

CASE STUDIES OF FORTY EXCEPTIONAL CHILDREN

by

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A THESIS

submitted to

OREGON STATE COLLEGE

in partial fulfillment of
the requirements for the
degree of

MASTER OF SCIENCE

June 1949

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ACKNOWLEDGMENT

To the faculty members of Oregon State College whose counsel and encouragement have inspired me to work, I am sincerely grateful. I wish especially to acknowledge the help of Dr. H. R. Laslett in the writing of this thesis. His ability, his patience, and his understanding of the individual's problem are well expressed in Webster's definition of a teacher as one who "makes to know how, makes aware by information, instruction, and experience."

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Introduction

The purpose for which this thesis is written is the study of forty "exceptional children," twenty of whom have intelligence quotients of one-hundred-forty or more and twenty of whom have intelligence quotients of eighty or less, and the development of case histories concerning them. These cases furnish an accurate although not complete picture of the extremes among the pupils found in the public schools in an urban area.

What has been done is often a guide to what can be done, and often lays a foundation on which further knowledge can be built. It is believed that the presentation of this material will be of some assistance, (a) to future workers in standardized testing and in guidance in the public schools, and (b) to classroom teachers in showing those among them who have not been able to have large amounts of special training in this field what has been done by one such worker. The writer believed, when she was graduated from college, that she could never pass judgment on a child to the extent of influencing his commitment to an institution for the feeble-minded; but she has had to do this in a case reported in this thesis for the greatest good to the child. She learned that an IQ score, or intelligence quotient, is only a part of the total picture of a child. She had felt awe concerning the

term "genius," but she learned that children with IQ's of 177 were much like ordinary children. She has worked to keep them working up to their mental capacities.

A limited amount of the literature in the field of mental testing is presented. This literature is extensive but not relatively new. Binet used his first scale for measuring the ability of children in 1905. Terman began his long study of 1000 gifted children in 1921. From then on, there have been tremendous numbers of studies involving mental testing, and much has been written. The Stanford Revision of the Binet-Simon Scale has been one of the most widely used tools for the mental testing of children and is considered one of the most accurate.

The public school system concerned in this thesis is one of the few Oregon public school systems which holds at the present time that the accuracy of results, the experience to the child, and the help in guidance situations are well worth the added time and expense incurred in the giving of the individual Stanford-Binet Tests to as many school children as possible. The forty children, on whose records this study is based, have been or are pupils in the elementary, junior high, or senior high schools of this mediumsize manufacturing and railroad town.

The town is an old town, as far as this term may

be applied to Oregon towns and, in many ways, resists innovations of all kinds. Its principal support comes from the rich farming area surrounding it and from logging and the by-products of logging. The town is situated on a river used for floating logs and, occasionally, for freight traffic. The flooding of the river in the winter adds to the fertility of the bottom land where vegetable crops are grown in abundance. Canneries and quick-freezing plants prepare these perishable products for a large market. Lumber mills are supplemented in their sawing of timber by factories which make chairs, prefabricated houses, and other wood products. There is a marked division in the populace of this town. Some of the townspeople take pride in being somewhat primitive, tough, and "unfancy." Others are cultured, orthodox, and most serious with their garden clubs, speech clubs, literary societies, and organizations for civic betterment. Like many towns in Oregon and in other states, its economy and social standards are confused as a result of World War II and the presence during the War of large numbers of members of the Armed Forces in its vicinity for four years. Quite a few of these soldiers have returned since being discharged from the Services to establish permanent homes in a community they liked while receiving military training.

The intelligence tests and other tests used in this study were given between 1938 and 1948 (inclusive),

and were administered by one or both of two persons who were either the director of guidance for the public school system of the town or the assistant director of guidance who later became the supervisor of special education as well as director of the work in testing. The tests used throughout have been the Stanford Revision of the Binet-Simon Scale, Form L or Form M.

In this town, as far as possible, all pupils in the third grade and all other pupils specially referred to the Child Guidance Clinic Center have been tested. Referrals to the Child Guidance Clinic Center have been for reasons of poor scholastic performance, emotional maladjustment, inability or unwillingness to conform to classroom discipline, or for any other reason held to be sufficient by the classroom teachers or the principals. In the referral cases, not only have tests been given but case histories have been worked up.

Since this study grew partially out of the local work of the Child Guidance Clinic Center, a brief history of this unit is included here. The Child Guidance Clinic Center developed out of the visits to this public school system of the Oregon Medical School Child Guidance Clinic and was the beginning of the organization of a guidance department in the public school system in the town of this study. The Child Guidance Clinic is a traveling State clinic restricted to eleven centers in the state of Oregon.

It began its operations during the school year 1937-1938. The Clinic was organized and is still functioning under the Child Guidance Extension Service of the Oregon Medical School at Portland. The centers are served by one or two psychiatrists, depending on the area included in each center. The psychiatrists visit each Clinic Center from one to three times during the school year, depending on the area to be served, the number of patients to be seen, and the scheduling to fit in with the private practices of the psychiatrists working in Child Guidance Clinics.

Two men stand out in the early history of this Clinic. Allan East, psychiatric social worker continues to precede the actual clinic in visiting the field, assisting local workers in the selection and preparation of cases to be seen at the Clinic, and in giving in-service training to workers in social case work. Dr. H. E. Dixon, through his interest and activity in child guidance, not only introduced many parents in Oregon to child psychiatry but helped to lay a strong foundation for future clinics. In the field of mental testing and psychiatry, much parent-and-community-education was, and continues to be, needed.

Communities in Oregon which wanted Child Guidance Clinics in the period of their organization are largely the ones which have them now. A few of these towns have been cut off the list for reasons of economy and changed policy. The town in which this study was made was cut off

from visits by this Clinic in the autumn of 1948, when the traveling load was reduced from eleven to nine clinic centers and clinic service for the entire state was centered in Portland.

During the earlier history of the Child Guidance Clinic in Oregon, the service the clinic was able to give was extended somewhat by the bringing of clinical cases from adjacent school districts into the established Clinic Centers. The school system of this study served two additional school districts, besides taking care of urgent cases from rural schools in its county. The necessary social case studies from districts in which there was no special Clinic teacher were made by the county nurse or a public welfare case worker. The scheduling of patients was done by the school clinician (special teacher).

After reading a prepared case study, the psychiatrist saw the child in a private conference. He then talked with either parent or both parents together, as he wished. A conference of the school special workers with the psychiatrist followed. In it, he made recommendations for the follow-up treatment of the child seen. This conference sometimes included school administrators, the child's classroom teacher, and the teacher or teachers in special education. Some psychiatrists saw only eight children in one Clinic day. Others worked faster, used shorter conferences and, under stress, saw sixteen pupils

in a day. Much depended on the relative usualness of the cases.

In the school system concerned and in which this Clinic service extended over a period of twelve years, the seeing of eight new cases a year took care of most of the needs. Including both old and new cases, twelve would constitute a busy clinic day for one doctor. In this school district, served directly by the Clinic, ninety per cent of the pupils needing treatment were seen; but in the county outside of this school district, scarcely five per cent of the need was being met. This was determined, not alone by the number who could be scheduled for a day but by the amount of parent education and even school-superintendent-and-teacher-special education that could be done in the interests of the Child Guidance Clinic by the trained workers in special education who were locally available. The County Health Department was doing a pioneer work here as well as in other directions.

During the earlier Clinic periods, children with auditory, visual, and speech defects were seen at the Child Guidance Clinic sessions; but, in 1941, the Oregon legislature voted to support a state-wide program for the education of handicapped children. Under this program, children with any kind of marked handicaps are seen by specialists in the respective fields. To qualify for benefits from the present state program for the handicapped,

children must show that they have the mental ability to benefit from the work of a special teacher; hence, fewer children of low ability are taken before the Child Guidance Clinic during its present meetings than was true in its earlier history.

In the 1937-1938 period, the school superintendent of the town studied was named as Clinic Center director for this town. As a result of his direction of the organization for child guidance and through his understanding of its aims through the community, he became chairman of a laymen's group or Clinic Committee. This Clinic Committee consisted of business people of the town, P. T. A. members, and teachers. During World War II, the guidance committee was disbanded; and, having served its purpose, for the time, in community education has not been reorganized. All records of the Clinic cases were kept in the office of the school superintendent until the school nurse who had made most of the earlier social case studies, moved to a newly established County Health Office, where the Clinic case records are now kept on file.

In some Clinic Centers, the County Health Officer is named as Clinic director. Locally, the school superintendent remained director of the Clinic since all correspondence, all estimates and claims for reimbursement through state funds to the local district, and all certified case cards are kept in his office because he is responsible

to his district for the hiring of special teachers and any other work necessary for the carrying through of the state program of education of handicapped children in the school district.

When guidance work and the visiting Clinics were new in the community, (1937-1938), the director of guidance was assisted by a young woman as clinic, or special, teacher. She had a small opportunity room in which the enrollment was not permitted to exceed fifteen pupils. This group evolved from a remedial group into a group in need of emotional adjustment and was used primarily for follow-up work from the Child Guidance Clinic. After three years, both remedial and adjustment teaching were carried on with pupils drawn from the regular classrooms for short periods with this teacher. She was followed by another special teacher. Upon the resignation of the director of guidance, the new special teacher took over the testing responsibility. The principals of the various schools carried on the work of the former director of guidance. In two more years (1946-1948), the work had increased to the extent that there were now two special teachers and case workers in special education under the Oregon State Program for the Education of Handicapped Children. This recounts briefly the transition during a period of twelve years from child guidance in its infancy in a small town to its part in a state-aided program in full use in a very

rapidly growing community.

Full use of the Child Guidance Clinic Center did not mean according to the entire need of the community. It meant use according to the staff available, according to the wishes of the school board, and according to the physical space available (which has not kept pace with a "mushroom" growth in school population). There has been constant need for parental education in this community. There has been and is need for community awareness of the fact that the child of low ability needs early recognition and training adapted to his own level of learning so that he will, from habit, be protected against trusting strangers who would mislead him. It is not the nature of the subnormal child to be delinquent. If he or she becomes delinquent, it is because of surrounding circumstances. If he is retarded many grades in school, he is with younger children and wants to escape. If the deficient child is graded two or three years above the level at which he is able to function favorably, he understands little or nothing of what is presented in the lessons and never has the feeling of success. He is by nature forever incapable of attaining the level of performance set by the majority. In a class of his own kind, he can be happy in accomplishment. The community should know these facts and support special classes for the dull children who are now sufficiently numerous to justify the expense.

While teachers are recognizing more and more the needs of the gifted child, it is impossible in a crowded room in which there is a heterogeneous class of thirty-six or more pupils to plan or to effect much of an enrichment program for those who need it. The schools in this study do not favor acceleration. Enrichment of class activities where it is physically possible by working in the lunchroom, in halls, or in office space is provided through extracurricular activities, added responsibilities, and encouragement of individual projects.

Studies have been made during the past three decades which indicate the importance of training our gifted children. It is from the ranks of the gifted that national leadership should come. Being gifted does not, however, guarantee the use of exceptional ability. It is as necessary for exceptional ability to be developed through training as it is for it to be discovered. This, too, is a part of parental and community education.

CHAPTER II

Some Meanings of Low and High Abilities in Intelligence

Plato (35, p.100) foretold the use of mental tests in "The Republic" when he wrote: "We must watch them from their youth upwards, and make them perform actions in which they are most likely to forget or to be deceived, and he who remembers and is not deceived is to be selected, and he who fails in the trial is to be rejected. That will be the way."

According to Henri Binet (16, p.2, 49-51), the eminent French psychologist, who made the first useful mental test, intelligence is: (a) the ability to adopt and maintain a given mental set; (b) the power to vary attempted solutions until a satisfactory one is reached or the problem given up as unprofitable; and (c) the use of autocriticism. Intelligence suggests wit, brightness, capacity to learn, according to Freeman (16, p.483). Intelligence, Binet says (34, p.54) "is judgment, or common sense, initiative, the ability to adapt oneself." Buckingham (2) believed that intelligence is judged or measured by both the rate and the typical products of learning as shown by the extent to which it has taken place or can take place. Intelligence (2) is imagination working on experience. Ebbinghaus (2) thought that intelligence does not consist of knowing many things nor

of their reproduction from memory. It is not memory (2). It lies (2) in the capacity to combine apparently unrelated parts into a coherent whole and in the elaboration of this whole into many uses and meanings. It is a combinative skill (2).

Pintner (2) believed that intelligence is the ability of an individual to adapt himself adequately to relatively new situations in life. Stern (34, p.55) expressed the same thought in different words when he defined intelligence as one's general ability to adjust consciously his thinking to new requirements. Terman (2) believed an individual is intelligent in proportion as he is able to carry on abstract thinking.

To Thurstone (2), intelligence is (a) the capacity to inhibit an instinctive adjustment, (b) the capacity to re-define the inhibited instinctive adjustment in the light of imaginably experienced trial-and-error (analytical thought), and (c) the volitional capacity to realize the modified instinctive adjustment into overt behavior to the advantage of the individual as a social animal (adaptation). Conceptual thinking (2) leads, after a pause, to overt action. According to Hollingworth (26, p.15), "The trait we measure and name as general intelligence is a complex, resulting from the incidence of a great number of functions, acting together in a great number of ways, yet cohering in respect to amounts found in given individuals. Intelligence

cannot be trained as a unit."

