteriorate mentally as they mature; or they die young. Once it was common belief that the bright children became insane at a certain level of genius. It is common belief even today that gifted children are usually sickly children. Therefore, the true facts as revealed through research, should be stated for the education of the public as well as the further education of teachers and administrators.

The knowledge of characteristics of the intellectually gifted children should make a difference in educational materials and methods used to fully develop their abilities. Therefore, the author will now consider the mental, physical, and social characteristics revealed through research.

Mental Characteristics of Gifted Children

"Bright children," Marentz¹ says in a recent article, "are characterized by their ability to reason in

¹ Marentz, I. Op. cit. p. 72
the abstract and to perform processes mentally. They are capable of many associations and have great versatility in using these mental processes. Some of their special disabilities are often overlooked because of clever substitutions of mental processes in which they are adept."

These children desire long range views of their work so they may look ahead for their own progress. They possess quick-wittedness and vital mental energy. They have "deeper" and wider sustained attention spans and therefore can get things done. They have an insatiable curiosity which sometimes is mistaken for rudeness. They have retentive memories. They use large vocabularies.

Leta Hollingworth in her book *Children Above 180 I.Q.* says, "These children from an early age are concerned over the meaning of the world and their destiny in it." They are concerned over issues political and social as well as moral before they have the experience to interpret them. These children generally see and hear more and are quicker to apply these observations to definite relationships. These children are not afraid


\[2/\] Ibid., p. 281
to think and question authority.

Terman and Hollingworth agree that highly gifted children have histories of accelerated development, particularly in ages when they learn to talk and read.

According to Albert Lane, "The most marked general characteristics of the superior child are his extraordinary ability to detect similarities and disimilarities, his tending to be alert, active, resourceful and his possession of that greatest of all abilities of man, the power to create."

"Gifted pupils are usually keenly sensitive to the humorous, to the intellectual and aesthetic elements in a new situation. They have accurate and logical memories with delayed recall."

Ruth Strang of Columbia University says that gifted children have better than average capacity for self analysis. They think through many of their perplexities without help from adults. Many, however, have maladjustments because they are exposed to more unusual hazards

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1/ Lane, Albert, Op. cit. p. 150
2/ Ibid., p. 150
in personal development. Contrary to popular opinion gifted children are not emotionally unstable. They also score higher in wholesome social attitudes.

Physical Characteristics of Gifted Children

The anthropometric measurements of these children show them to be superior physically. Against the average population these children are taller and weigh more. This is contrary to all popular notions. These children seem to have more muscular strength. The picture of development will vary but doctors have found no significant variance from the average children.\footnote{1/} Gertrude Hildreth \footnote{2/} says that visitors to the Hunter College Elementary School for Gifted Children comment about the beauty of the children and the fact that clumsy sickly looking individuals are so rare.

The popular idea is that these findings are not so; because these children associate with older children, who are naturally larger in size, but on an equal mental level, they appear to be the opposite (of true facts) or as cartoonists caricature them.


\footnote{2/} Hildreth, Gertrude and Others. Op. cit. p. 29
Social Characteristics of Gifted Children

Terman and others recognized that these highly gifted children had acute problems of social adjustment, the less gifted the less problem. These children are as a rule, well balanced and less neurotic than unselected children. The gifted children are usually above average in desirable traits.

These gifted children enjoy reading. Guidance is needed in order to keep them to their maturity level. They are reasonable to discipline if the disciplinarian is honest and sincere. The use of arbitrary authority usually brings contempt or resentment.

In choosing playmates, they tend to find their mental rather than chronological age. If there is a great difference between physical and mental maturity these children tend to play by themselves. They like competitive games that require more thought. These children usually possess more than average knowledge about games they play. Many of these children understand the games of the older children but can't physically participate in them. In

childhood activities especially the higher the intelligence the greater the possibility of social maladjustments. ¹/ (Other social maladjustments may grow out of a curriculum that fails to challenge their ability.)

Summary

Research investigators on certain physical, mental and social characteristics of the mentally gifted children seem to be in agreement. Leta Hollingworth in the Eastern United States and Lewis Terman in Western United States have contributed the foundation to our knowledge of this group. It is remarkable how consistent they were.

Helen Davidson ²/ in her book says that like other children these children must be considered and treated as individuals. "In general these children are superior in mental health as well as mental ability; they are accelerated in character development as well as in intellectual accomplishment. All present evidence show that gifted children are equal or superior to the general population in the degree of emotional maturity" and stability and social attitudes. ³/


Chapter III

Section 3

An Analysis of Research Pertaining to the Types of Administrative Devices
It can now be concluded that adequate education of the mentally superior children is important to the democratic progressive development of our country. It can also be concluded that the gifted can be readily identified by testing and observation. It will now be of interest to investigate what types of school organization function in the effort to educate the mentally superior children and what some educators have to say about these types.

There are three main types of school organization that function today in the effort to educate the intellectually gifted children of the United States. These types or "Administrative Devices" are:

(1) Acceleration
(2) Segregation
(3) Enrichment

**Acceleration**

The easiest program and "cheapest" is simply to move children from one level or grade to a higher one after evidence proved the work is mastered. There is considerable savings to the school system and the children. First: no different curriculum is needed. Second: the children able to accelerate save (1) time in years going to school
and (2) frustration due to work that is not challenging.

Controversy about this device is based on the emotional and social needs of a child. Those in favor, Terman, Oden, Hollingworth, Pressey, Keys and others support the position taken by Terman. His opinion is as follows: "If the gifted children's intellectual welfare were the sole criterion, then promotion ought to be based primarily on mental age, since it is the factor that chiefly determines the intellectual difficulty of the school tasks one is able to master... The question is, how much risk of maladjustment one can afford to take in order to keep the gifted child at school tasks difficult enough to command his attention and respect. The data here reviewed indicate that the risk of maladjustment is less than is commonly believed."

Those that agree with Terman and Hollingworth argue that this plan:

1. improves the children's motivation
2. prevents development of sloppy and poor work habits
3. gives desirable recognition in school and the community

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1/ Terman and Oden, "Genetic Studies of Genius, "Vol. IV pp. 279-280
4. allows earlier and more complete professional training.
5. allows greater chances of becoming leaders at more productive ages.
6. allows earlier marriages at a more productive age.

The Stanford Studies\textsuperscript{1} actually show that accelerates did better in high school and more of them graduated from college, more with honors too, and more graduating continued for graduate work. It is especially significant that at an average age of thirty the accelerates were more often in the "A" group for occupational success than were the nonaccelerates.

In social adjustment there was no appreciable difference between nonaccelerates and accelerates whether in childhood or adult life.

1. Extra curricular activities in college were only a \textit{trifle} less common with accelerates.
2. The marital rates did not differ significantly.\textsuperscript{2}

Even if the author makes some allowance for the possible reasoning that good social adjustment was sometimes a prerequisite for the acceleration, there is reason to

\textsuperscript{1} Ibid. p. 260
\textsuperscript{2} American Association for Gifted Children. Op. cit. p. 260
believe as Terman does that, "The influence of school acceleration in causing social maladjustment has been greatly exaggerated." ¹/ (Individual cases of temporary inferiority in childhood were overcome in adult life.) "Data on physical and mental health both in childhood and adult years favor the accelerates." ²/

Segregation

Ability grouping is the most commonly understood method of segregation. Some large school systems segregate gifted children as others do the slow-learning children. Special classes have now been created for bright children. Under this plan (called in some systems the two track method) all children are promoted according to their chronological age. Then each grade is divided into classes based on intelligence. ³/ In this way, the different materials and methods necessary, due to the characteristics of mentally superior children, can be used profitably without endangering social and emotional development.


²/ American Association for Gifted Children, Op. cit. p. 43

³/ Ibid., p. 51
In some very large cities of the United States this segregation goes even further than special classes. Entire schools are devoted to specialized education for children and youth of similar mental abilities and interests.