Child intelligence differs from adult intelligence in degree and, to some extent, in form. Intelligence has hierarchies, the upper levels of which are more than the sum of the lower levels. Intelligence does not necessarily mean genius. By widespread consent, genius is defined as superior intellectual ability, or above 140 IQ or intelligence quotient. A genius does not know without learning, nor learn without effort; but he does know more and is able to do more things with what he knows. Estimated IQ's of geniuses now dead have been worked out with considerable probable accuracy by discovering what abilities they showed at early ages, finding the ages at which these abilities are found in normal children, and comparing the two (10, p.47). Galton would, thus, have had a probable IQ of 200. The average for Cox's (10, p.85) group was above 160 IQ. They had not only ability but are characterized "by persistence of motive and effort, confidence in their abilities, and great strength or force of character." They had superior ability in many fields. This group was selected on the basis of one in each 4000 of population, according to the space given their accomplishments in the standard biographical dictionaries.

The term "mental test" (33, p.78) was first used by Cattell in describing tests in use in his laboratory in

the University of Pennsylvania in 1890. His tests were on keenness of sight and hearing, reaction time, after-images, color vision, perception of pitch and of weights, accuracy and weight of movement, memory, and imagery. A mental test now is a measure of general intelligence (13, p.28, 29) inborn capacity to perform. It is a means of studying the behavior of the mind functioning as a complete unit. The inborn capacity of an individual to adapt himself to new situations in life is very closely (13, p.30) related to the ability to learn. The test to measure this intelligence is not a measure of what the child has accomplished in his school work. It is (13, p.31) not a test of special talents or abilities nor is it a means of discovering the vocation for which a child is best suited. It is distinguished from the educational or achievement test, the vocational aptitude test, and the personality test. The mental test is not the sole criterion to be used in the classification of children in school (13, p.32). Mental tests are based upon common sense as well as upon fundamental psychological principles.

Terman (49, p.5) refers to language as the "shorthand of the higher thought processes." He adds (49, p.5) that the level at which language functions is one of the important determinants of the level of the processes themselves. A test which satisfies the requirements for validity, reliability, and time economy at the

upper levels may easily be a verbal test employing either written or oral language.

Mental tests may be divided into several classifications which may be combined. These classifications are: individual, group, performance, pencil-and-paper, language, and non-language. The "language" test is one which employs language in the giving of the directions for taking the test and in taking the test, but is not the same as a test of language usage or of rhetoric. Language is often, but not always, employed in mental tests. A "language" test may be an individual or a group test. It may be a pencil-and-paper test, or it may be a performance test. The Stanford Revision, for example, is a "language," individual, performance test. The Army Beta is a non-language, group, pencil-and-paper test. The various form-boards are either language or non-language, individual, performance tests. The Army General Classification Test, so extensively used during World War II, is a language, group, pencil-and-paper test.

Freeman (16, p.137) defines a non-language test as one in which there is no use of words either by the examiner in giving the test or by the subjects in responding to it. The term is more broadly applied to include all tests to which the subjects respond without using language and in which no written directions are given to the person taking the test, regardless of whether or not

oral directions are given by the examiner. The non-verbal or non-language tests are most successful at the lower levels of age or of intelligence, e.g., in measuring the intelligence of small children, illiterates, and foreigners (16, p.130).

A performance test or scale is composed of exercises which require the subject to react to problems presented in the form of concrete objects rather than of words. Instructions may be either verbal or in pantomime. A performance test is a variety of a non-language test, but the non-language or non-verbal test in its broader sense is more inclusive. A pupil's performance is what he does. It must be such that a competent observer or scorer can easily observe it. Performance, or what a pupil does, is to be distinguished from ability or capacity or what he might be or is able to do (32,). An individual test can be administered to one person at a time only. The usual reason is that the subject's responses are oral or that the examiner must note down rather careful descriptions of them (32). An individual test requires the full attention of the examiner. In giving the Stanford Revision of the Binet-Simon Tests, from a half-hour to an hour is needed (13, p.55). Results of an individual test have been found to be more reliable than results from a group test, if the examiner is well-trained.

A group test can be given to a large number of

individuals at the same time and by one examiner. Almost all standardized educational tests are group tests, the chief exceptions being those in oral reading. Using a group test, a teacher may examine a whole class in less than an hour's time.

The "mental age" concept originated with Binet (34, p.28). It is now used with any set of tests standardized on children of various ages under eighteen. According to Terman, mental age is the level of development which normal children have reached at a given chronological age. If a child (34, p.114) is said to have a certain mental age, one means that his performance on the tests is equal to the average performance of a fair sampling of children of the same chronological age. If average six-year-olds are able to pass certain tests, a child--regardless of his chronological age--who is able to pass these same tests and unable to pass any higher ones is said to have a mental age of six years. Because of varying skill and thoroughness in the standardization of tests, it is necessary to keep in mind (34, p.114) the scale from which the mental age has been computed. At the present time the Stanford Revision of the Binet Scale would seem to be the best standardized scale and it is the one most widely used (34, p.115). "The great merit of the Binet Test is that it is a graded scale for intellectual difficulty, and it is only weakened by being loosely interpreted."

That the mental age concept leads to ambiguities and inconsistencies, hence should be discarded in favor of a percentile ranking, was held by Thurstone to be necessary for the evaluation of mental test results for adults whose chronological ages vary over the twenty to fifty, sixty, or seventy year age span but whose mental ages do not vary very much in any one individual over the same span of years (52, p.268-278). The mental age and the intelligent quotient terminology seem to have functioned and survived, as indicated by the 1947 Terman report (47, p.11) on 1000 gifted children. Thurstone, however, still persists in his idea that the intelligence quotient as a single index of intelligence should be discontinued.

Binet did not use the IQ. After being proposed by William Stern of the University of Hamburg in 1912, this concept was developed by Terman (18, p.366) and is now the most widely used method of expressing the results of intelligence tests when given to children. The IQ expresses the relationship between mental age and chronological age and, in so doing, is an individual's brightness or dullness in comparison with others. It is obtained by dividing the child's mental age by his chronological age. The IQ has continued in popular use and is preferred to standard score indexes such as a statistician might use, partly because the majority of teachers, (49, p. 27-28) school administrators, social workers, physicians, and

others who utilize mental test results have learned to think in terms of the IQ rather than in terms of other standard scores and partly because all IQ's and mental ages are directly comparable where-as standard scores usually are not. Of course, the IQ apart from the mental age or chronological age of the individual is of limited use, but the same is true of standard scores. There has been, and is, some objection to the use of the IQ because so much incorrect information has grown up around it in the minds of untrained people; but this is true of many discoveries and processes.

Terman reports (49, p.30) numerous investigations of his own and of others to show that scales of the Binet type, when carefully standardized--and especially when properly administered--yield closely constant IQ's on repeated testings, at least from fairly early childhood through the adolescent period and even beyond. Terman's reports show that children tested at the earliest ages, i.e., from two to five, change very rapidly in their learning capacities and the acceleration of gain in their mental abilities begins to decrease after the age of thirteen years, probably through the slowing down of the physiological growth of the brain. Later learning is accomplished by better selection, evaluation, and organization of the material; better backgrounds of knowledge; and longer and more attentive periods of work.

While Terman (49, p.52) and others have stressed the importance of accuracy and thoroughness in the training of testers and the essentiality of good rapport during and before the test, it seems desirable to make a distinction between the "true IQ" and the "found IQ" because so many people are actually giving tests without having had accurate and thorough training and without the ability or the willingness to establish good rapport before beginning the actual test. If this concept of "true versus found IQ" is understood, much of what has been written and spoken about the constancy or the inconstancy of the IQ may be more easily understood. It is not claimed here that children do not vary from day to day in willingness to make effort during a test or that they are not keener in their problem-solving at one time than another; but it is claimed that the variations among testers are much greater than the variations among the children being tested and that the "found IQ's" approach the "true IQ's" more closely at the hands of thoroughly capable testers and that the "true IQ's" are quite constant as shown by repeated tests of the same individuals.

Because the Stanford Revision of the Binet Scale was carefully standardized and through its use with many children in the selecting and the continuing study of Terman's 1000 gifted children (46, p.1x) over a quarter of a century and longer, there have been many retests of the

same children. These results verify Terman's belief in the constancy of the IQ where the testing is done by skilled testers. The changes found, especially in group tests of intelligence which are coarser measuring instruments, are almost uniformly much larger.

Goodenough and Cattell (8, p.371-376), both students of Terman and later co-workers on some of his more extensive studies, recognize factors that may cause changes in the found IQ, but share with Terman the belief that there is little--if any--change in the "true IQ." While they do not use these terms, they do express this idea. They recognize that there are changes from test to test of the same individual, but they have found the most of these changes to be so small as to be insignificant.

Since the constancy of the IQ has long been the subject of heated controversy, a few of the studies supporting one or the other theory will be mentioned here.

According to Thorndike (51, p.168), "The intelligence of the bright remains high; that of the dull tends to decline. Evidence on the influence of improved environment on IQ is conflicting."

Available evidence (13, p.40) tends to show that the IQ is comparatively constant, varying at different examinations not over five to eight points in the majority of cases. Terman, in retesting 435 cases, found the

exceedingly high correlation of .93 and, in two other studies involving fewer children, the correlations reached .94 and .95.

Lincoln (29, p.287-292) became interested in the problem of changes in the IQ among superior children because of an apparent contradiction between the results obtained by Terman in his study of gifted children in California and those obtained by Cattell in her analysis of the Harvard Growth Study data. He found that when children whose records are studied have been tested throughout by the same person, there is an element of constancy. Cases in Lincoln's study came from three towns which made a practice of admitting to the kindergarten and the first grade, children who are under the chronological age limit, if they obtain a Stanford-Binet mental age which equals or surpasses the required chronological age. Ninety-two children with initial IQ's of 119 or more had been re-examined at intervals ranging from five to eight years. In general, analysis of the data showed that gifted children selected on the basis of a single initial Stanford-Binet were more likely to lose than to gain and that the girls are likely to lose more than boys are. Usually the loss or gain does not exceed eight points, however.

Bayley (4, p.314) made a study of forty children tested at regular intervals from one month of age through eighteen years. Mean IQ's varied with the test and with

the children's experience with the test, but IQ variations were controlled by use of standard scores based on means and standard deviations. Individual curves indicated that a child's intelligence is more stable than would appear from the IQ's. No adequate basis for the prediction of mature mental status from scores found on the infant scales has been found. Scores made during the school ages tend to be stable for most children. After eight years, correlations between the scores from different tests--changed to terms of mean and standard deviation--are not significantly lower than between scores from repeated use of the same test. The course of intellectual growth in each child is unique, presenting an over-all pattern of development which rarely parallels absolutely the average for more than a few years at a time. Relative status may change at any age, though the changes are most prevalent, rapid, and extreme during the first two years.

There are needs and limitations of comparison in measuring children's capacities. This was recognized early by Binet. Thom and Newell (50, p.61-67) brought out some of these needs and limitations in their study of forty-three children of IQ 130 or more, who had been seen in a child guidance clinic between 1927 and 1934. Thirty-eight of these were retested, with an average interval of eleven years between initial test and retest. The average Stanford-Binet IQ upon retest was 135. The range was 106

to 161. For this group, the average Wechsler-Bellevue IQ was 125. The differences in scores between the first and the second tests were attributed largely to the varying efficiencies of the tests at different age levels and to favorable or to adverse factors in environment upon the children's personalities. In general, parental influences on these children had been good. The school histories of this group were disappointing, since the more retiring pupils had been overlooked and had lacked guidance in utilizing their abilities and in making personal adjustments. Social adjustment for some members of the group had been difficult. These children were divided, for study, into those who had achieved and had made good adjustments and those who had had only mediocre success or were maladjusted or unhappy. Those who failed, relatively, in fulfillment of their promise or ability had been hampered by family instability or unfortunate environmental conditions.

Studies made by Skodak (42), and Skeels and Wellman (41) present the belief that the intelligence quotient is significantly influenced by varying environments, especially very favorable environments. Wellman found (41) average gains of twenty IQ points for 600 children who had attended preschool for four years in a home for orphans. Children of higher intelligence from both preschool and control groups within this group were

placed in foster homes. Children of lower intelligence remained in the orphanage. The scholastic achievement of resident children showed the preschool children to excel in grade promotions and scholarship. In general, (41) they claim the IQ of a foster-child during these preschool years is not related to his genetic constitution as derived from his true mother and father but to the quality of the home in which he now lives. They stated that the older idea that a gain or loss of as much as twenty IQ points must be exceedingly rare is definitely not valid for these young children. They further stated that (41) when young children are subjected to demonstrably changed environments, substantial shifts are the rule rather than the exception. To a significant extent, such shifting (42) indicates real losses and gains in the relative mental standing of the children involved. These University of Iowa studies appear to include an emotional factor which others working in the field of mental testing concede to have an appreciable influence on the "found IQ" which may vary any number of points from the "true IQ."