The Educational Policies Commission of the National Education Association of the United States and the American Association of School Administrators stated in a 1950 publication that "In the opinion of some educators and psychologists, the advantages of special classes for the gifted are considerable." 1/

The benefits stated may be summarized thus:
1. Standards of achievement are higher; therefore pupils are challenged to use their intellectual powers to a fuller extent than in a typical heterogeneous class.
2. It prevents the formation of bad work habits and develops more industrious and efficient work habits.
3. A larger number and variety of learning experiences can be had.
4. More difficult and abstract mental processes can be included to good advantage.

5. The children in a special class are less likely to become egotistical about their superiority because they are competing with their intellectual peers.

6. This kind of a class makes possible more enrichment because less routine drill and remedial instruction is necessary.

7. Finally, the grouping of gifted pupils in a separate class makes possible the careful selection of a teacher who is well qualified to teach that type of pupil.

A similar position is set forth by Francis L. Drag in 1941 and Hedwig O. Pregler in 1946.

Several good reasons for establishing classes for mentally superior children appeared in an article by Edith Fox Carlson. She advocated these classes for gifted


in order to bring about better self realization and self evaluation. She gives proof in case studies to demonstrate that feelings of superiority and smugness and other undesirable characteristics are nil when these bright children are competing with their intellectual peers. Carlson concludes that the special class program helps the gifted child make better social adjustments; that these children should remain in school the same number of years that other children do; that these children should be offered individually challenging experiences; that these children learn at their own rate or rhythm.

Some more good reasons for establishing special classes for the mentally gifted children are reported by Marion Brown ¹ in 1949. She finds their academic achievement was consistently higher (and faster).

In 1943 William P. Schwartz ² reported in his Ph.D. dissertation, the relative progress made by two groups of


gifted children; a special class group and a regular class group. At the end of four months, he found evidences that the gifted group in the special class excelled consistently in work and personality traits.

Although it happened a little more than a quarter of a century ago it is still important to view the results of Leta Hollingworth's experimental classes for the gifted. She started with two classes and because of what she reported there are now "considerably more than one thousand elementary school children of superior mental caliber receiving the benefits of an individualized program of education in the public schools of Greater New York."  

The above are just a few opinions of leading educators concerning segregation as an administrative device (or school organization) used to meet the challenge of the intellectually gifted children. In the annotated bibliography of the Gifted Child published by the American Association for Gifted Children can be found mention of many other leaders who favor segregation.

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Recently published articles reveal a rise in the formation of classes for the gifted pupils. The author however feels this rise is very "slow going" and the gifted child is still neglected throughout the elementary school. The statistics in the U. S. Office of Education report for the school year 1947-1948 shows that the public schools rarely provide special classes for gifted elementary school pupils and for secondary school pupils more classes are provided, but in all the number is still small.

In 1947 George Santayana stated that only four states, California, Wisconsin, Pennsylvania, and Oregon, had established by law authority for organizing special classes for mentally gifted.

In 1948 Mildred Mills obtained information to add to this fund. She wrote letters to the officials of


3/ Mills, Mildred, Graduate Student at Northwestern University
forty-eight state departments of education. Answers received indicate that only six state departments of education had some type of provision. Respondents expressed interest in the education of the gifted. Their answers clearly showed that at that time what little was done for the gifted children varied greatly and was inadequate. 1/

Despite the record there are those (administrators and teachers) who doubt the advisability of establishing special classes or schools for gifted children. These critics assert that segregation by special class or school is an undemocratic practice because:

1. it promotes "class education" and encourages "class distinction." This undesirable acceptance of social stratification tends to be carried over into later life. ¹/

2. the effectiveness and interest of regular classes are lessened by the removal of the most able and stimulating pupils. It is interesting to note here that spokesmen for the opposition reply that in such a situation the slow learners are merely discouraged and their opportunities for participation are lessened by the propensities of the more gifted class members to claim a disproportionate share of the class time in recitation and other activities. ²/

²/ Ibid., p. 54
3. the salutary effect of the experiences in a regular classroom which lead to appreciation and congenial work with every individual is lost. No longer is the worth and dignity of each individual respected.

4. the preparation for later life in a democratic society made up of all kinds of individuals is lost.

5. it tends to foster notions of superiority.

6. children excluded suffer from stigma.

The objections to segregation based on practicality are as follows:

1. at least half our gifted children live in small towns, villages and rural districts in which the formation of special classes is impossible and impractical due to smallness of enrollment.

2. transportation makes special classes unfeasible in many areas.

3. also, time, equipment, ability of teaching staff is limited.

4. scheduling of separate 1/2 day classes is difficult.

5. parental or community disapproval may be an obstacle.

\[1/\] Ibid., pp. 53-55
Enrichment

Enrichment more narrowly conceived is often the deliberate differentiation of curriculum contents and activities for the superior pupils in a regular classroom. In a broader sense enrichment is a policy—that can be applied to any plan—acceleration or segregation. Why have special classes if not to bring enrichment into greater play? Why have acceleration if not to give enrichment?

Mary Albers and May V. Seagoe in their article "Enrichment for Superior Students in Algebra Classes" 1 says much of the same—"The best interests of Democracy demand that the superior children shall not merely shorten their stay in school but should have a broader experience while there. In practice it will fall to the regular teacher in the regular class to provide it."

There is another type of enrichment used and that is the contract system. The materials of study are organized by the teacher into typed contracts which the children can fulfill at their own speeds. This type of enrichment may develop good study habits, but

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W. Paul Allen, Elsa Ebeling and Robert H. Roberts say in their chapter "Administrative Problems in Educating Gifted Children" that:

Contracts must be continually revised to fit changing content and the changing needs of different groups. The actual typing, mimeographing and other details of preparing the materials is expensive and time-consuming (as is the correction), perhaps in some instances, out of proportion to the values to be achieved.

Those who sponsor the contract plan believe that contracts become an enrichment media through which factual data of content subjects can be mastered. The opponents point out that most important of all—motivation, to achieve worthy outcome, which is the purpose of learning is lost in the contract system. The assignments (contracts) are prepared by adults. "To be really effective, the purpose of learning should be in the mind of the learner as well as in that of the teacher."  

Another form of enrichment mentioned is most commonly known as units-of-work. Selected centers of interest are

1/ American Association for Gifted Children, Op. cit.,

2/ Ibid., p. 264
surrounded by a wide variety of activities. The author knows from experience as well as from research study that these activities are the best media for teaching the worth and dignity of each individual, the democratic processes of living together as well as working together.

A much quoted treatise, The Report of the Harvard Committee in 1945 has in it one statement that alone justifies to the author the administrative device of enrichment through units of work.

"Neither the mere acquisition of information nor the development of special skills and talents can give the broad basis of understanding which is essential if our civilization is to be preserved. No one wishes to disparage the importance of being well informed. Even a good grounding in mathematics and the physical and biological sciences does not provide a sufficient educational background for citizens of a free nation. For such a program lacks contact with both man's emotional experience as an individual and his practical experience as a gregarious animal. It includes little of what was once known as the 'wisdom of the ages' and might nowadays be described as 'our cultural pattern.' It includes no history, no art,
no literature, no philosophy. Unless educational process includes at each level of maturity some continuing contact with those fields in which value judgments are of prime importance, it must fall far short of the ideal."

Leta Hollingworth 1/ advocated enrichment too. She wrote:

"The education of the best thinkers should be an education for initiative and originality. Effective originality depends, first of all, upon sound and exhaustive knowledge of what the course of preceding events has been."

Ruth Strang 2/ writes that "Maladjustment in gifted children may grow out of a curriculum that does not challenge their ability or provide education in interpersonal relations, self understanding and family living in addition to the usual academic subjects. Richly equipped laboratories, workshops and studios in all fields from which individual students can select, with guidance, the experiences they need would seem to offer ideal education for gifted children and young people."

1/ Hollingworth, Leta S. "An Enrichment Curriculum for Rapid Learners at Public School 500: Speyer School" Teachers College, Record 39:297 January, 1938

Terman concludes his opinion in favor of acceleration by saying that "No universal law can be laid down governing the amount of acceleration desirable. Some gifted children are less injured by acceleration of three or four years than others by one or two years. Children of 135 I.Q. or higher should be promoted sufficiently to permit college entrance by the age of seventeen at the latest, and that a majority in a group would be better off to enter college at sixteen."
Summary

In concluding the author agrees with J. Conrad Seegers of Temple University who says:

1. Acceleration is not the answer; neither is segregation.

2. General development, not simply intellectual, or academic, advancement, must be provided.

3. An elastic curriculum, providing for individual challenge as well as for participation in group activities, is essential.

4. Stress must be placed on original investigation, thoughtful and extensive reading and creative work. This implies both imaginative teaching and adequate school facilities, including library facilities.

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1/ Seegers, J. Congrad, "Teaching Bright Children" Elementary School Journal, May-June, 1949, p. 515
Chapter III
Section 4

An Analysis of Research Pertaining to the Types of Administrative Devices Functioning in the United States (Or the Nature and Extent of Educational Provisions)

The author reviewed many interesting reports of administrative devices used throughout the United States. In her opinion the summaries presented by Grace I. Loomis in her research concerning the gifted children, University of Oregon, 1951, are most comprehensive and worth quoting, for they give a representative overview of prevailing practices in the elementary schools of the United States. Therefore, the summaries presented in Section 4 are quoted from Grace I. Loomis's *The Education of the Gifted Child*, School of Education, University of Oregon, Eugene, Oregon, 1951.
"In this chapter an attempt will be made to review the operation of a number of programs. Perhaps by comparison of methods and philosophies, insight may be gained which will help suggest a plan for a particular school situation.

Cleveland, Ohio

In April, 1950, Cleveland was the only city in Ohio having special classes for the gifted. \(1/\) Thirty years before, in October, 1921, the first group of children selected as having the necessary high mental test results enrolled in one school. The plan proved so satisfactory a number of classes were later formed. Grades one, two, and three met in one group; grades four, five, and six, in another. The classes were limited to thirty to thirty-five pupils. If an individual school did not have sufficient numbers to warrant the class, a number of schools combined to form one. The classes were a planned part of the school organization and met the same time as the other classes in the building. \(2/\)

The purpose of the classes for children whose intelligent quotients were 125 or above has been to enrich lives, not to cram minds. Much of the success in establishing the


\(2/\) Norris, Dorothy E. Special Classes for Superior Children in an Eastern City." The National Elementary Principal, 19th Yearbook, Vol. 1.
work has been due to the close cooperation between the community and the school. The Women's City Club gave time and full cooperation to the Board of Education in sponsoring the project. In 1922, funds were provided by them to secure Dr. Henry Goddard of Ohio State University as a consulting psychologist for two days a month. This was but a start of their activity. Club funds purchased extra books and equipment, financed many of the first field trips, provided transportation for needy students, and gave many hours of time to cement community interest in the classes. Much of the work begun by them is still carried on through a fund now maintained by interested citizens. 1/

Cleveland's major work projects have been child centered in their organization and curriculum. Since these students finish the prescribed work with much less drill in a much shorter time than the average student, additional activities are necessary for the wholesome development of this total personality. The primary objective integrating each unit is the understanding and practicing of social relationships. Critical thinking, developing alertness,

initiative, creative power, ability to share in undertakings, power to work independently, and developing leadership, are a few of the definitely stated objectives. \(^1\) It should not be implied that facts are not taught. A well organized plan to make them a part of the central theme in a meaningful situation has been a part of the work since its inception. Social studies have furnished the core of the program. Through them, students have become familiar with the history and evolution of civilized man. This has formed a basis for appreciation of the heritage of culture and contemporary life in a meaningful situation. Drill subjects are usually done on an individual basis. Experimental research has shown the necessity for more routine drill needed in their mastery than can be worked into the unit activity. Science and biography are also a part of the curriculum. One hour a day is spent in learning French.

Field trips, as in most other projects of this type, are often utilized for instruction. Many opportunities for creative experiences in the interpretation of the activity are offered. The seminar method has facilitated

organization, interpretation, presentation, and sharing of ideas and facts in the development of each unit.

In the first efforts, the classes were large. Experimentation showed their inefficiency. Twenty to twenty-five in each group has proven to be the most effective size for the best results. This is the size of the present classes.

The classrooms are cheerful and bright. The furniture is movable to allow for freedom and changes in organization. The equipment for learning experiences and the use of research tools is varied and interesting. Each room has a piano, an aquarium, map, globes, charts, a variety of encyclopedias, reference books, and a large classroom library.¹/

The effectiveness of the program was tested in individual cases in a study reported by Merle Sumption.²/ He compared by case studies, the adults formerly members of the Major Work classes, with others not in the classes. Opinions of the students themselves evidenced satisfaction with results of having been in the classes. Their chief criticism was of being deprived of social contacts. This was not shown in the evidence of social adjustments as adults.

²/ Ibid., p. 235
They seem also to have acquired a larger range of self-expressive activities, do a larger amount of critical thinking, have received more honorary awards, and show greater leadership activity. A larger percentage of the students in the major work classes attended college than in the control group. In their appraisal as adults, former students indicated no sacrifice of fundamental skills and knowledge due to their school training. The survey revealed a wider range of reading by class members. They read more non-fiction, professional and technical magazines. The mental and physical health of both groups was similar. Neither group expressed any harm to health or impairment of eyes. Some stressed the need in the class for a greater understanding of civic and social responsibilities. Both groups emphasized a desire for a greater understanding of purposes, methods, and effects of propaganda. The former students suggested more opportunities be given for student participation in responsibility for the welfare of those about him. They indicated, also, the need for more vocational guidance, and less isolation from average children.

Perhaps the best summary of the reasons for success can be sensed in words of Henry H. Goddard after he had visited one of the classes:

\[\text{\textsuperscript{1/}}\text{Ibid.}\]
It seemed clear as we thought over the first day in the Special Class for Gifted Children, that theory of the Cleveland educators must be that education is life. Those children were certainly living. They were not just going to school. They were healthy, happy, and alive. They were doing things and not merely learning about things. Moreover, there was no wasted effort. They were making their own selections and necessarily were choosing things that they could understand. We were satisfied that though different, it was still education and probably highly effective education.1/

Los Angeles, California

The same year that Cleveland launched its "major work" projects, Los Angeles adopted an enrichment curriculum as the basic philosophy of their "Opportunity Classes." The educational staff had been experimenting since 1915 to determine the best method and had found enrichment the most feasible answer to their needs. It was the beginning of a long term guidance program for gifted children.

The formation of a class within a school is effected

upon a principal's request, if there are a sufficient number either within his organization, or within easy transportation distance. There must be approximately thirty pupils testing 125 I.Q. or more to make the formation possible. A group of schools may cooperate to have combined classes in each building but in different chronological age groups, or they may be centered in one school. The chronological age is limited in all classes but flexible enough to allow placing a student where social maturity needs are filled best. Thus a class may be composed of four sections from the fifth and sixth; or in another school, come from a group of fifth grade sections only.\(^1\) Once organized, the unit becomes more than a combination of grades. Working together in the solution of a common goal unifies the group into an integrated whole, a social unit.\(^2\)

The curriculum after all these years of experience is more a matter of method than a change in subject matter or materials. Research problems and projects evolve out of


student interest and careful planning. It is pupil purposed through actual pupil experience. The need for basic skills is recognized and the students are made to realize the necessity of their mastery. The difference from the average class lies in the student's consistent and constant search for meanings and relationships. There are no formal lesson assignments, no formal recitations. There are defined individual goals in a purposeful plan built around a central theme for cooperative research. Each student watches his own progress and makes a note of improvements. There is daily practice in creating, discovering, inventing, and problem solving on each one's own level of interest and ability.