Even though Binet (33, p.277) was less inclined than are some present-day psychologists to draw closely the distinction between the effects of a conceivably innate organization determining the possibilities of intelligence on the one hand and the effects of training on the other, and was therefore likely to consider favorably

the possibility of increasing one's intelligence by training, the various uses of intelligence tests which he suggested or actually employed were practically the same as those recognized today except in phases which have been developed out of more experience. Binet in no place shows any hope of considerably improving one's degree of intelligence, unless in the cretin (33, p.278). There probably is no good evidence that improvement, where apparently shown in tests, is permanent.

The good test is valid, that is, it measures efficiently what it is supposed to measure. How consistently it measures whatever it does measure is the test's reliability, that is, the good test functions consistently. Tests of doubtful validity or reliability may not have well-selected items or not been well standardized through sampling too small a population or a well enough selected population to enable the tester to use them with confidence in the results obtained.

"It is very easy to devise tests, but a very difficult task, involving years of experience and observation before the test can be correctly interpreted."
(37, p.3-4)

Some people are not fitted by nature to be good testers, perhaps through the lack of personal adaptability. No amount of training could make good testers out of those who are not interested in children and their reactions to

varied stimuli. An interested person with all the personality prerequisites would not be a good tester without training in the mechanics of testing, in child psychology, and in winning people over. Above all other qualifications, in order to measure all of the ability that a child has, the tester should be able to establish rapport, that is, that interplay of genuine interest and friendliness that establishes a feeling of confidence in the child so that a sympathetic understanding exists between the tester and the child throughout the test. This (49, p.56-58) can be done in different ways. An understanding smile, a spontaneous exclamation of pleasure, an appreciative comment, or just the air of quiet understanding between equals contributes to keeping the child encouraged and attentive. The child's efforts should be praised by varied expressions of commendation that fit naturally into the conversation. No degree (49, p.58) of mechanical perfection of the tests themselves can ever take the place of good judgment and psychological insight of the examiner.

Part of rapport, too, is the freeing of the child from disturbing emotions. A frightened child cannot give his best. A tense child, when he becomes relaxed, will respond more freely and truly. A child should not be tested when he is not feeling well. Either a long-time or temporary health situation contributes to the quality of one's intellectual response. Testing should be done in a

restful, quiet room free from any competing interests around the child, either immediately before or at the time of testing. The end of a hard day should never be taken as testing time for either child or examiner, as the test itself should be a pleasant experience. While the interest is usually held easily by the numerous and varied test items, the examiner should watch for any signs of fatigue, and give the child a few minutes rest from time to time according to his age, or, if the test promises to be too long, it may be broken into two sittings. A test cannot be considered a true test if there is a hearing loss or vision difficulty which actually affects the results. Examiner's remarks may be used to indicate whether he or she feels the test results show the usual accuracy or whether possible interferences, either physical or emotional, have detracted from the accuracy of the test. The presence of others--parents, siblings, or teachers--is not desirable during a mental test. If the child has had prior test experience, the familiarity with the test situation may make some difference in the results, even though a different form of the test is used. This is not likely to be large, however.

The person giving mental tests should have training enough in statistical methods to find the scores, interpret their meanings, estimate the probabilities of similar scores if retests were made, and apply the results in terms

of life situations.

Binet held the view that intelligence is composed of three distinct elements (33, p.260): a direction of thought in connection with a problem, a tentative solution or an adaptation, and autocriticism of the results when obtained. The defective is deficient in all three but not totally without them. The term "feeble-minded" is applied to those individuals who are markedly lacking in mental capacity as a result of incomplete mental development or from traumatic experience. The feeble-minded are classified in the United States into idiot, imbecile, or moron groups. The term "ament" (33, p.20) is applied to these people who are seriously limited in ability from birth. This term is in general use in Great Britain, but has not been widely adopted in the United States.

The idiot never learns to communicate with his kind by speech. He neither expresses thoughts verbally nor understands speech. An idiot (33, p.281) must always be cared for as though he were an infant. By definition, he never develops in intelligence beyond the level of a normal child of two years of age. An imbecile is capable of talking and walking and of learning to do simple tasks under supervision. The mentality of the adult imbecile ranges from about three to seven years in mental age. The imbecile fails to learn to communicate by writing, to express his thoughts, or to read. A moron is usually

defined as a person who is capable of learning to read and write and who can do simple work. He shows a retardation of two or three years in his school studies for reasons other than insufficient or irregular attendance. He is incapable of working efficiently except under supervision, cannot look after his own affairs with ordinary prudence, is incapable of consistent planning, is often markedly lacking in appreciation of moral sentiments and in judgment, and is usually poorly inhibited in controlling his immediate impulses. His mental age, by definition, lies within the seven-to-twelve year age range. The moron class provides many of the petty thieves, "toughs," drunkards, and prostitutes.

The feeble-minded are not by nature (38) morally debased. They respond to moral training, if painstakingly established by habit. Because of their limited ability to make decisions and understand moral issues, more feeble-minded are found among criminals than among the population at large because they easily fall prey to criminal leaders who use them as tools in crime. They are usually readily detected in criminal acts and so appear to make up a rather greater proportion of the criminal population.

At least, two per cent of our school population is defective (1). Unless these are very carefully and wisely trained, their chances of becoming anti-social are great. No feeble-minded child is naturally anti-social

and a great proportion of them could be so trained that they will never become anti-social if enough time and money is spent on their supervision. Whether the results would justify the expense or not has been settled by the public largely in the negative at the present time.

The feeble-minded who are self-sustaining usually work on the lowest economic levels. Those women in the Fairview Home, near Salem, Oregon, who can be trained, are taught to do laundry work, child care, and cleaning. Some of them will never get beyond work in the institution while others, after they are sterilized, will be placed in homes as domestic servants. The men work in the fields. Many of those who leave the institution make fair farm hands. They are able to do good work under supervision. Some feeble-minded are always entirely dependent on their families (37, p.5) or on others. Some, from babyhood through life, require institutional care as custodial patients. While Porteus (37, p.11) wrote that the mental defective rarely exhibits outbursts of bad temper and quarrelsomeness and is not inclined to be cunning and sly; Goddard, in his "Criminal Imbecile" (35, 81, 106) shows that there are enough exceptions to make the first statement a dangerous one. Defectives do differ as much in individual personality and emotional development as do people of normal intelligence. As an example, two of the cretin women observed in the Fairview Home while belonging to

the dwarfish type caused by thyroid deficiency were different in both looks and temperament. The brunette was plain in hair cut and dress. She was quiet, stolid, dignified. The blond was like a frolicking child of three. She skipped to meet the visitors, dimpled, and laughed as she answered questions. She proudly showed her print dress with its sash and bow. She wore a ribbon in her curly hair. Her chronological age was thirty-five. In the Mongoloid type, there is a wide range of deficiency from the merely dull to the hopeless idiot. This type may appear in the best of families, may keep up its place after a fashion in the schoolroom, or may never be able to attend public school. The cause of Mongolism is not known at present even though it has been studied extensively.

The first modern attempt to educate a feebleminded child was made by Itard, about 1800, (22, p.344) when he took into his home a boy about eleven years of age found wandering in a French forest (28). Itard was the medical director of the National Institute for the Deaf and Dumb at Paris at the time. During the five years Itard worked with the boy he made so little progress that he gave up the task after deciding the child was a hopeless idiot. The French Academy of Science (22, p.344) recognized the external changes that had taken place in the boy during his period of training, and praised Itard for his

contribution to the science of education, for the boy had learned numerous words that he could write and use in making his wants known. His sight and touch were improved. Some emotional development had taken place (28). This was the first proof (22, p.345) that idiots have traits and characteristics similar to those of normal human beings, but differing in the degree to which they are present.

In 1837, Edward Seguin, a pupil of Itard, started (40) a school in Paris for mental defectives. He later came to the United States, and started a private school in New York City in 1878. Seguin's report (40) on the work done with feeble-minded in this school is of great historical importance. Following Seguin's school in New York, (22, p.345) educational work and care for the feeble-minded in America was greatly increased throughout the United States.

In 1842, Horace Mann (22, p.345) visited schools for the feeble-minded in Europe. He was so impressed by what was being done that he urged that such schools be generally established in the United States. The Training School for Feeble-minded Children at Vineland, N. J., was founded in 1906. Dr. H. H. Goddard (34) was made director of the psychological laboratory, one of the first in an institution for the feeble-minded. He began to use the Binet Scale at Vineland in 1908. By 1910, Goddard had published his standardization of the scale. The reason

for early objection to mental testing and the taking by normal people of mental tests was its almost exclusive early use in the detection of feeble-minded children, primarily for commitment to an institution for the feeble-minded.

Public school provisions for children of low IQ have probably been delayed from lack of enforcement of compulsory school-attendance legislation. As long as the children were not compelled to attend, those of low IQ seldom continued long in school and many never started. It was not until the beginning of the twentieth century that the growth of special classes for those of low ability began. By 1911, 222 cities had classes organized for backward and mentally defective children (53). Now the total number of cities in the United States with such classes is undoubtedly well over 400.

Three alternatives have been followed with low ability children. First, they could be ignored, "our hands washed" of the entire problem of caring for and educating them (15, p.138), or they could be put out of the public schools, placing complete educational responsibility for them on their parents; second, they could be institutionalized; or third, in a few of the large cities, special classes and special schools could be organized in which they are trained by teachers fitted to take the child, understand him, and develop the abilities he has to

such useful ends as may be possible. All three alternatives are being followed in various communities or even with different individuals in the same community at the present time.

Sometime during the dull child's development, (13, p.147, 148) both child and parent should be led to realize that the work being done is not of standard grade. They should think of the place in life which he can fill successfully. The truest measure of success will come in industrial life when he has found work within his mental capacity which calls forth all the ability which he possesses.

The assumption that the subnormal child's problem is solely one of intelligence leads to a defeatist attitude. With training, the subnormal child is enabled to adjust adequately in his home under supervision (11, p.352-353). The emphasis in the special schools is on social adjustment and on group activities, thus enabling the child to make normal contacts and develop self-esteem, self-control, and social graces. These must be learned before there can be any preparation for vocational activities. Any vocational training for this group would be practically valueless unless preceded by training leading as far as possible to social adaptability, responsibility, and acceptability.

There appears to be a rather decided tendency toward

an increase in the percentage of pupils of low mentality entering high school (36). If these pupils spend four or five years in a high school where there is a program adjusted to their needs, and they have faithfully applied themselves they should have a diploma or certificate showing what has been accomplished (13, p.151). Both the kind and quality of work should be indicated. The value of self-activity in the schools can hardly be over-emphasized (39, p.387-464). Trade training should be given to those to whom it will be of benefit. For the duller, there is training as tradesman's or artisan's helpers. For these people, even this training requires a long period of time. For the still duller, there is training in manual labor. For them, this requires a still longer time. If it did not, they would not be dull or subnormal. Values such as accuracy, patience, neatness, better finger manipulation, better knowledge of letters and numbers, spelling and punctuation, better acquaintance with printed forms, and encouragement of artistic ability may be gained by all of these pupils (54, p.373-376).

These children can be trained to become self-supporting in many types of semi-skilled and unskilled labor. Jobs within the range of their abilities will keep them happily occupied. Regular habits of work can be established through patient training. Habits of good conduct may be formed. Through more individual work the

dull can gain the feeling of success which comes from accomplishment. Heck believes (22, p.364) that the few words necessary for reading simple primers should be taught the feeble-minded child who can learn them, even though it may take several years. Those who have below normal intelligence can succeed even with academic school-work if the steps are developed slowly, constant repetition is made, methods are concrete and direct. They can read children's stories of third, and fourth, and even fifth grade level. Simple fundamental operations of arithmetic can be taught and applied in making change. History and geography can be taught if it is rewritten in simple story form (15, p.138, 143).

In 1927, the Baltimore public schools began to offer a program now known as occupational education. This program offers a special three-year curriculum for students who have become two or more years retarded in their school work. Classes are located in schools in all sections of the city, each class enrolling about twenty-five pupils (6, p.437). Since its inception the program has been greatly enlarged, with the result that there are now about twenty-three occupational centers which care for a group of approximately 2800 pupils.

Dubo and Gruenberg (14, p.12) recognize that "the lesser endowed take on the stigma and burden of being inferior." The mentally retarded are not accepted and

have little place in our society. Often, little effort is made to develop such productive capacities as they may have. Acceptance, however, is not unanimous on this point. A former director of special classes says that they frankly call their centers schools for subnormals and that, until the depression, they had no difficulty in placing the graduates of these schools. After the placement service was well organized, those industries that had employed the graduates began to call the placement office voluntarily for workers whenever vacancies occurred or whenever jobs of the type these youths could do were available.

It is possible that stigmatization of the dull and subnormal cannot be avoided. Whether or not this stigma is felt depends almost wholly upon the attitudes held and the attitudes developed by those who have been responsible for organizing the classes. If people understand that all children differ widely and that these differences extend to innumerable qualities, abilities, and interests; if they realize that children lacking in one attribute may have a good share of another; and if they are shown what children of low IQ have accomplished, the prejudice against such class groups and schools will materially lessen.

The slow learning child in most families is sensitive to the family's attitude toward him. If he is

given instruction as he is ready for it instead of being put under pressure, he develops according to his own ability and does not develop habits or mannerisms which make him appear "queer." There is still the stigma of being regarded with suspicion, but young parents are beginning to realize that a slow child is not their "fault" or a "disgrace." They can protect him from teasing when other children begin to notice he is slow by explaining that some children do things sooner than others and giving, as an example, to a four-year old tormentor of a small child the statement, "You can't ride a two-wheeled bicycle."