In the overall plan, approximately one semester of each year is devoted to a theme centering about science, a sort of, "Evolution of Common Things." The other semester is devoted to a unit centered in one period in the history of civilization, including a study of the people of the period and achievements in art and literature. To the children, the projects are problems to investigate. They are never superimposed facts to be mastered. The activities grow in interest to all participants as through simple inventions, music, dances, stories and poems, each presents
the material he has found to fellow members. The children gain an appreciation for the past. They also grow in wholesome respect for their contemporaries and learn to listen to their own members appreciatively. Some of the particular units used in Los Angeles to bring about a unified interest and growth in knowledge have been:

Food and nutrition

What people know of astronomy and how they use this knowledge

Weather

Music on the pages of history

Why Los Angeles brings water through the mountains and over the desert to the city

The Opportunity Classes have proven to be effective in securing children's happiness in work with freedom for development while training for leadership. They have nurtured initiative, research ability, and habits of concentration and work. To the teacher guiding it, the class offers a challenge and opportunity for a broadening horizon. To the classroom teacher of average children and ability, it offers relief of the responsibility involved in an instructional program for the gifted. This, in turn, releases her to bring enrichment to meet the individual needs
of the average more adequately. 1/

New York: Public School No. 165

Any one who has made even a cursory study of the needs of the gifted child is soon aware of the intense contribution of Professor Leta S. Hollingworth. In the beginning, her interest was centered in the slow learner or retarded child. Her position as a clinical psychologist brought her in contact with a maladjusted seven year old boy wrongly placed in school. In trying to find a solution for the adjustment of this boy, her interest in all gifted children was aroused. Dr. Jacob Theobald of Public School No. 165, worked with Hollingworth to provide the right kind of pedagogical program for this fifth grader and began to seek a sound procedure to use with all superior students. 2/

Public School No. 64, Manhattan, had pioneered with a class for rapid learners, and in 1921, Public School No. 11, has reported the organization of a Terman Class. 3/

1/ Drag, Frances L. Op. cit. p. 21
These studies did not carry with them the scientific research and evaluation begun by Hollingworth in No. 165.

The first of the two opportunity classes studied by her in Public School No. 165, began in 1922. Follow-up studies, as well as objective appraisal of the project in operation, resulted in approximately fifty studies from that year until 1938.

The success of the first three year program was assured by the partial support from the Carnegie Corporation of New York. The purpose of the experiment was two-fold; first, to educate particular children; second, to study them to gain information as to their nature. Careful records of social, physical, and educational progress were integral parts of the program.

The classes were organized on the basis of Stanford Binet results into two groups. The first was composed of children testing 134-150 I.Q., the other, of those testing above 150 I.Q.

Although the classes were supposedly homogeneous, marked individual needs were apparent. It took the gifted children but one-half to one-fourth the time to complete the academic work prescribed for other children their age. Acceleration or grade advancement was not the answer.
To secure socially adequate individuals required enrichment rather than grade advancement. As a start, biography, algebra, and history were used for this purpose.

At the time of the experiment, measurement of social behavior and personality growth had no scientific units of measurement, so they were not considered in the evaluation of the program. To discover the growth in achievement, the groups of Public School 165, were compared with a control group similar in age and ability in the public schools. Both groups tested high in academic subjects. Hollingworth felt the real advantages, however, were not in the tool subjects and skills, but rather in the greater opportunities for scholastic experiences of cultural enrichment.

Speyer School, New York

Public School No. 165 pointed to the need for more adequate curriculum adjustments to foster development of the gifted. Real impetus to this type of pedagogical treatment gained a foundation in Speyer School, No. 500. Here, long range planning and careful experimentation resulted in a basic knowledge for individualizing instruction. The

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information obtained in these studies is used as a sound foundation for any work with the intellectually superior today.

The experimental school evolved jointly between the Board of Education and the Advanced School of Education of the Teachers College of Columbia. It was fortunate, that at the same time the Advanced School of Education was seeking a means of providing research opportunities for study of individual differences, the Board of Education was also studying provision for individual differences. The Board of Superintendents of the Public Schools had organized a committee of eight to study provision to meet the needs of all children. About this time, also, Speyer building became available. This combination of factors resulted in the organization of a five-year program of research in two learning problems; first, the slow learner, and second, the intellectually gifted. It is with the latter two Terman Classes we are concerned.

On opening the school, February 3, 1936, two classes of children aged seven years to nine years, six months, were formed. The median intelligent quotient was 147 with a range of 130-194 I.Q., Stanford-Binet tests. Earlier research had demonstrated the inadequacy of judgment of
ability based upon grade and age level in school. The selection of candidates, therefore, was made on the basis of Stanford-Binet Intelligence tests and the chronological ages of the individuals. Consequently, the grade level of entering students varied from 1A to 6B.

As previously stated, the chief purpose of the experiment was the formation of a program of psychologically and socially sound individualized instruction. To function specifically and uniquely for each individual, the education had to fit the child. Thus the curriculum was designed to meet the needs of the child, rather than fitting the child to the school. It was desired to furnish a rich background of ideas to interpret the time. Aware of the child's chief concern in the world around him, a series of enrichment courses to discover the "how's," "why's," "where's," "when's," and "what's," of his world were introduced. The central theme, "Evolution of Common Things," aptly describes the nature of the material. Units arose as a natural growth of children's ideas in the classroom. They were never superimposed by the specialists. Teachers helped organize and set limits, but the children did the work.

Reading was not taught separately for all of the students read widely in their personal research. Spelling
and arithmetic skills were kept separate entities. At first, grammar and English were not formalized. Later, to meet the needs of children entering public high schools, the formal aspects were presented in separate classes. Since these children did not need so much drill, and could cover and master material much more rapidly than the average child, only one-half of the day was devoted to the pursuit of the usual elementary school subjects. The remainder was spent in an enrichment program.

In the opening sessions, many centers of interest were discussed with the student to find a central theme around which to organize the particular unit. To facilitate effective organization and cooperation, many committees were formed for specialized research. These committees reported to the whole class and in a culmination activity, each child reported the entire project from his point of view. Many of these demonstrated unusual ability and creativeness in their presentation. Teachers of the groups compiled these reports into published units to be used as suggestions for others working with similar children.

Much of the material found by student research came from school and community libraries, current periodicals, letters, interviews, and field trips. Whenever feasible,
the experiences were made alive by visits to local activities of the community in action. Hollingworth personally made biography an integral part of each unit. Since the units were centered in child's interest, and broadened his vision from himself outward to wider knowledge, they were alive and challenging. Some idea of the possibilities of the Evolution of Common Things may be gained by a cursory review of the subjects studied. We note the inclusion of such topics as refrigeration, clothing, etiquette, libraries, food, shelter, transportation, communication, sanitation and health, government, education, warfare, labor and recreation.

Leading specialists from Teachers College taught a course in Science and Nutrition; an advanced student presented a course in general science, and specialists in music, drama, and art, helped guide each unit. An additional part of the program included instruction in French and literature. Handcrafts were an intricate part of the project also. Games, clubs, assembly programs, and physical education, offer the children opportunities to mix with average boys and girls to gain skill in normal human relations.1/

1/Hollingworth, Leta S. "The Founding of Public School 500: Speyer School." Teachers College Record. 39:119-26, November, 1936
Hunter Elementary School

Authorized by the Board of Education, Hunter's elementary school program for gifted pupils between the ages of three and eleven years, was organized in 1940. The entire 250 students were chosen from the top one percent of the school population. The median intelligence quotient of the class was 145 I.Q.

The skyscraper classrooms are large, modern, cheerful rooms with running water, work benches, and movable furniture, to facilitate flexibility and implement instruction.

Every possible source of enrichment is utilized. Prints from the Metropolitan Museum, microscopes, slides, movies, phonographs, chrome cameras, and exhibits, are a few of the excellent visual aids offered. Twenty juvenile magazines, many sets of encyclopedias, and a wealth of reference books suitable to children's use are available in the classes. Special rooms for art, music, science, visual aids, and adequate libraries are beneficial.

One unique feature of the program was a free day for every teacher every week. On these days field trips are taken to local industries and places of general interest, such as print shops. These prove to be valuable instructional experiences.
Thus the emphasis is upon a rich and varied participation aimed to release the best of creative talents in each child as he develops to the fullest of his capacities.1/

**Appleton, Wisconsin**

The educators directing the policy of Appleton, Wisconsin, schools believed giftedness did not grow by itself. It needed nurture and a definite, planned program. They did not subscribe to the usual accepted methods. Instead, their emphasis has been upon the encouragement of genuinely purposeful hobby clubs, both inside and outside the classroom. The nature of the clubs has allowed only those who maintained a high standard in their own classrooms to belong. Because of the desire to be a part of the program, children with talent and ability are challenged to do their best in academic work as well as participating in outside activities. Development of judgment and purposeful responsibility is stimulated in the children capable of leadership. As a result of the club program, there has developed a school spirit of unity and social responsibility to a high degree. Active minds are diligently occupied,

the curriculum enriched for the entire school, and a social intelligence fostered among the gifted leaders. School discipline problems have diminished and some measure of knowledge and skills in human relations has been imparted to those who need this knowledge for resourceful leadership. In their attempts to provide for the survival and progress of society through the maximum progress of the individual, the plans for enrichment grew out of the children's needs and interests.\(^1\) Probably this is the main reason the program has been so successful. The materials were chosen for social solidarity and continuity of the interests of those educated. The hobby interests and clubs have been an effective method for instructional and social activity planned to stimulate emotional urges.

This method has been utilized in a number of schools. It requires much experience and understanding to be an effective, purposeful mode of instruction.

**Detroit, Michigan**

For over twenty years, Detroit has utilized three ability groupings for classes in the public schools. The

\(^1\) Osburne, W. J. and Rohan, B. *Enriching the Curriculum for Gifted Children*, (New York: The Macmillan Company), 1931, pp. 54-53
X group includes those children whose mental test scores indicate an ability twenty to twenty-five percent above the average. The Z group is composed of those scoring twenty to twenty-five percent below average; the Y section contains the fifty to fifty-five percent of average ability. In addition to these groupings, the top two or three percent of the superior X division are organized as a major work class similar to the Cleveland plan.

Realizing the necessity of suitable educational opportunities for all children, the Assistant Superintendent in charge of elementary education, appointed a representative committee of approximately twenty members to study the problem.\(^1\) In the preliminary appraisal, four elementary schools were chosen for study. Three were located in districts having a large number of major work class candidates, the fourth in an average neighborhood. The choice of schools in which the greatest number of gifted persons were enrolled was necessary to avoid transportation difficulties.\(^2\)

\(^1\) This Committee contained representation from administrative, supervision, and research departments of the public school system.

The research committee presented to the main body for consideration a survey of the research and literature concerning the education of superior children and their needs. Particular emphasis was placed on the investigations of Terman and the organization of Cleveland's major work classes.

In the selection of criteria for discovering gifted children, the committee carefully avoided isolated parts in an attempt to evaluate the characteristics of the whole child. The all around growth of mental, physical, and social factors were considered. After weighing the many aspects of selection, they presented a rating plan for ten characteristics, based on a five point scale for each trait, to determine a composite picture of each candidate. Mental, chronological, and achievement ages were rated. In addition, general behavior, effort, reading level, extra curricular activities, scholastic record, height, and weight, were listed and considered for each individual.¹

Administration was determined in each school by the conditions peculiar to each according to the school's

¹ Baker, Harry J. Introduction to Exceptional Children. (New York: The Macmillan Company) 1947, p. 291. In active practice, interest was weighted by five, scholarship by four, and chronological age by two. The total rating scale of all traits combined to a score of fifty.
general organization and building enrollment. In one school, the group remained in their own classrooms with the other children except for special activities two or three times a week. In this instance, various talents and special training of resident teachers were utilized during the time their home rooms were engaged in special activities such as physical education or music. Another school, operating on the platoon system, found it more feasible to form six sections of three half grades who did their academic work separately but mingled with the rest of the school in play and auditorium activities. A third group cared for their gifted children with major work activities guided by the regular classroom teacher in the classroom organization.

The instructional committee introduced enrichment outside the fundamental subjects, encouraged club groups, radio drama, and trips to local points of special interest. In addition, French was taught in most of the schools.

In all of the schools, the teachers allowed the children to do independent work and attempted to teach them to exercise good judgment. Her chief obligation was to direct general policies and limit the field of operation.
Every effort was made to give the class members a sense of belonging to the school as a whole and keep them an integral part of its operation.  

**Baltimore, Maryland**

Baltimore has successfully used a plan combining enrichment and acceleration through which a student may finish the primary grades in two and one-half years, complete the intermediate, in the same time, and thus save one year out of six. Intelligence quotients alone are not considered adequate to secure entrance in the accelerated class. Cumulative achievement records, special ability, and social maturity were also appraised before selection for special instruction. Summer school work, in some cases, helps supplement and accelerate a candidate’s progress. Throughout the project, better, not more work, has been emphasized while letting boys and girls progress at their own pace.

This plan was not Baltimore’s first entrance upon

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\[2/\] Stenquist, John L. "Baltimore’s Plan for Superior Pupils" Nations Schools, 28:20-22, October, 1941
the field of educational opportunity for the superior. As early as 1902, Baltimore established "preparatory centers" for children completing the sixth grade. In these centers, during the seventh and eighth grades, the work of the first year in high school was also covered. The senior high school had also initiated a program of acceleration. The greatest weakness discovered in this early plan was the failure to reach a great number of children needing special education. Transportation was a big obstacle in securing attendance.

The new emphasis upon the individual's social responsibility led to a change in the method of instruction. Consequently, Garrison Junior High School changed from the acceleration plan to one of enrichment. The students were chosen on the same basis as in the previous program. In the "Garrison plan," one-third of the class day is allotted to enrichment activities; the remainder, to the completion of regular prescribed class work. Special efforts were made to widen the regular class units to provide a deeper knowledge with increased power to interpret and apply it. Less

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time was spent on notebook work and drill. More emphasis was placed on making outside contacts, acquisition of research tools, and growth of creative ability.

In striving to develop the whole person, values were placed upon those factors which help the child to live more effectively with his fellows. Critical mindedness was stressed but a sense of humor was also cultivated. Individual initiative and self determination were encouraged but balanced by a deliberate cultivation of respect of personality of self and others. Recreational opportunities were offered and skills taught. The acceptance and discharge of responsibility was practiced in live situations. In all instruction, there was an emphasis upon the adherence to the ideal of working peacefully with and for others.

It is natural for one reading a report of the activity of the Baltimore schools to ask, "How did they do it?". Stenquist in discussing this issue, recognizes the need for adequate organization and effective administration, but seems to think the true basis of the successful program is found in their careful selection of teachers. They are the agents responsible for the guidance and establishment of right attitudes and relations of the class members. The
best of organization and supervision cannot devise a successful project without the close cooperation of the person implementing its operation.  

Birmingham, Alabama

Birmingham evolved an effective plan for education of superior students in a three-fold program. In some instances, there have been separate, segregated classes. Where this was not feasible, enrichment instruction has been given to individual students in the conventional classes. The primary grades throughout the system are divided in ability groups.

Children recommended by teachers and principals as possible candidates were screened on the basis of achievement tests, physical conditions, and results of a psychological examination. If found eligible, the student's parents were then contacted. If the parent was willing to provide transportation, his youngster was then put into the special class. If the parent did not care to register his child, there was no pressure to attend.

Since Birmingham was organized on a platoon basis, the enrichment teacher spent one-half day with each class.

\[1/\] Stenquist, John L. "Baltimore's Plan for Superior Pupils." Nation's Schools, 28:20-22, October, 1941
The remainder of the time, the class met with special teachers in music, art, auditorium activities, and physical education. This did not eliminate the use of any of these subjects and an intricate part of the classroom unit whenever their activities tended to provide opportunity for increased knowledge, appreciation, or application of creative ability. No skipping of grades was practiced. Instead, the acquisition of a breadth and depth of knowledge beyond that feasible in the regular classroom of average ability, was stressed. Often the classes were organized on the plan of city governments. Small groups rotated leadership and followership duties and responsibilities.