It is better to face life's tragedies than to try to conceal them. It may be necessary to institutionalize a child. Homes for the feeble-minded are now built with no walls and no guards. Patients play, work, or rest outside their homelike cottages. There are no thoughtless neighbors to gossip. Parents are treated as persons still interested in the child, contributing toward his support and happiness. They are kept informed of the child's health and progress by a skilled staff. The good fresh food, sunshine, and fresh air plus the regularity of institutional life can do wonders for the child who cannot or should not be cared for at home.

In the population of lower intelligence there is no postponed marriage from economic motives, no restraint by

thinking there is not enough to feed those already in existence (25). The lower the intelligence, the higher the birth rate. Among those of low intelligence, the birth rate is two to six times as great as the rate for the population as a whole, because they are at the mercy of instinct and there is little thought for the future. In addition, the philanthropy of the present time does not allow the natural laws of selection and survival to operate. Inferior children originate most often in inferior homes and become a great burden to all, economically and socially. Goddard (20, p.48) stressed feeble-mindedness as a cause of alcoholism. Hollingworth (25) summed up the responsibility of schools when she wrote, "Under our compulsory school laws all except the lowest grade of feeble-minded come under the supervision of the teachers. The defective paupers, criminals, unmarried mothers, alcoholics, and hoboes all have school histories. When these histories are elicited, it is found that they were the chronically "left back," the truants, the disciplinary problems. Typically they drift through school as repeaters, until at the age of 16 years they have reached the fifth or sixth grade. They then drop out, being no longer within the limits of compulsory school age. Young adults, who have passed through school since ungraded classes have been established, sometimes have a history of having attended these classes. All subnormal individuals should be

identified and studied while yet they are children, in order that they may be trained in useful specific habits up to the limits of their capacity; and in order that those who are incapable of any social adjustment may be protected from miserable and delinquent careers, we must discover the subnormal child, who is potentially a social menace."

The community is interested in the mental defectives as potentially or actually socially inefficient or criminal (37, p.1). Special education does render some of the defective industrially and socially more competent, and allows the detection and institutionalization of others--for their protection and the protection of others.

The unusually competent or gifted children, because they usually create less trouble and friction have received even less special attention than the dull and the subnormal.

Hollingworth's book "Gifted Children (24, p.VII), published in 1926, contains the statement, "Nearly all we know about gifted children has been learned through investigations of the past ten years." Mentally defective children were receiving attention and help much earlier. There still exists the natural tendency of human beings to take for granted the things which proceed in an orderly and agreeable manner and to notice the things which are different or annoy." In addition, according to Hollingworth, (24, p.VII) a wave of uninformed humanitarianism has for a

century-and-a-half influenced the establishment of expensive institutions for those who varied biologically or mentally in the direction of social incompetence. Beginning, however, with the one year investigation of Whipple (56,7,8), at Urbana, financed by the General Education Board in 1918, financial aid has been granted for the studying of gifted children by The Public Education Association of the City of New York, The Commonwealth Fund, Stanford University, The Carnegie Corporation, and from limited federal funds.

Since 1920, or thereabout, a great deal of well-intended but often misguided philanthropy, called social security or what one will, has even put a premium on physical and mental incompetence, laziness, and selfishness. On the other hand and within agencies or organizations which do not have--and may not have for many years to come--access to large public funds because their work does not have public appeal, the study of superior children and young people has been carried on.

Anthropologists have seen among savages not only social caste but distinctions because of personal merit. (24, p.1, 2) Royalty originally grew out of the need for preserving the best and their offspring--those who were generally superior. Often superstitions grew up about the ones who were intellectually endowed far above the average.

The first scientific study of superior persons among the more civilized people of modern times was made by Galton (17, p.1, 17, 124) in England beginning about 1865 when he collected facts about adults who had become eminent--judges, writers, statesmen, and others. Cattell, in seeking to study superior ability, has selected over the years the outstanding American men of science who lived between 1900 and the present. As Cattell's (7) early findings have not differed particularly from the later findings, they are here quoted:

"The professional classes have contributed in proportion to their numbers about fourteen times as many scientific men as the others, the agricultural classes only half as many as the manufacturing and trading classes. The farm not only produces relatively fewer scientific men, but a smaller proportion of them are of high distinction and a larger proportion are in the lowest group. This traverses a common belief....In proportion to their population, cities have produced twice as many scientific men as the country."

What a person can do depends upon his congenital equipment, but no one (24,p.14) knows how far what a person does do depends upon his environment.

Yoder (24, p.17) left an early record when he made a systematic survey of biographies of famous persons to find data relating to their childhood. He published his

studies in 1894. In the childhood of these fifty famous persons, Yoder mentioned unusual height frequently. He found no evidence of more sickness or weakness among this group than among the average. Their play interests were great, often solitary or unusual. Physical activity was enjoyed by them.

The development of mental tests was preceded by a child-study movement in which the theory of a child as a miniature adult gave way to scientific study of the way in which children actually behave and grow if not interfered with. Tests to measure intelligence marked a big step in selecting the gifted and the study of their abilities and traits.

Gifted children (24, p.42) are those identified by mental tests as very superior to the average. They can be identified fairly well as intellectually gifted as early as the second year of life. The gifted child often has an early interest in numbers and in the exact meanings of words. Ability to read understandingly at an unusually early age is characteristic. Being the youngest in the school class is usually a sign of superior intelligence.

The gifted are usually taller than unselected children and are heavier. Gifted children constitute an unusually healthy group. Superiority of body accompanies, but does not cause superiority of mind.

As a group (5, p.15, 18) mentally superior children

are taller than the general population; they are heavier, and are strong, healthy, fine-looking. As gifted children approach and reach maturity, they reap the benefits of superior vitality, size, and beauty. When young they may suffer from feelings of inferiority connected with their lesser size and strength compared with their classmates because they have been accelerated in school. The gifted child (5, p.13, 18, 28, 29, 31-33) tends to be more stable emotionally, less neurotic, more self-sufficient, and less submissive than the child of low ability or normal ability. Their moral traits are higher. The gifted are much more resistant to childish temptations. They exhibit far less of undesirable behavior than is exhibited by the dull. There is, however, more restlessness and lack of interest among them than among children of 100 IQ, according to teacher reports. The cynicism found among the gifted is caused by the fact that a person who is highly resistant to suggestion is as much in bondage to others around him as is the person who is positively suggestible (5, p.27, 29-31, 33, 90). Because he is different, physically and temperamentally, and scholastically superior to the average, he is often not understood by his classmates and gives the outward appearance of preferring solitude.

Economic status, as determined from the tax assessments of parents, shows a low positive correlation with intelligence test scores (43, 110), but, in Europe,

Baron (3) found that it is wholly unproved that the highly gifted occur with much greater frequency in the upper social circles. Apparently, they have not been so subject to proficient natural selection nor to the discipline which leads to ability.

It has been shown that the gifted are rated above the average (24, p.148) in kindliness and sympathy. These traits would serve as a restraint against pushing an economic situation to their advantage. Gifted adults often sacrifice higher remuneration for an occupation in which they are more interested. Superior intelligence obtains a superior economic reward in competitive societies, though not perfectly proportioned. The mentally gifted can learn to perform any kind of work; they can do a professional job and their own manual work because they are physically, as well as mentally, superior. The millions below mediocrity cannot do this because they cannot serve their needs in the field of expert thought.

Among the moral issues, the gifted can understand implications and are more able to make just decisions. They have been found to be more trustworthy (24, p.147). In a study made by Terman, in 1915, children testing at or above 125 IQ were studious, socially adaptable, popular, modest in demeanor, and had few defects of character.

The gifted child (55, p.23) is not a physical and social misfit in the elementary school. It appears that

superior mental capacity is a potent factor in determining the success of the child in adapting himself to school activities and demands.

In regard to personality, the gifted child is frequently misjudged because his superior intellect may cause him to be uninterested in the pursuits of children his own age. The brilliant student is characteristically an academic success. His school marks are high (9, p.508-513), especially in subjects demanding judgment, generalization, and logical thinking. If he is not doing good work, either he is to blame or the school is to blame in not meeting the challenge of his superior ability. The personality of the child may take on a note of boredom, or of mischievousness, or of anything to escape from the drill he does not need or the monotony of routine lessons he understood years earlier. If the child is pushed ahead several grades, he may develop a feeling of inferiority through being unable to compete physically with his classmates who are several years older and larger than he. He may take on the personality of a recluse, feeling that he cannot become a social being, at the same time longing to be accepted by his new group. It is natural for the gifted child to want playmates. He has within him the elements of leadership, and these need fostering.

Early educational provisions for the gifted were

made either by parental instruction or by tutoring. Much of the early instruction was given, not from the recognition of the exceptional ability, according to Hollingworth (24, p.267-269), but because of the belief by conscientious parents that a child should be trained early and well. Example is given (24, 268, 270) of the training of Karl Witte, who learned to read before his fourth birthday and gave a public demonstration at the age of seven years-and-ten-months in which he read Italian, French, Greek, and Latin. With a doctor of philosophy degree at the age of fourteen, he lived a life of fruitful mental work until his death at the age of eighty-three. His father believed that "any man, normally well endowed, can become a great man, if he is properly educated." In the light of modern knowledge, Karl Witte's intelligence quotient must not have been less than 180.

Gifted children in the early schools tended to be dissatisfied because of a feeling of failure to accomplish all they wished to do. One of these, Francis Galton, had a strong dislike for the boarding school where he was sent. Thomas Edison was taught by his mother who was an experienced teacher, after he had difficulty in school.

Early entrance into college was typical of the earlier education of the gifted. An unintentional segregation of superior children, which is still taking place, was made through schools in restricted residential

sections of cities (24, p.275) and in private schools. There is a strong correlation between the high ability of children in private schools and the economic status of parents who can afford to send their children to private schools.

While little use of special classes for superior pupils was made before 1900, in the latter half of the nineteenth century a few school superintendents in eastern United States were experimenting with flexible schemes of promotion. Some of the plans which followed were: The Santa Barbara Concentric Plan (24, p.276) which divided the children in each grade into three groups, The Cambridge Double Track Plan (24, p.276) permitting an able pupil to save two years out of six years of time, The Portland, Oregon Plan (24, p.277) of more rapid advancement for the bright, the North Denver Plan of temporary detachment from class for extensive reference work, the Group System in New York City (24, p.277) aiming to advance the bright child while securing thoroughness in the work, The Constant Group (24, p.277) and Shifting Group Plans. These plans are in addition to a number which care for the gifted through individualized instruction. The Winnetka Plan carried out in Winnetka, Illinois, is an example of individualized work.

One of the first experimental classes for gifted children was selected in Louisville, Kentucky, by means of

Stanford-Binet tests in 1918 (24, p.278). With a range in IQ from 120 to 168, the children of this group covered the work of the elementary school at about twice the ordinary rate. They were stable and healthy.

The emphasis in experimentation had shifted, by 1923, from the question of selecting pupils, to questions of curriculum, the organization of classes, and the qualifications of teachers.

The point of admission to special classes, both in the United States and in Europe where Germany particularly was active in educating her gifted (24, p.282), was that pupils chosen by objective tests must not only have excellent intelligence but must show ambition. The classes selected on teachers' judgment or other subjective methods yielded, in part, pupils of average ability who had to work extremely hard to meet the requirements, if they met them at all.

Now that the need is recognized for attention to be given to the greatest development of potentialities of gifted children, it is easy to find in current literature what different school systems and what various states are doing in this direction. New York University's clinic (55, p.100) for the social adjustment of the gifted, during the three years prior to 1936, provided service, either by advice or by treatment of behavior difficulties, to a group of 114 superior children with IQ's from 120 to 208.

These children, like those studied by Terman, are superior physically as well as mentally and come from families of superior educational and social status. Two-thirds of the New York children were of foreign-born parentage (55, p.108). This clinic at the New York University School of Education is now the only guidance center of its sort in the United States.

Rapid advancement (acceleration) is the oldest and probably the most common method of providing for children of superior ability. The sectioning of superior pupils into rapidly-moving classes is another acceleration method. Acceleration is a time-saving method, permitting the child to complete his schooling in shorter time through extra promotions. Objections to the skipping of grades, however, consist of the danger of missing basic content material and of the child being placed in a social group for which he is unfitted, perhaps physically, maybe emotionally. While rapidly-moving classes present the more desirable method of acceleration, care must be taken that the process of acceleration is not carried to extremes which could contribute to maladjustment of a child (6, p.382).

Enrichment of the regular curriculum is a means of providing for the gifted child which avoids any undesirable effects that may result from acceleration. Under an enrichment program, the superior pupil (6, p.383)

remains at his grade level in his regular room, but carries on a wide variety of activities in addition to the regular class work. There are also special classes concerned solely with enrichment, with no attempt to shorten the period of formal education. These classes may take the form of an "opportunity room," a laboratory where the child may work, experiment, and learn to the limit of his ability. The teacher of such a class must be a quick and eager learner herself, as well as a student of mental hygiene. She needs to know literature, the arts, and the sciences and be able to recognize creative ability in these fields. Among her teaching tools should be music, drawing, and a modern language (6, p.385). To the objection that special classes are undemocratic, Hollingworth (24, p.304-305) has the answer that in adult society there comes a natural segregation of like-minded people, from economic competition, from preference for the same kind of shelter and recreation, and partly from kindred abilities. The wish to enrich the school curriculum has, in this decade, definitely taken the place of the earlier attempt to care for the needs of the gifted by acceleration.