The teachers of the special classes were carefully selected on the basis of education, experience, enthusiasm, alertness, understanding of children, interest in creative education, and a broad background of knowledge.

Enrichment in the regular classroom was cared for by special assignments, broader units of work, and extra curricular activities.

J. R. Obenchain, Director of Curriculum Department of Birmingham Public Schools, \(^1\) was enthusiastic in his

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support of the results of the special class. Many of the activities such as murals and service projects contributed inspiration to the entire school. He recognized the administrative difficulties of transportation, and scheduling of classes. Coordination of the special class with the rest of the school was another problem. The attitude of other teachers toward the class needed guidance to bring understanding between members of the staff and a realization of the purpose of the class. However, in his opinion, the class demonstrated its value by helping these children become well adjusted individuals capable of helping one another in social welfare and human relationships.

_Brockton, Massachusetts_

Brockton, Massachusetts is among the more recent contributors to the organization of classes for gifted children. Their work has been unique in the emphasis upon the therapeutic effect of such classes upon children. In November, 1940, eight girls and eight boys; five third graders and eleven fourth graders, were organized

\[1/\text{Ibid.}\]
in a special class. Its purpose was to bring out leadership, stimulate creative activity and meet individual needs.

Personality and intelligence were stressed in the organization and planning. A curriculum for emotionally disturbed as well as adjusted children was chosen. Those sponsoring the class felt it would have distinctive values not found in other programs. It would avoid loss of contact with other children of normal ability. It would avoid disbursement of learning over a scattered or too wide an area. The first criticism often resulted in programs of acceleration, the latter when enrichment was attempted in the regular classroom. The class attempted, instead, to offer special training areas allowing for development of excellent work habits. Elimination of slow learners from the class, and working with mental peers, was expected to challenge each child to use all of his intellectual power.

The sixteen children composing the first class ranged in chronological age from seven years, nine months through nine years, six months. The achievement levels ranged from second grade, two months, to ninth grade, seven months. The intelligent quotients ranged from 129
to 159. One was an exceptional reader, five were classified as good, six fair, and four, not good.

During the duration of the experiment, psychiatric examination and well kept records of growth were cumulated. A complete record was kept of physical and mental development, health history, habits, sex development, play life, mother's impressions of personality, home and neighborhood environment, economic situation of the family, religion, sibling information, and heredity. 1/

Nine control children were given enrichment programs in their home classrooms for comparison with the group in the special class.

Since the purpose of the class was to secure well adjusted happy intelligent children, trained to the maximum of their capacities, with a parallel growth in personality and social adjustment, it is well to examine the type of human resource used in the experiment. Four boys and three girls in the experimental group were classified as well adjusted. In the control group, five children were similarly classified. Six of the experimental class had

1/ Carlson, Edith Fox, and Wiles, Marion E. "Special Education for Gifted Children" Journal of Exceptional Children. 10:73-77, December, 1943
some such maladjustment as exaggerated inferiority feelings, extreme tenseness, extreme intolerance, excessive day dreaming, solitary work habits, or other personality problems directly related to the factor of their superior intelligence. Three of the control group, also, had some personality maladjustment. The remainder of the group were maladjusted children who needed psychiatric help but for whom there was no available psychotherapy. The class was given no name. It drew its members from the third and fourth grades of the public schools.

In the class, freedom to move at will was encouraged. Students worked in an orderly manner for each followed his own prepared schedule of work for a given term project and set aside a definite time for definite tasks. Each child was guided to set his own objectives and compare his progress with his established goals. The effective organization of the class is noted in that it carried on by itself for an entire week without a teacher.

In general, the seminar method was used in making an effort to find a depth of information, examine all aspects of the problem, and to study relationships of research about a central theme.

Less emphasis than in the usual classroom was
needed upon discipline. The children were working at their own pace, setting their own goals and acquiring a technique of research. Learning was fun. Success in a challenging situation brought a particular satisfaction. The socially timid child was helped to make closer contacts with other children. In a class of this sort, he found it much easier for there was a common bond of interest among its members.\textsuperscript{1}

The basic philosophy encouraged a growth of responsibility to classmates, school, and community. The core or center of the project was a social studies unit. Creative writing, records of class activities, personal diaries, and similar creative experiences were cultivated.

The daily program was divided into three parts; planning, skill and drill, and appreciation. Each child was given his turn as room chairman to plan, organize, and carry out group activities. Each student had room duties. Each worked job sheets. Social responsibility was stressed by community service such as war time projects, book exhibits, assemblies, story hour for other children, and

\textsuperscript{1} Carlson, Edith Fox. "Project for Gifted Children: A Psychological Evaluation" American Journal of Orthopsychiatry, 15:648-61, October, 1945
a Christmas Tea. Research skills such as outlining and summarizing were studied and practiced. In the four years of experimentation, each child was progressively given an increased amount of individual work. 1/

In evaluation of the social improvement of the twenty-five children, parents, teacher, and clinical opinions were sought. Sixteen of the children had been a part of the program for four years, nine for one. By consensus twenty of the class had improved appreciably. All had made better progress than in regular school. By progress is meant social or emotional symptoms either modified for the better, or no longer present. 2/ In her evaluation of the class, Carlson stated: "When one works with these children, one becomes increasingly impressed by the great modificability and increased level of behavior of children ... over a long period of time in an environment that is stimulating in its quality and sound in its totality, even though many elements depart from the ideal." 3/

1/ Handy, Mabel, and Lindstrom, Alice L. "Special Education for Gifted Children: Enriching the Curriculum" Journal of Exceptional Children, 10:103-107, 126. Feb., 1944


3/ Ibid., p. 661
In a survey of the control group and former special class members, in high school, achievement tests indicated great similarity in academic growth. Some other factors not so easily measured were more revealing of the value of the class. Ten out of eleven were class officers, two of the control group. Even more suggestive of knowledge of human relations is evidenced in teacher comments describing both groups. Non-class members were reported to be lazy, indifferent, bored, and to lack initiative. In contrast, descriptions of the special class group were characterized by statements such as: "tenacity," "questioning attitude," "leadership qualities," and other approvals.

The most positive proof of the success of the experiment was realized when the School Administration established similar classes as a regular part of the school organization for the entire city. This demonstrated both the effectiveness of the class and the convincing high caliber of the public relations during the experiment.

Conclusion

In the presentation of this chapter only those plans about which the most appears to have been reported have been reviewed. No attempt has been made to report all of them. However, it is hoped the presentation has been broad enough and representative enough to demonstrate many possibilities for nurturing the gifted. No doubt, there are many unheralded successful projects now in process to which one may look in the future for suggestions. It is encouraging to note that carefully planned programs have grown and changed with increased knowledge and experimentation in the field. It is encouraging, also, to note successful beginnings for the most part, have demonstrated their worth effectively enough to warrant their continuance through the years. To the educator, each project has suggestive application to some factors in his own particular situation. Such an interpretation of the possibilities represented by the various schools must be given in the light of the governing attitudes, organization and administration of the particular school situation to which it is applied."
Chapter III
Section 5
An Analysis of Research Pertaining to the Teacher of Intellectually Gifted Children
The author firmly believes that whatever touches a child becomes imprinted upon that child's personality.

W. Carson Ryan, \footnote{1}{American Association for Gifted Children, Op. cit. p. 106} (University of North Carolina) and Ruth Strang, \footnote{2}{Ibid.} (Teachers College, Columbia University) and Paul Witty, \footnote{3}{Ibid.} (Northwestern University) state in the very first line on their Chapter concerning "The Teacher of Gifted Children" that: "Next to parents, the teacher exerts the most important personal influence on the development of gifted children."

In the light of these reasons it is important to consider the characteristics of a teacher of gifted children; what teaching methods should this teacher use; what preparation should a teacher of gifted children have.