Hollingworth found after eighteen years of experience with superior children who had attended opportunity classes that enrichment is largely a matter of quality and of methods of instruction rather than of changes in subject-matter or materials.

According to Bentley (5, p.261, 263), qualified leadership proceeds from gifted children and youth. Their training in school should include subject-matter and methods that will stimulate creative power and develop initiative in thought and conduct. Superior children (5, p.124-171) have complex interrelations of traits which should be given an opportunity for expansion with individuals of their own mental outlook in the formative years of their education and training. Hollingworth (24, p.314) suggests that, in their school curriculum, gifted children have the study of civilization, laws, government, religion, food supply, and other topics of interest in units. Biographies provide a good source of information (24, p.318). Modern languages can be learned early and easily by the gifted. They should be trained in their special abilities, drawing, music, mechanical art, or whatever their fields of interest may be. As extra-curricular activities, a school newspaper, a forestry project, radio, crafts, and similar activities offer worthwhile learning situations. Hollingworth would have the superior child study the evolution of common things, e.g., lighting, refrigeration, or transportation (27).

Whipple (56, p.109) would have the enrollment of a special room for gifted children represent approximately the top ten per cent of the general school population in the grades that are to be included. He would reduce

the amount of drill and explanation about fifty per cent in such a room. His other recommendations as to the teacher's fitness, selection of children, curriculum, and method are much in line with practices in use at present with gifted children.

Stedman has written (44, p.109) a detailed account of the methods she found most useful in her experience in teaching gifted children. She found (44, p.183) that a factor that contributed much to the early development of these children was the custom of parents of conversing with them freely, showing respect for their opinions, answering questions intelligently and truthfully, and solving problems with the children. Stedman recommends that children work and study together when possible, and that a flexible curriculum involving the pupils' interests is necessary.

Martens, senior specialist for the education of exceptional children in the United States Office of Education, has presented in her bulletins much practical material which is useful in organizing programs of education for gifted children plus actual units of experience for their development. She recognizes (31, p.2) that gifted children are among the most neglected of all children as far as their special abilities are concerned. Whatever adjustments are made for gifted children who have special problems should be made in the regular school,

if possible, unless the problem is so extreme as to necessitate sending the child to a private residential school. Many gifted pupils should be counseled to prepare them for professional work. During high school, they need some vocational training. It should take the form of preparation for further study. About two per cent of children of school age are intellectually gifted and learn so easily that they mark time or waste time in the ordinary classroom. Martens suggests (31, p.25) the use of slides, motion pictures, microscopes, post cards, magazines, radios, victrola, exhibits, charts, and pictures as materials to lend visual and aural aid to a group following one central theme or interest, but she refers more to an increased rate and quality of study and of performance. Bright children are (41, p.26) omnivorous readers and, for that reason, need guidance in the selection of worth-while and appropriate books.

Recognizing that upon the training of the gifted depends our country's leadership, that attempts are being made (chiefly in large cities) to educate according to individual differences, that some gifted children are receiving special consideration, one may look at the possible effect on the future of the nation from these gifted people. Terman found (47, p.257) that the incidence of marriage and the age at marriage in the gifted group is approximately the same as for the general population.

By 1945, among his 1000 children first studied in 1922, approximately eighty-four per cent of both men and women were, or had been, married. At this time, 1945, the mean number of offspring for the members of this group who had been married five years or longer was 1.52. Folsom (47, p.235) estimates that those who marry will have to produce an average of 2.62 live births per family in order to maintain the stock. Since about seventeen per cent of marriages are infertile, the necessary average number of children that must be born in fertile families must be about 3.17 if the stock is to be maintained. It is too early to predict whether Terman's gifted subjects will produce enough additional offspring to bring the average to 2.62 for those who marry or to 3.17 for those who have children. Since the mean age (47, p.234) of the members of Terman's early group of gifted children was approximately thirty-five years at the time of the last report, it is doubtful whether their ultimate fertility will be sufficient to maintain the stock. What if it does not? According to Galton's law of filial regression (17), gifted individuals are not assured of having gifted children. Only half of one's heredity comes from the two parents; the other half is from more remote ancestry (47, p.236). Neither do all gifted children have gifted parents, but they do have able parents. If the gifted group may not replace itself from within the group, the

question remains whether the gifted group will be replenished sufficiently from without their group. In the opinion of Lincoln, of the Harvard Psycho-Educational Clinic, we need not expect complete social disaster as a result of the declining birth rate in the professional classes. It is not generally realized how much of the growth of civilization has come from the thinking of the small minority of gifted. Whether the contributions (24, p.340) of those of superior intellect have added to the world's happiness is not a settled question. Optimistic thinkers, viewing the social function of the gifted, have in mind what has helped man to be different from other animals, such as ethics, law, government, machinery, medicine, surgery. From this viewpoint, the social function of the gifted appears wholly good. But has there been too much invention for the mass of mankind? Can chemical warfare be controlled? Are our laws too many and too intricate? Have gifted thinkers furnished mankind with the instruments of eventual degradation and destruction? Is it desirable to increase the number of gifted? Since the products of man's intellect are valued by a majority of people, the gifted will be generally valued by a majority of people. The gifted will be generally valued both for their social and economic contributions to human society. An important work of the schools seems to be that of finding the gifted and

developing their potentialities if the world is to realize the fulfillment of Terman's words (47, p.381): "The fruits of potential genius are indeed beyond price."

While one may think of a genius as one who is endowed with superior intellect which brings him eminence, De Boda (12, p.234-250) analyzed the subject further. He considered the genius as having a special mental structure. He considered the genius to have a superiority that is determined by extreme sensitiveness, a strong internal tension, a strong aspiration toward perfection, and intense effective and volitional life and, above all, an exceptional intelligence.

When Lombroso (30, p.VI, 361) found evidence to support his thesis that genius is akin to insanity, he not only selected cases to favor his thesis, omitting those cases which disproved it, he also used "insanity" to include all those showing any deviation from an assumed standard of normality. Cox's investigation (10, p.4) was an attempt to discover whether characteristics in children who received high scores on mental tests parallel the childhood traits of individuals who later achieved eminence because of superior intellects. She found that childhoods characterized by superior IQ's show interest traits, energy, will, and character in keeping with their later performances and corresponding to those of eminent persons of earlier generations. These qualities alone do

not assure adult eminence. Education plays its part.

Cox's method of choosing cases gave her an adequate sampling. She based her selection of subjects on Cattell's objectively determined list of the thousand most eminent individuals of history. Her three hundred cases were obtained from the reduction of Cattell's list. The intelligence of her 301 men and women of genius was rated, first, on evidence from their childhood and early youth and, second, on evidence from their young manhood or womanhood. IQ, in Cox's study, was thought of as a constant measure. Many of the IQ's of her subjects were estimated as being above 180, and only a few were below 140.

One may conclude from Cox's study (10, p.215, 219) that both a favorable hereditary background and opportunity, while conducive to eminence, are not alone responsible for it nor do they always bring eminence. "The peculiar combination of inherited traits which makes up a genius--the most favorable chance combination among many only less favorable ones--is an equally significant factor" (10, p.216).

While it would not be wise here to go into the details of the Terman study, its importance to the future selection and education of gifted children exceeds any study made before or since. Because Terman's study included the testing of so many thousands of children from

all walks of life before the thousand gifted were chosen from among them, it is a fair sample.

Terman found (45, p.635) that, in spite of all the effort to equalize educational opportunity, the ten-year-old child of the California laborer competes for high IQ rank no more successfully than the laborer's son competed for the genius rank in Europe a hundred years ago. Terman found that the reading of gifted children surpassed that of unselected children, both in quantity and quality. He found the gifted children to have more than the usual interest in books of science, history, biography, travel, and informational fiction. Terman's study shows that the gifted are not free from faults, that at least one out of five has more of them than the average child of the general population.

Six years after the survey of 1921-1922, a grant from the Commonwealth Fund of New York City made the first follow-up study by Terman's field workers possible. The group was still highly superior intellectually. Their showing in school achievement was in line with their superior intelligence (47, p.64). Nearly two-thirds of the high-school grades of the girls and more than one-half of the high-school grades of the boys were "A's." The mean for the gifted group on physical, mental, and personality traits tended to be higher than for unselected children of corresponding ages, but the range of variability in these

and other traits was, if anything, greater in mid-youth than it had been in mid-childhood.

While contact on an informal basis continued between the subjects of the Terman study with Terman and his workers, another extensive field study was made in 1936 through follow-up through the mail. A 1945-1946 inquiry continued contact with the subjects (47, p.77) and brought the records on the events of their lives up-to-date, including war records. Results from the Terman study of 1000 gifted children begun in 1921 and its follow-ups indicate, so far, that children of high IQ are on the average superior to the general child population in physique and general health. The mortality rate for such a group to the age of thirty-five is lower than for the generality. Versatility is the rule with gifted children rather than one-sidedness. School retardation (defined as grade placement below achievement) is almost universal among the gifted. The findings show: "that gifted children (47, p.377) who have been promoted more rapidly than is customary are as a group equal or superior to gifted nonaccelerates in health and general adjustment, do better schoolwork, continue their education further, marry a little earlier, and are more successful in their later careers." Gifted children average above the general child population in character and personality, but "the degree of superiority is less marked for traits indicative

of emotional stability and social adjustment than for intellectual and volitional traits. The group shows a normal or below-normal incidence of serious personality maladjustment, insanity, delinquency, alcoholism, and homosexuality. In vocational success, the gifted group rates well above the average of college graduates. The Jewish subjects in the group display somewhat stronger drive to achieve, form more stable marriages, and are a little less conservative in their political and social attitudes.

Now that the average life expectancy is nearing seventy years, (47, p.379) the Terman study of gifted children is only at its half-way point with its subjects near the age of thirty-five. Results of the study up to the present which have been tabulated and summarized can only presage what future results may mean. Terman refers to the problems of personality and general adjustment, as promising fields for future research. Terman's records on the domestic adjustment and divorce of this group become more valuable with the passage of time. Tests to reveal basic patterns of personality structure are being improved and used more. It is suggested, that personality data and case histories, especially of the males, could be correlated with body build and with all other known data in order that as complete analyses as possible of the members of this group may be made and possible applications for the future good of the race be found.

CHAPTER III

What Has Happened to Forty Children Tested in the Schools
of an Oregon Town

The cases reported in this chapter were chosen to show general tendencies in the extremes of high and low abilities in intelligence. This sampling of the many students tested is an effort to report the variability of individuals within the IQ ranges included. These forty cases do not include any of a score of children in the thirty-seven to fifty-seven IQ range who were among the low-ability pupils tested in the early part of this Binet testing program, before testing of more normal children and the gifted was begun. It is hoped that this chapter will be read by any teacher to encourage her to locate her potential research workers and community leaders in order that she may enrich their programs and that she will know when a child is educationally retarded or unable to learn the studies his chronological age would indicate he should learn and, as a result, give him the work he is able to do. It is hoped that school boards and communities may recognize the needs of the exceptional child at either extreme of the intellectual range and provide to meet these needs more fully.

In these case studies, the high IQ's are arranged in order of IQ, with the highest first. Then follow the

low IQ's with the lowest IQ first and others following in order of IQ. All names used in the case studies are fictitious.

When Hollingworth (23) searched, over a twenty-three year period, she found only twelve cases which tested 180 IQ or higher in New York and the entire surrounding metropolitan area which many think of as the center of a concentrated cultural area. It is at least interesting that, in another but much smaller town which grew from 5000 in population at the beginning of its Binet testing program to 15000 in ten years, even one such gifted child should be located in its schools.

It is the Stanford Revision of the Binet-Simon Scale, revision of 1937, that is referred to throughout this thesis. "Measuring Intelligence" by Lewis M. Terman and Maud A. Merrill (49) has been the text book and guide to the administering and scoring of all tests.

Reference is made in these case studies to age levels. The Stanford-Binet scale is arranged from II to V years with six months intervals, since the mentality of the pre-school child develops faster than it does later. At each early level, there are six subtest items with one month's credit allowed for each item passed. From the age of VI to XIV inclusive, each age level has six subtest items with two months counted for each item passed. The Average Adult Level has eight subtests counting two months

each; the Superior Adult Level I has six tests counting four months each; the Superior Adult II has six items counting five months each; and the Superior Adult III gives six months credit for each of six items that are passed. The subtests contain such problems as copying a bead chain from memory, number concepts, distinguishing likenesses and similarities--both from pictures and from words, comprehension, paper cutting, repeating digits from memory--both in order and reversed, induction, ingenuity, and orientation. The test becomes a game to children, and they like it.

A mimeographed sheet called "Findings for Binet Tests" which is filled out by the tester and placed in the guidance folder of each child given a Stanford-Binet test in the schools of this study is similar in substance to Thurstone's profile of abilities. It shows the tabulation of results of the test under the headings: Visual, Auditory, Organization, Reading and Remarks, Memory, Comprehension, and Sight Vocabulary.