The Characteristics of a Teacher for Gifted Children

The most recent intensive study concerning the characteristics of these teachers was finished in 1950 by Paul Witty.\footnote{4}{Witty, Paul, "Some Characteristics of the Effective Teacher" Educational Administration and Supervision, Vol. XXXVI (April 1950) pp. 193-208}
He pointed out in his article the changing picture of a good teacher. In 1845 a description of the ideal teacher was one "who possessed knowledge of his own subject, of kindred subjects, and of the world." In the 19th century another picture was described: the successful teacher had "a benevolent disposition, good health, pleasing appearance and a genuine and earnest sympathy for the young." In the 20th century correlation studies failed to show a close relation between successful teaching and separate factors such as intelligence, achievement in special subjects and amount of formal education. There is no predictive value in these separate factors. Rather more often than not, the subjective evaluation of the children give more insight to the characteristics of an effective teacher. 1/

The Quiz Kids of radio fame have had contests on "The Teacher Who Has Helped Me Most." Fourteen thousand answers were received. An analysis of these letters showed the following traits. From year to year the order of frequency for each trait varied somewhat. These characteristics are:

1. Cooperative, democratic attitude
2. Kindliness and consideration for the individual
3. Patience
4. Wide interests
5. Pleasing personal appearance and manner
6. Fairness and impartiality
7. Sense of humor
8. Good disposition and consistent behavior
9. Interest in pupils' problems
10. Flexibility
11. Use of recognition and praise
12. Unusual proficiency in teaching a particular subject (This was mentioned most frequently by high school pupils.)

These characteristics are obviously the same ones needed by a good teacher of any type children. However, the teacher of gifted children needs additional qualities. The author believes the following are most important:

1. the keen understanding and appreciation of human growth and development with special reference to childhood and youth; from this will come the

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1. Ibid., p. 107
needed ability early to recognize giftedness in the individual child.

2. the ability to encourage creativeness.

Ryan, Strang and Witty concluded that the teacher of gifted children should possess desirable characteristics of all good teachers; namely, friendliness, a constructive attitude toward people, eagerness to understand, knowledge of the subject, or (and this next the author believes more important than mere knowledge of the subject) knowledge of sources of information regarding it (subject) and a genuine respect for each individual. In addition, the teacher of the gifted children in order to keep pace with their active minds and wide interests, "needs to be more nimble mentally and somewhat more widely read than the teacher of average children." This teacher should be able to appreciate fully the children's ability "to take initiative and responsibility" and "be aware of any limitations in the

\[1/\text{American Association for Gifted Children, Op. cit., p. 112}\]
physical, social, or emotional aspects of their development.

George Santayana, 1/ also says, "The gifted need a teacher who understands them in terms of their nature and learning possibilities. This teacher should possess a large fund of general information, because gifted children manifest an unusual range of interests, and a wealth and variety of mental association. He should be especially trained for the task, which demands outstanding intelligence, exceptional training, unusual energy and enthusiasm, and an inspiring personality."

The Educational Policies Commission of the National Education Association which received assistance from the following: Thomas H. Briggs, William H. Bristow, Herbert A. Carroll, Harold F. Clark, George Forlano, Gertrude Hildreth, Joseph Justman, Morris Krugman, Elise Martens, W. S. Miller, Dorothy Norris, Margaret Alltucker Norton, Willard C. Olson, Daniel A. Prescott, Ruth Strang, Merle R. Sumption, Lewis M. Terman, Edward L. Thorndike, Pauline B. Williamson, Paul A. Witty, and J. Wayne Wrightstone, published in 1950 a document on the gifted child. They stated in their most recent publication that the first answer to the question "What then, are the characteristics of a competent teacher for gifted learners?" is the obvious one; namely, that the qualities of a good teacher of any type of pupil are needed by the good teacher of the gifted. But for the latter, some additional qualities are highly desirable. Among them are: superior intelligence (although it is neither probable nor essential that the teacher excel his brightest pupils in sheer intellectual capacity); a rich fund of information; versatility of interests; an inquiring mind; ability to stimulate and inspire; modesty; a sense of social and professional responsibility; freedom from jealousy (Research shows that many teachers are actually jealous of some gifted children);
freedom from excessive sensitivity to criticism; understanding of educational psychology, with special knowledge of the psychology of gifted children.  

The author thinks it is interesting to note here the Commission also states that "In a school which groups pupils without reference to differences in ability, there is no opportunity to assign a specially qualified teacher to the instruction of the gifted. This difficulty in the case of heterogeneous groups constitutes a strong argument in favor of ability grouping." 

The Teaching Method for Teachers of Gifted Children

The Educational Policies Commission states that in general, "the principles of good teaching in any situation apply to good teaching for gifted students. There are no 'special methods' for teaching the gifted. But some characteristics of good teaching methods that are of special importance in the education of mentally superior students can be identified. Among them are the following:

"(a) The teacher should share with the learners his reasons for using the methods that he does.

Such explaining purposes is both more important

2/ Ibid., p. 112
and more rewarding in the case of gifted students than of others. Moreover, they are more likely to demand it.

"(b) Learners should have some opportunity to select and plan their own activities. Such opportunities should be afforded gifted students to a greater extent than others. They will have more ideas and their ideas are more likely to have greater educational value.

"(c) Assignments should be so phrased that they will invite originality in fulfilment. For the able students, assignments can--and should--be given in less detail than for others.

"(d) The teaching of skills should involve repeated practice until a reasonable degree of mastery has been attained. For fast-learners, higher standards of attainment should be required; but less time will be needed. Unnecessary drill beyond the attainment of mastery should be avoided.

"(e) Teaching for understanding should focus on explanations of the reasons for things. The understandings achieved by all learners will
be increased by the teacher's skilful use of
'why' and 'how' questions; and such questions
are especially well-suited to guiding the
thinking of gifted students.

"(f) Learners should have access to a wide variety
of books, pictures, realia, and other instruc-
tional materials. More materials and a greater
variety of such materials are needed for students
of superior mental ability than for others. But
superior students need less guidance in the
selection and use of such materials than do
others.

"(g) Learners should have direct and guided contact
with the out-of-school environment. Community
study and participation in community activities
are particularly desirable means of enriching
the education of gifted students. Such activities
complement book learning, at which the gifted
are specially adept; and they serve as an anti-
dote to excessive verbalization, to which some
highly intelligent students are especially
prone.
"(h) Students should be given a large measure of responsibility for evaluation of their own work. In the case of a gifted student, such evaluation should use his realistic estimate of his capabilities as the norm. It should involve comparison with his own previous achievement and should avoid comparison with the achievement of his classmates—especially if he is in a heterogeneous class." 1/

Preparation of Teachers for Gifted Children

The author found that only a few institutions offered a special class in the psychology and education of gifted children.

Dr. William P. Schwartz, Supervisor of the program of education for gifted children of New York City has outlined a course of study which is summarized as follows:

1. Introduction - need of special programs
2. Methods of Identification
3. Characteristics and educational needs.
4. Special gifts or talents

5. Responsibility of the community
6. Equipment and material
7. Administrative devices or educational adjustment
8. The teacher

Summary

The factors considered important in the selection of the teacher for gifted children are intelligence, good health, physically and mentally, pleasing personality, interest in gifted children, teaching ability and skill in counseling.

This teacher must possess special talent in working with parents and community agencies because the condition of the above-mentioned affect learning and the attempts of the teacher to encourage and release creative energy.

Because few institutions offer courses on the gifted children this teacher must be able to find other ways of gathering more knowledge concerning these children.
CHAPTER IV

SUMMARY

Implications in the Studies Most Rightfully Needed in the Education of the Gifted
Implications in the Studies

"Among many studies were implications of modern educational theory as that most rightfully needed in the education of the gifted. In the philosophical approach gifted children are to be educated for a genuinely democratic society free and humanitarian in character. Differences among individuals shall be understood, appreciated and utilized for social ends. Individuals shall enjoy full growth in body, mind, and social and emotional natures. This full growth rests upon functional patterns of behavior emerging from selected experiences of every kind. Of necessity thereby the whole school and also the community are intimately associated in the educative processes.