The guidance director of the school assembled general statements regarding the philosophy and the use of mental tests for the use of testers and teachers as follows:

"All testing should be done chiefly for the benefit of the individual tested, with the compilation of test results for a school picture as a secondary purpose. Tests should not be given unless there is time to make use of them. All tests should be given in a uniform manner and

records made so that the results may be available to all teachers who know how to use them. Group intelligence tests will indicate only that the pupil has at least that amount of brightness indicated by the test. It is only a lower limit of measure and not a top measure. We must not brand a pupil as having low mental ability as the result of a group test. The low score may be due to a number of factors or to one factor, such as poor reading ability, not feeling well, excited, etc. The pupil should be rated only by means of the individual Binet if any degree of accuracy is required for an upper limit. The Binet rating should only be accepted along with the examiner's comments and observations. The examiner may learn many more things about the pupil through close observation for the hour that it is taken to administer the test than the classroom teacher could observe over the same period of time. The pupil is working at many kinds of tasks while the examiner's attention is concentrated on this one individual. The teacher has to be spasmodic with observations of any one pupil and then, unless a pupil is causing trouble, there is probably no concentrated attention on that individual. Two units are most commonly used in mental testing. The IQ is a measure of brightness and does not show the stage of mental maturity. The IQ does not change throughout life if you have the true IQ. In other words, many of the IQ's that we have attached to pupils' names are too low and are

not true IQ's. If the tests are correctly scored and if reliable tests are used, it should be a rare situation in which the IQ would be too high as a result of the group test. If strictly scored, the results of the individual Binet will never be too high. One's power or ability to think increases from birth to mental maturity but is no measure of the tools acquired (the amount of learning that has taken place). The average adult who has made the best use of his mental capabilities may have much more usable knowledge than the genius who has not made use of his mental powers." Terman has divided IQ scores into ability groups as follows: Below 70--feeble-minded; 70-80--borderline--cannot do high school work; 80-90--dull--poor high school material; 90-110--average--poor college material; 110-120--superior; 120-140--very superior; above 140--near genius and genius."

The cases reported here are taken from record folders in the file of the school's guidance office or from the actual testing experience of the writer of this thesis. Most of the cases reported here have been found in the author's work as a special teacher, either as follow-up studies from the guidance director's beginning studies, or as studies of children presenting immediate school problems, with attempts to solve the problems.

Numerous other cases from the school files were studied and then discarded for lack of sufficient information

on the case, lack of probable reader interest, or failure to represent a sampling of the school picture as a whole.

The Case of Elihu.

Elihu was in the fifth grade when he was given an intelligence test by the assistant guidance director. He was ten-years-and-two-months old chronologically. He was found to have a mental age of eighteen-years-and-eleven-months, and an IQ of 186. Elihu showed enthusiasm in a dignified manner. He was self-confident, and gave complete attention to the task at hand. He answered correctly every test item on "Form M" of the Stanford-Binet Test from the tenth-year-age level through the thirteenth-year-age level, and missed only one item at the fourteenth. His responses were well organized, fluent, and natural.

That is the way of Elihu's life, well organized and natural. Elihu has always been an early riser. When he was two and three years old, he wakened the hired girl before his parents were up in the morning, and had her read stories to him. He could repeat from memory pages of nursery rhymes he had heard a few times. From this early memorizing and his interest in books, he learned to read when he was three. During his music study while in the intermediate grades, he set his alarm clock at an hour earlier than the family's rising time, and did his piano practice then.

Elihu has offered no school disciplinary problem to either his teachers or classmates. His parents did not wish to have him placed in a grade higher than his chronological age would place him. His father had been accelerated one year as a boy and he felt that this had put him out of his natural social group. He did not want his son to have a similar experience. Elihu has had, from the first, most understanding and conscientious direction from his parents; and this may account for the fact that Elihu is contented in school. He has finished his assignments quickly, but was never at a loss for something more to do. He was quiet by nature, secure in his school interests which were supplemented at home by a room and equipment for his scientific experiments, and always books--both scientific and classical. Elihu's family traveled during vacations, and he enjoyed the trips. Discussion was a part of the family plan of living, and Elihu grew and matured in an atmosphere of cooperation, logical thought, and culture.

The pattern of culture and accomplishment without anything of the spectacular has been in Elihu's family for generations. In the community in which Elihu lives and in which his father is a professional man, a mention of Elihu's family name often brings mention of Elihu's paternal grandmother who carried on ably the family traditions and culture when her husband died, leaving her four sons--who later followed as many professions.

The school recognizes that Elihu is gifted. He has been encouraged both at school and at home to develop a liking for, and activity in, athletics. Elihu is large, well-proportioned, and a handsome boy. He is inclined to be withdrawn rather than aggressive, and the school's efforts have been toward giving him more opportunity for social success. At home, lessons in French were begun while Elihu was in the sixth grade.

Elihu's mother, an intelligent woman of Swedish descent, was a teacher before her marriage. Both she and the father take an active interest in community affairs, but their home and two sons remain their primary interest. The younger boy, four years Elihu's junior, does not have the evenness of action or the accomplishment of his gifted brother. He has had more ill health, and does not succeed at school. While he shows the results of the cultured environment in which he lives, he lacks the muscular coordination that Elihu has.

The same school year that Elihu was given the Stanford-Binet Intelligence Test, he filled out a Strong Vocational Interest Blank for Men. This was given him as an experiment to determine whether or not his vocational interest maturity might be in keeping with his mental maturity. It was not. Both his interest maturity and occupational level came near the center of the scale. Even the occupational interest in which he rated highest

is probably not the occupation which Elihu will follow.

This excellent pupil, with his fund of good general information, is unusually advanced in his thinking. His genial personality has attracted many friends who are welcome in his home. He learned from babyhood to keep himself busy and so he is succeeding and will probably continue to succeed.

The Case of Ann.

Ann was recognized by her fifth-grade teacher as an exceptionally gifted child very soon after her family moved to this community. In the routine Stanford-Binet testing, when her chronological age was nine-years-and-two-months, her mental age was found to be fifteen-years-and-eight-months and her IQ 171.

Her mother stated that Ann had been of a rather nervous type since babyhood, quick in her movements, and energetic in carrying out her purposes. She had always been eager to learn, and the mother, a college graduate with honors in mathematics, had spent time reading to Ann from the time she was two. The mother entered into the child's games and plays of fancy. Always happy in make-believe, Ann made her dolls and, later, her baby brother, play the games she originated. When Ann was nine her mother guided the child through a course in anthropology, acquainting her with new terms and answering her questions.

Ann was very much interested in this home study of anthropology. She liked the subject, and her parents felt it was a solid background for whatever field she later followed. Ann had shown an early interest in people of different lands and their histories, possibly through stories told by her paternal grandparents.

The grandmother had been graduated from a normal school in Sweden. She met her future husband when on a summer tour of Scotland. They had come to the United States after their marriage. There, the indomitable will of the grandmother encouraged the equally intelligent father to succeed with stock-raising, and the individual development of each one of their large family.

Ann's father was the youngest of a family of eight, all but one of whom received a Daly Scholarship for college. That one missed it through no fault of his own. Ann's father enjoyed his college life. He was by nature very quiet and retiring, preferring to read and study by himself. Realizing that he needed social experience, he made an effort to take an active part in the social life of college. He found that he enjoyed it so well that his grades were only average. Later he received his degree as doctor of philosophy in engineering at Purdue University. His research at the United States Bureau of Mines led to his later appointment to work in atomic research.

Ann's maternal grandmother was a cultured

American-English woman who had been a high school teacher. The maternal grandfather had had no high school training. His skill with mechanics and his management of men put him at the head of a large lumber manufacturing concern.

Ann's hands are skillful. She enjoys working with clay, modeling animals and people. She was a member of the school chorus, Campfire Girls, and a group of fifth-grade girls who practiced rhythms after school hours.

Ann showed independence in her thinking and actions, yet she played well with other children. While she often initiated what the group played, she was not domineering. Her parents were wise in encouraging Ann to bring playmates to her home to share her playtime. She often read to a group of younger children who lived near her home. A give-and-take relationship existed between her and her brother, four years younger.

Ann looked small in her fifth grade, not because she was small for her age but because she was a year young for the grade, having been placed in the second grade soon after she started school. She had good health, perhaps because her mother watched that she should have regular and sufficient rest and nourishing food.

With the father's work, the family moved often. To Ann, this was not a handicap but another opportunity to learn about new areas and to make new friends. The future for Ann looks bright indeed. With a family so responsible

for her education and welfare and her own interest in learning and making progress, Ann should go far in realizing the full potentialities of her natural capacities for leadership.

The Case of Charles.

When Charles started his Stanford-Binet Test, he missed the first test item at the nine-year level, which was memory for design. After he was given a few more test items, he remarked, "Oh, that's what you want!" He then proceeded rapidly from one item to the next without additional error through the fourteen-year level, continuing to score occasionally on the subtests through each of the superior adult levels I, II and III. His IQ was 165. At the time the test was given in 1945, he was in the fourth grade. His chronological age was nine years and his mental age was fourteen-years-and-ten-months.

Charles' test responses give some insight into his lack of interest in the regular classwork. He had fallen into habits of postponement, arguing, and inattention. He was an active mischief-maker because his ability was not challenged by the work of the fourth grade. To an exceptionally bright boy, it can become very boring to have to do the many arithmetic drill problems needed by the majority of his classmates to master the material. Charles had superior skill for both the memory of and working with

numbers, yet he would make simple mistakes in his daily class assignments in arithmetic. He was slow in starting his work, but did thoroughly what he attempted despite the mistakes, even though he did not always complete the task.

He amused himself in class by drawing airplanes and rocket ships. Treasure clues interested him also. In a "secret envelope," he placed treasure maps which he had worked out and on which he had located imagined buried treasure. On another sheet of paper, he had listed pounds of gold and jewels and cash in fantastic sums. Charles' need was for more activity through games, projects, and friends, and for guidance through being led into the investigation of subjects he could like but might not know about because of lack of experience.

When Charles started his school attendance, his exceptional ability was recognized and it was suggested that he go into the second grade. The parents wanted him with a first-grade teacher who had taught his sisters. That teacher added enough enrichment that Charles had a very happy first and second year in school. After he reached the third grade, his family moved to another town with a poor teacher in Charles' classroom. As a result, he lost interest in the school work and became a discipline problem. Following the family's next move to the town where he was given his Binet test, he had to change teachers soon after the beginning of the term. This was confusing to him

because the first teacher taught creatively through informal class arrangement and the later one was very formal and required strict discipline.

Charles' parents did not wish to have him put ahead a grade, feeling that he was too small to find his right place among children who were older. His parents were both very able and cultured and both were active in the social and church life of the community they had chosen for their new home. Interested in their son, they were most willing to work with the school in supplying Charles' needs. His father began taking him to competitive games, and played with him at home; and Charles did develop, through his father's efforts, an active interest in athletics. He played baseball, and liked it. He became, not an enthusiast, but a fairly good basketball player on the second school team. He worked a little with music, but this did not become a consuming interest. He might have felt that his sisters were too far superior to him in the musical field. He joined the Boy Scouts where there was excellent leadership, and there found much stimulating activity which was satisfying to him.

Charles was enough higher in ability than the more frequently found superior child that the work of his chronological age group held little interest for him, yet in the classroom in which this study was made was the boy who had an IQ of 186, Elihu, as reported in a previous case history.

This boy, with an IQ twenty-one points higher than Charles', excelled him in native ability as far as Charles excelled the other high ability children in his class. As long as he was in the same class as Elihu, Charles could not excel. His way of gaining recognition was through the contradictions and disturbances he could introduce into his classroom.

Charles became a well-adjusted boy through the understanding of his parents and his fifth and sixth grade teachers. He wrote poetry, and this was one activity in which he was led to contribute constructively to his group, the school paper, and school programs. "Spring is Here" is an example of his work, written when he was eleven.

The spring is here,
The winter is passed.
I know where a stream
Is tumbling fast.

The flowers are blooming,
The buds are out.
The birds are chirping;
The limbs are stout.

There are blossoms gay,
The grass is green.
There's clearest water
I've ever seen.

The sky is blue
The whole day long.
Hear that bird singing
A beautiful song.

And in the hives
The bees are humming
And you can tell
That spring is coming.

The other productive use made of Charles' time was through his excellent mechanical ability. He learned

quickly the running and care of the school office duplicator. Work requiring special skill with this machine was entrusted to him when he was eleven. He did this work when his assigned class work was completed. His father is a linotypist and Charles admires his father very much. Both the father and Charles' mother, with only high school educations, have the culture, the economic status, and community participation of college people.

Now, as he is finishing the sixth grade, at the age of twelve Charles is no longer a problem in his classroom. He finishes assignments on time because he is interested. He is liked by his classmates and teachers. He is given errand responsibilities which he carries through with businesslike precision. He works independently and willingly. His teacher expects the best of him in scholarship as well as dependability and he does not disappoint her. School and home are serving Charles well.

The Case of Dan.

Dan was in the third grade in 1946 when his IQ was found to be 164 on "Form L" of the Stanford-Binet test. His chronological age was eight-years-and-three-months. His mental age was thirteen-years-and-six-months. His teacher showed concern over his imaginative tales which usually included some form of gang warfare in which he was the undisputed leader. He had but one actual friend, and

did not seem to know how to play with a group of children. He failed to finish assigned class work unless forced to stay in and do it, preferring always to lose himself in a book of adventure or history or science, whatever he could find in the school library that he had not read before.

The guidance director who gave Dan his test asked for a conference with Dan's grandmother, who was found to be aware of the boy's problems. The grandmother had come from Germany in her youth. She regretted that she had not been able to go farther in school than she had. The arithmetic skills that children learn in school she had learned through doing them in adult life situations as needed, for example, she had told Dan she could not show him how to do long division when it was giving him some trouble in the fourth grade yet when the home visiting teacher showed the grandmother how to set down and go through the steps of working a problem in long division she said, "O yes, I've worked those out but I do it in my head." Her native intelligence served her well at all times.

The grandfather was but one generation removed from Germany. Both he and his wife are tall and stately. They are intelligent and conscientious, having at heart Dan's best interest and welfare.

Dan's mother, the only child of this fine old German couple, quit high school at the age of fifteen when

two more months in school would have enabled her to graduate. She was deeply in love with a young "sharp-shooter" on the college campus in the town where she lived with her parents, and he with her. They were married and Dan was born a year later. The young father did not take financial responsibility for his family. When his wife's parents refused to support him longer, he went home to his own mother. A divorce followed. The maternal grandparents had legally adopted Dan in his infancy.

He grew into a handsome child, large and beautifully proportioned. The Stanford-Binet examiner's comment was, "He needs improvement in socialization, self-control, and ability to complete the task at hand. The child needs lots of careful and thoughtful guidance, as he lives in a world of fantasy." For a child so bright, Dan had little enthusiasm, needing help to grow to the maximum of his mental powers.

The health of the grandfather was poor and Dad had to leave school to go to a different climate where the grandfather's health might improve. In 1947, Dan was again in the school in which he had been tested, and the question arose as to whether he might benefit by being placed in the fifth instead of the fourth grade. Dan said, "No, I do not want to go into the fifth grade. The arithmetic is too hard, and Grandma does not want me to be put ahead."

A conference with the grandmother then disclosed the

fact that Dan had been placed in the third grade of a neighboring school when he was chronologically six years old, and she had objected. She felt that he was lost socially because he had been permitted to enter school when he was five, then he was accelerated because the second grade was too easy for him. The grandmother felt, too, that much of Dan's mother's unhappiness stemmed from the fact that she was only fifteen when she had married. She, too, had extremely high ability; and had been pushed ahead into grades in school beyond her social development.

Instead of putting Dan ahead a grade, Dan's classroom teacher cooperated with the teacher in special education who met with Dan three times a week to bring his arithmetic work up to standard through his interest in getting individual help. Dan was also encouraged to do additional creative work, such as writing new words to songs which he knew, composing poems, and following through experiments in elementary science. The special teacher learned of his intense interest in growing things when she took him home with her to help in her garden.

His grandfather had taught Dan well about growing things. Later, when the grandfather's health permitted, he bought a home where Dan could have a garden and pets. A new bicycle helped Dan mature. While he improved in his relationships with other boys, he probably will always be somewhat apart, as many gifted children are. It is

difficult for one to become an active part of a group, when he is thinking far beyond what the group is. The solitude of gifted children has been recognized from as far back as they have been studied, unless chance has brought a number of them of similar ages and with interests together, and this is rare.

The Case of Jerry.

Jerry's superior ability was recognized when he was in the first grade at school. His teacher left in his record-folder the comments: "Fine mind. Very much interested in school work." When Jerry was given a Stanford-Binet Test two years later, he was found to have an IQ of 159. His chronological age was eight-years-and-three-months at the time and his mental age was thirteen-years-and-one-month.

His pleasant, sensible, well-adjusted mother was surprised when told that she had an exceptional son. She was used to his general well-being, his perfect assurance in personal contacts, and his enthusiastic eagerness; but she thought of him as an average boy.

Both of Jerry's parents had been graduated from high school. The father is a railway brakeman, and the mother is a housewife. They are a couple who enjoy their home with their little sons and do not go away from home unless they can take the boys with them. Jerry's brother

is younger than he.

Various teachers' comments in his guidance folder give a clear picture of Jerry: "very observing; fine home background; unusually inquisitive; liked by other children; exceptional pupil; many accomplishments; excellent leader; widely interested and active; contributes much to the classroom." Some of his out-of-school activities and interests are stamp-collecting, fishing, reading, and playing softball. He enjoys art. He is pleasant, popular, ambitious, original, and helpful.

Jerry is a boy who, fortunately, because of his winning manner and the naturalness of his leadership will attract and be able to keep the recognition of his teachers and his classmates. Because of these traits, he will get from school the challenges he needs for his steady development. His parents appreciate him and will continue the home environment which has given him the foundation for living at his optimum.

As this paper is being completed we find Jerry in the fifth grade continuing to be friendly and a true leader among his classmates who are proud of him.

Jerry may not become a famous scholar but the probability is that he will succeed in whatever he chooses to follow, perhaps in some field of business.

The Case of Ralph.

When he was in the ninth grade in the junior high school, Ralph was given a Stanford-Binet Intelligence Test by the guidance director of the school system. He was found to have an IQ of 159. At that time, he was thirteen-years-and-four-months old. The test was given at the request of Ralph's mother because of her interest in her son and in the results of the mental and the achievement tests being given in the room in which she was a teacher.

Through a personal interview with Ralph and his mother, it was learned that Ralph is descended from mixed ancestors who have been in America for many generations. His maternal grandfather was full-blooded Irish. His maternal grandmother carried a little Russian, Scandinavian, and a trace of French blood in her veins.

The paternal ancestors were mostly English, with some German. Both of Ralph's grandmothers were homemakers. The paternal grandfather, at the age of ten, was in the Civil War as a staff boy. His father, Ralph's paternal great-grandfather, who took him to war, served as a colonel in the Civil War. In civilian life, he was a lawyer. Because of his work against slavery in Kansas, he was assassinated. The story of his life was published in the "Saturday Evening Post" twenty years ago.

Ralph's maternal grandfather was the youngest son in a Catholic family. In accordance with fairly well

established custom, his place in the family destined him to become a priest but, instead, he ran away from home and learned to cook, later becoming the owner of a cafe. He was a gifted mathematician. Ralph's mother remembers when, as a girl enjoying mathematics in high school, she used to test her father's skill in carrying long numbers in his mind and quickly manipulating them in problem-solving.

Ralph's father and mother were each twenty-eight at the time of his birth, six years after their marriage. The father came from a family of eleven children. Two of the sisters, both unmarried, are writers and book editors. One has been producing a series of stories for children's magazines for some years.

Ralph's father is away much of each year. When at home, he seems devoted to his wife and son, but is unable to contribute to their support owing to a heart condition which had become so severe he has had to give up his attempts to do various kinds of work. He is a writer and has worked at advertising. He had three years of college training.

Ralph's mother is extremely conscientious and hard-working, continuing to study for her teaching degree while working long hours in her classroom and making a pleasant home for Ralph.

Ralph had a normal birth. He said words, and made himself understood before he was a year old. He walked at

one-year-and-one-week. He wanted to read when he was three, but his mother did not encourage this as she believed it was not best for him. At that age, she read to him. If she read two pages to him, the next day he repeated the two pages and picked out separate words. That was when she put the book away.

When the boy was five, the family had a friend who ran a farm store. If he heard the friend state the figures of a business transaction, he immediately gave the answer. The man came to remark, "This is 6 1/2 bushels of corn at forty-five cents a bushel and here is a five-year-old who can give the answer before I can write it on paper." Ralph could not tell how he worked the problem, but he knew when the answer was right. Years later when he heard his mother tell the incident he commented, "And now I can't do especially well in algebra."

Before he went to school, Ralph's mother was teaching. On Saturday, if she had to be in the city all day at a teachers' meeting, she gave her small son a dollar bill. He bought his own dinner, went to a show in the afternoon by himself, and never made a mistake with his change. He knew the number of sales tax tokens required on all his purchases according to the system in use in his city.

Ralph started school at the usual time, finishing the first and the second grades the first year. Teachers later encouraged him to skip grades, but the mother

prevented this. At the age of twelve, Ralph would talk freely with adults he met. As he developed further into adolescence, his mother felt that he had become blunt in his speech and manner and more critical. He became conscious of everything around him and of the worth of much of it. He has always been truthful and reliable. He expresses admiration for his classmates who challenge him.

Now at the age of fourteen, he stands five feet and eleven inches tall and weighs one-hundred-and-twenty pounds. One sees him usually alone or with one boy companion.

Ralph definitely plans to become a lawyer. When he was in the seventh grade, he thought it would be gratifying to say he wanted to become a lawyer. He has adhered to this, but now he believes that his thinking he wants to be a lawyer naturally evolved from his repeatedly saying so. On the other hand, he knows many of the advantages and some of the problems of being a lawyer. He should succeed in this profession.

The Case of Martin.

During Martin's Stanford-Binet Test, he was completely absorbed in the task, relying entirely on his excellent ability. He showed much eagerness, and was perfectly assured in the personal contact with the examiner. He was in the third grade at the time, with a chronological age of eight-years-and-seven-months. His mental age was

thirteen-years-and-six-months, and his IQ 157. The tester left these remarks on his record: "This boy could become a psychologist, or other professional man. He is creative. I would not encourage him in mechanics. Designing and drawing out a plan showed his weak spots. He is a student, a thinker, with a good memory, a charming personality, a cultured manner, and fine sensitivities."

Martin's classroom teacher recognized his creative ability in his story-writing in the third grade. His fourth grade teacher commented on his writing ability. She found him slow in arithmetic. In general, he was a very good worker with independent habits.

Martin's father is an electrician who finished high school. The mother is a college graduate, now devoting her full time to her home and family. There is a younger sibling, a sister.

Martin is absent frequently from school because of some minor illnesses. He readily catches up with work he has missed. Otherwise he goes along much like the average boy in his grade. If he were exercising his intellectual capacity to its fullest, he could be a very outstanding pupil.

Careful studies have been made of what should be done for the exceptional child, and ways in which it can be done. State-controlled testing programs for all schools to aid in the locating of gifted children have been advocated.

This should include plans made by local boards for the training needed by these children. Some states, such as Oregon, have mental testing required for the certification of physically or emotionally handicapped children in order that they may have the help of specially trained and qualified teachers. If the child is gifted musically, or in art, or any one of a number of fields in addition to being gifted intellectually, then he should have the service of a special teacher in the field for two or three hours a week.

If such were the general policy of the schools of our country then such a boy as Martin would be preparing for leadership in a democracy, and acting as a leader in his class.

The Case of Richard.

At the time Richard was receiving his first art assignments, he was in the second grade at school. His teacher had recognized Richard's talent through his illustrations of written lessons and his copies of pictures in story books. He seemed equally gifted at creative work or reproducing what he saw. He had moved from a large city, after having six months in kindergarten. After two weeks in the new school, his dependability and accomplishment in all of his first grade studies made it seem best that he should work in a second grade. His quick insight

into new problems soon made him very much at home in the new grade where he did excellent work.

It was not until the following year when he was in the third grade that he was given a Stanford-Binet Intelligence Test. The tester was impressed with his complete reliance on his own ability, his social assurance in personal contact, his willingness and absorbed attention in each task. With a chronological age of seven-years-and-nine-months, he had a mental age of twelve-years-and-two-months. His IQ was 157. As he left the testing he said, "I sure had a nice time."

Richard's ability could be explained by either heredity or environment. His father had been graduated from college as a mining engineer. In his profession, he showed great skill as a draftsman and in other ways. The mother was an artist and a musician, but had had little time for either while her three sons were small. Both she and her husband were fine-looking people. Richard, being the oldest son, seemed to feel that it was part of his life to be manly. He was responsible always to his little brothers and his parents. All three boys were strong and active.

Richard is an example of the child who is superior mentally and tends to be somewhat accelerated socially, although he would not be happy to be promoted to the grade to which his mental age, considered alone, would actually

entitle him. The contribution Richard can make to his class through his drawing and coloring and clay modeling, has been an important part of his enriched school program. He takes an active part in classroom dramatics, and likes to sing and to build. He has shown early leadership qualities, and is much interested in school in general. He is pleasant, polite, ambitious, and an outstanding student who is and probably will remain unspoiled. The prediction for him is probability of accomplishment of what he sets out to do and the ability to get along well wherever he is. His home is rich in comfort and color, love and harmony, stability and consistent atmosphere, all of which are reflected in the life of this child.

The Case of Molly.

Several years before she started to school, Molly learned her letters out of the phone book. Her parents had not bought preschool books, but had read stories to her older brother and to her. When she was four, Molly said to her mother, "Mommie, what does 's-o-m-e-t-h-i-n-g' spell? I don't want you to read to me. Tonight, I am going to read to you." She did read to her mother from her brother's reader. The year before she went to school, Mollie wrote pages of numbers and did simple additions to amuse herself. She asked her mother to buy work-books for her, and worked page after page by herself when she was six.

a deeply religious interest developed in the little girl, and she talked at that time of being a missionary.