The curriculum, both as to goals, content and method, is to be based upon experiences of living in a social world, understanding the nature of child growth and development, and the acceptance of children and their guidance by teachers who are friends. Situations are to be permissive, allowing children time, self-selection, and management of their affairs—which means participation in planning, carrying on, and evaluating experiences and hence is dominated by interests and abilities of children.
Life situations will be central content in the curriculum and will identify and provide those experiences in which learners need help. They will be both horizontal and vertical in scope, and resources for their exploitation will be abundant. Continuity of progress in development rather than graded standards will be sought.

To achieve this educational provision for gifted children the two desiderata already mentioned are clearly emphasized: understanding teachers, trained to guide the growth of the gifted children; and materials of content and method appropriate to the emerging levels and area of their growth.

The problem will in the future, as it has in the past, advance toward solution as the gifted educators of one generation more and more unfailingly find and more and more adequately educate the gifted educators of the next. 1/

CHAPTER V

CONCLUSIONS
The author has come to more specific conclusions, namely:

1. Society for centuries, although recognizing to some degree the value of providing opportunities to the gifted youth, has made meager, inadequate provisions.

2. Society must educate its members to realize that equality of opportunity means that each child be given the kind of educational experiences commensurate with his abilities.

3. Society should open educational opportunities on the basis of ability to learn and less on ability to pay.


5. Test scores should be considered in combination with other school records and teachers' judgments.
6. In practice highly gifted and moderately gifted should be distinguished. Frequent tests to determine level of I.Q. should be given.

7. More difficult than even discovery at an early age is providing the intellectually gifted with an adequate educational program with sufficient opportunities for development according to their abilities.

8. The difference in educational objectives is added emphasis should be placed on creative effort, critical thinking, social adjustment, social responsibility, intellectual initiative, social adjustment, good attitudes for leadership.

9. Neglect of gifted is based upon the fact clearly established, that in general, gifted children do not cause trouble in school, that they tend to adjust to the normal program and work with minimum effort and little opportunity to develop fully.
10. Enrichment may be provided by special classes, special schools or individual attention. In the final count no conflict exists between acceleration and enrichment.

11. Encouragement and guidance is needed by intellectually gifted.

12. Educational opportunities for gifted children should be the same as for other children, but because they are potential leaders in a highly developed world they need deeper, keener understanding of what has been before, in human development.

13. Most effective method of enrichment and preparation for later work can be had in small classes or groups within a heterogeneous class.

14. Best development and growth results from thrusting large measures of responsibility for their own learning on these children.
15. Teachers with deep understanding of development and growth of gifted children and with much humor are the crux of the whole problem of educating these children.

16. Teaching methods should be elastic.

17. Prestige and economic benefits are incentives toward better development.

18. No program in education offers more to the social and economic welfare of this country than does an effective educational program for the children gifted mentally.
CHAPTER VI

IMPLICATIONS FOR FURTHER RESEARCH
Implications for Further Research

The author after examining many articles and books has come to the same conclusion that Frank T. Wilson came to after he sent out a questionnaire to state and city school superintendents and to colleges and universities. "The main implications of the replies for further study and progressive action can be stated as follows:

1. There is a strongly felt need for further research concerning
   (a) curricular material and procedures primarily for enrichment in regular classes.
   (b) trained teachers who understand the nature and needs of gifted children, who appreciate them and have special skills to guide their growth and development in social living.
   (c) more information about the nature of gifted children.

2. There is a strongly felt need for further research in ways to disseminate information because apparently findings concerning gifted children

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well established by many research studies have not reached large numbers of school people, who have concrete problems of providing educational experiences for gifted boys and girls.

3. The two conclusions given above point to needs apparently not generally recognized by teacher training institutions."

The author believes more specific information based on further research is needed on:

1. How children grow and learn
2. What steps of reasoning do they use in solving problems
3. How they develop in use of language
4. How they grow in command of academic skills
5. What sorts of curriculum offerings will build the desired traits, attitudes
6. What kind of equipment is best to implement a broad educational program
7. What influence of environment on gifted children
8. What lessons can be learned from follow-up studies
9. Comparison studies on the rate of progress of different educational programs
10. When the gifted children reach maximum I.Q.
11. Attitudes of gifted children concerning their intellectual giftedness
12. The relationship between school superiority and life-living superiority
13. What lessons can be learned from follow-up studies
14. More facts based on follow-up studies to convince the public of the need and advantages gained for all the people by adequately educating the gifted
BIBLIOGRAPHY
BIBLIOGRAPHY


Durost, Walter N. *The Measurement Note Book* New York: World Book Company


Handy, Mabel and Lindstrom, Alice L. "Special Education for Gifted Children: II. Enriching the Curriculum" Journal of Exceptional Children. 10:103-107, 126 February, 1944

Hattery, Lowell H. "Why Waste Talent?" School and Society 71-81-84. February, 1950

Hildreth, Gertrude, Brumbauh, Florence and Wilson, Frank T. "Educating Gifted Children at Hunter College Elementary School" Harper Brother, N.Y. 1952

Hollingworth, Leta S. "An Enrichment Curriculum for Rapid Learners at Public School 500: Speyer School" Teachers College Record, January, 1938


Hollingworth, Leta S. "The Founding of Public School 500: Speyer School" Teachers College Record 38:305, November, 1936

Hollingworth, Leta S. Gifted Children The Macmillan Company, New York, 1926


Lane, Albert T. "Some Aspects of the Problem of the Gifted Child" Massachusetts Teacher 11:149-151, February 1932

Loomis, Grace I. The Education of the Gifted Child, School of Education, University of Oregon, Eugene, Oregon, 1951
"Markle Fund Research Grant for Identification of Talent"
School and Society, 75:348, March 31, 1952

Marentz, I. "Understanding Unusual Children" Grade Teacher
69:16-17, October, 1951

Mills, Mildred, Graduate Student at Northwestern University
Unfinished Research Study

The National Elementary Principal. "Providing for Children
of Superior Ability" Meeting Special Needs of
Individual Children, Nineteenth Yearbook, Vol. 29,
Washington, D. C.: National Education Association,
July, 1940

Children: Evaluation at the End of Three Years"
Journal of Exceptional Children 12:6-13, 24 October,
1945.

Norris, Dorothy E. "Special Classes for Superior Children in
an Eastern City" The National Elementary Principal,
19th Yearbook, Vol. 1

Osborne, W. J. and Rohan, B. "Enriching the Curriculum for
Gifted Children" New York: The Macmillan Company,
1931

Pregler, Hedwig O. "The Gifted: Society's Neglected Assets"
Clearing House. 24:141-145, November, 1949

Rockwell, John G. "Testing: Its Basic Assumptions and
Unanswered Questions" Educational Methods, Vol. XIX,
November, 1939

Russell, W. T. "The Importance of Social Capillarity"
Teachers College Record, Vol. 42, Feb., 1941

Santayana, S. George. "The Intellectually Gifted Child."

Schwartz, William P. "The Effect of Homogeneous Classification
on the Scholastic Achievement and Personality Development
of Gifted Pupils in the Elementary and Junior High
Schools" Doctoral Dissertation. New York University,
1943

Seegers, J. Conrad. "Teaching Bright Children" The Elementary
School Journal, 49:511-515, May-June, 1949
Stenquist, John L. "Baltimore's Plan for Superior Pupils" Nation's Schools 23:20-22, October, 1941

Stern, Edith M. "Is Yours a Gifted Child?" Woman's Home Companion, November, 1949


White House Conference on Child Health and Protection, Special Education - "The Handicapped and the Gifted" 1930


Witty, Paul. "Improving the Reading of Gifted Children and Youth." The Packet, February 1951


Zorbaugh, Harvey W. "Are You Throttling a Future President?"