After she went to school--which she loved--when she was still using hand-printing, Molly wrote stories. She developed one at length and called it her book, dividing it into "Book I," "Book II," and "Book III" as chapters. This story she named "A Day in the Woods." It was well illustrated by the child. It is original and artistic, in both drawings and writings.

Molly does not finish all of the things which she begins. When she is developing an idea, she wants to work on it immediately as her thoughts come. Her school work, her play, her music all move quickly. Her first school work was somewhat "messy" in appearance because she worked too rapidly but, as she matured, her work improved in neatness although she continued to be a very rapid worker. While Molly wanted commendation and strove for perfection, she remained spontaneous and unaffected. She was very friendly and unselfish, was well liked by her classmates, and had many friends.

The principal problem which she presented to her mother was that of getting her to relax for the rest which she needed. A few days at home from school were needed now and then to protect her from illness or over-fatigue. The unusual memory which served her so well at school was at times uncomfortable for others. She might say to a

chum, "A week from Wednesday I will meet you at two o'clock to go get an ice cream cone--now remember." If the chum was not at the appointed meeting place, this would be a keen disappointment to Molly because she never forgot a plan.

The school problem with Molly is grade-placement. Molly can think so much faster than the others in her room and can execute with so much more speed and ease that she has always finished far ahead of the other pupils. She is so self-reliant and original that she knows how to find other things to do, therefore, she is not a discipline problem. She is a tiny girl but thoroughly enjoys her companionship with her classmates of her chronological age. Now in the third grade, she is with her social group. Whether she goes on taking one grade each year or is to be accelerated scholastically is not at present determined. The parents do not want her in the same grade as her older brother. They are providing other activities to be added to her school program through piano lessons and dancing. She has ample materials for her quick and happy drawings. It is her parents' hope that she may succeed in realizing fulfillment of her desire to create and that her talents may be used to the maximum.

When Molly was given her intelligence test, the results showed that she had an IQ of 155. Her answers came rapidly, and were far superior to the average yet, when she went home, she told her mother about having the

test and added, "I didn't know some of the answers. Oh, I didn't do well at all."

Molly's father and mother both had been graduated from college. They had built a flourishing business in a small town, and the mother had helped with the buying of merchandise and the clerking until the birth of their first child, a boy. The father's parents had come to the United States from Ireland. He was orphaned at an early age, and grew up under the direction of an aunt. He worked early and hard, both as a boy and later. Out of his successful business and through his own perseverance and the help of his wife, a beautiful home was built for them and little Molly.

Molly seemed to inherit both her mother's lovely coloring and her artistic sense. Like her mother, she was from the first very quick in her movements as well as her thinking. Her walking was a sudden accomplishment, and she ran laughing at the age of eleven months. She talked soon after she was a year old.

The family of Molly's mother was composed of talented people, a cultured pioneer farm family. The maternal grandmother spent time and interest with her three children in giving them an appreciation of literature, music, and the arts. "Lorna Doone" and "David Copperfield" were read over and over, and were loved by the children. The older girl of the family, who now has her own grown children,

works in the school administrative department of the Portland Public Schools. She writes musical backgrounds for skits and plays. She gives readings and writes musical interpretations. Her own daughter is an outstanding musician at the age of twenty, but lacks the physical strength for concert work. She draws, showing clever and original ideas. In design, interior decoration, and dramatic art, she is gifted. The second child of this pioneer family was a son, also gifted musically, who became a successful business man, active in his community, a constructive thinker, a good father of bright children. Molly's mother was the youngest sibling, frail and tiny. She was unable to complete her senior year of high school because of ill health, but later went into college by completing high school credits as she started her college work in secretarial training. She worked as a secretary for a few years after her graduation, never quite satisfied, because she craved an outlet for her creative urge to decorate and design.

Molly's brother, two years her senior, is very unlike her in movement, interests, and scholarship. While he, too, is an unusually intelligent child, he learned at a very young age that he could not compete with Molly. It is difficult for a brother to know that it is natural for girls to develop faster than boys. This fact coupled with Molly's brilliance has made life seem more complicated for her brother than it might be otherwise. He is serious and

sensitive and, at times, finds Molly to be very disturbing. Each child is an unusual individual in his own realm.

The Case of Lillian.

Lillian is a member of a capable and ambitious family. From infancy on, Lillian has been a quiet and complacent child. She was an extremely good baby, almost never crying. When she was four years old, she began to request her mother and all others whom she could to teach her. She has always been very persistent about anything she starts out to do. When she was still four years old, she could read and do simple arithmetic. Because of her large size and her desire to learn, her parents started her to school when she was five. She continues to find school easy and pleasant. Lillian was given a Stanford-Binet Intelligence Test as a matter of routine when she was in the third grade. She was then eight-years-and-two-months old. Her mental age was twelve-years-and-seven-months, and her IQ 154. She was, and still is, doing excellent work at school. In the judgment of Lillian's teachers, she has special ability in written expression. Her poem, "On the Oregon Trail," written in the third grade is an example:

On the Oregon trail,
On and on we go,
Prairie schooner swaying,
Swaying to and fro.

Stretching endless trail,
Days pass slowly by,

Crossing over the prairie
With the weather so dry.

Squeaking, creaking, grumbling,
The wagon wheels would say,
On the Oregon trail,
On and on each day.

Lillian is both scientifically minded and superior in ability. She does need to improve her neatness and orderliness and to do the things which she does in less of a hurry. Lillian says she likes to solve puzzles. Her brother in junior high teaches the younger children games. He lectures to them and then tests them through entertaining competitions. His own interests and comradeship with the younger siblings have given to them a large and usable fund of information.

Physically, Lillian is robust and inclined to be overweight. In 1946 and at the age of eight, her height was fifty-three inches and her weight seventy-seven pounds. A year later, she measured fifty-five-and-a-half inches in height and weighed eighty-six pounds. She has beautiful skin with pink cheeks. She is always smiling and is a happy child who makes friends readily. She has ease and assurance in her personal contacts.

Lillian's home is comfortable, relaxing, and attractive. There is room for the children's hobbies and experiments. Their friends are welcome. Their parents have many friends and entertain often. Lillian and her brother, who is fifteen months older than she, play piano

duets together and both sing in a Sunday School choir. Lillian seems to be particularly staunch about excusing or taking the part of any one of her three brothers. She has a mother attitude toward the six-year old. Her usual task in the home is getting up in the morning and making three lunches for herself and the two younger brothers to take to school. She is very cheerful about this job and seems to accept it as a natural part of her day.

She has taken piano lessons for three years. While she does not show indications of being an artist, she works willingly. She is enthusiastically learning to play a cello in the school orchestra. She is taking lessons in social, ballet, and tap dancing. Her greatest faults are being too sure of herself and being a little officious in some situations. It is unusual to see her when she is not smiling. What the school is doing for Lillian and her brothers is well supplemented at home by understanding parents who are aware of their children's superior abilities.

Lillian's father married her mother when both were twenty. He continued with his medical studies and became an osteopathic physician. Lillian's mother was graduated in the upper ten per cent of her high school class and took a year of nurse's training before her marriage. Now, with her fourth child in school, she is continuing her professional study through extension courses.

The Case of Vincent

Teachers thought Vincent acted queerly on the playground. He had been noticed coming along the hallway to his classroom with the appearance of reaching for objects no one saw. He seldom talked. When he did, it was difficult to understand him. At recess time, he was often found remaining behind the dismissed group, acting as "teacher" for a child or two who had also stayed behind.

When he was to take the Stanford-Binet Intelligence Test, he came into the tester's room actually trembling physically. This did not last, as he soon entered into the game phase of the test. Farther and farther he progressed through one age level after another, disclosing his brilliant mind. His discernment of abstract terms and ideas was amazing. He explained proverbs in the manner of a superior adult. At the age of nine-years-and-four-months, he had a mental age of fourteen-years-and-three-months, showing an IQ of 153, yet, with the exception of reading, he was doing poor classroom work. It was extremely tedious for Vincent to write or draw. He seemed never able to finish an arithmetic assignment with the rest of the class. He objected to joining in games with others. If he sensed a note of disapproval in his teacher's voice, he shook and became generally upset. Attention directed to him caused his arms and legs to move rapidly back and forth.

He was seen by the state speech specialist in 1946, who referred him to an orthodontist for correction of extreme malocclusion which was affecting his speech. The boy was found to be very low in vitality because of insufficient rest and poor eating habits. During a home call made by the director of special education and Vincent's room teacher, it was found that the boy ate his meals with a book propped in back of his plate, that he read late at night, and listened to exciting radio serials. He had gone through repeated surgery before he was old enough for school, in having a club foot corrected. His education had begun in a hospital where he had made excellent progress and learned to read when he was four years old. He was fitted with glasses in the second grade.

His mother and older brother and sister were all interested in his welfare, but workers found it difficult to get a planned program carried through by the family. The mother credited the father with a brilliant mind, especially in the realm of memory and mathematics; but it seemed necessary for the mother to work away from home a number of days a week. Because it is so expensive, Vincent has not had the recommended orthodontia.

A health program was worked out at school for Vincent. He has had rest in the morning and again at mid-afternoon on a cot that was brought into the classroom. He was given milk chocolate at both rest periods.

No more work was required of him than that which he did freely. His teacher was especially understanding of the possible problems of exceptional children and worked with Vincent most patiently. She gave him opportunity to talk about the things he liked best, history and other stories; he looked up in the encyclopedia the answers to questions she told him she could not answer. He verified suggestions from his classmates. By the end of the school term, much progress had been made from the health standpoint, and some from the scholastic. Vincent was showing much better muscular coordination, no longer having the movements in the hall that were thought "queer." He was beginning to enjoy games, but still needed encouragement to participate.

When school reopened in September, 1946, Vincent had lost some of his gain of the preceding spring. Fortunately, he was able to have the same understanding room teacher who helped him through another adjustment period. By the time the school term had passed, Vincent was still working behind fourth grade level in arithmetic. He was then assigned to a special teacher for one-hour periods, by that time being ready for individual instruction outside of his classroom. He had made steady physical growth during the year. He was entering a body adjustment period, when his small thin body started to catch up with his large head size. Both his head size and protruding upper jaw were probably inherited, and neither will appear

quite as prominent as they now do when the complete body adjustment takes place during and after adolescence.

Vincent is a gifted boy lacking the home environment which would give him the greatest security and cultural advancement. He is not one of the gifted who will find his own place in school. He needs special help and this he is getting partially at the present time. He has already overcome much in the way of physical handicap. One thinks of various possibilities for his future, in which he can give his worthy contribution to the world and use his high ability to the fullest extent. Goddard's statement seems most fitting here in emphasizing that it is not so important to discover in which direction a child is gifted but in discovering that the child is gifted and then training him:

"Given one hundred children of any parentage whatsoever, provided only they have the same high degree of intelligence; select one hundred professions, arts, trades, or skills of such kind that they require for their practice the same degree of intelligence as that possessed by the one hundred children; and it would be possible to train and educate any child in the list, for any profession, art, trade, or skill in the list" (21, p.45).

The Case of Kathryn.

The case of Kathryn is not that of an exceptional

individual in a family but rather that of an exceptional family. Kathryn had not been given a Stanford-Binet Intelligence Test until she was in the ninth grade. The family had moved to the town of this study from a large city. When the mother learned of the testing program in use in the schools, she had asked the guidance director to test her two girls and two boys.

Kathryn overshadowed her sister, not in intelligence (Kathryn's IQ is 149), but in beauty and personality. "Sparkling" best describes her. She is healthy, alert, interested, polite, well liked by others, a very attractive, smiling high school girl whose chief interest is dramatics.

Perhaps because Kathryn's older sister, Arlene, was extremely reserved, serious, and studious, Kathryn's personality developed to the other extreme. Always full of fun and frolic, Kathryn attracted many friends from the time she went to kindergarten.

When she was three and when Arlene had started to school, Kathryn was the little pupil at home to whom Arlene taught reading as she learned it in her class at school. School lessons were always easy for Kathryn and she filled her spare time with music, plays, readings, and girls' clubs of various kinds.

By the time the girls were in high school Kathryn wore snappy, colorful clothes, while Arlene dressed in subdued colors in keeping with her subdued personality but

not to her best advantage. Arlene wanted to be a leader, too, but felt that others had potentialities which she did not possess. Although the Stanford-Binet Intelligence Test could not measure accurately Arlene's intelligence because she was seventeen at the time, she passed successfully all of the test items at the highest superior adult level. This indicated that Arlene had an IQ well over 140.

The brother in grade school with a mental age of four-years-and-two-months above his chronological age, tended to be overconfident. This is unusual for one of his ability; his IQ is 149. He was challenged at school through extracurricular activities, such as music, athletics, and dramatics.

When the youngest sibling had a chronological age of four-years-and-eleven-months, his mental age was six-years-and-six-months. This gave him an IQ of 132, the lowest among the children in this family. He was very active and alert, yet easily distracted. This youngster with his abundant drive and pleasant personality showed his greatest ability on the Stanford-Binet Test to be counting.

Both parents are college graduates, active in their community, where the father has a flourishing insurance business. They are interested in their children's individual potentialities and development and are able to continue

with the education of each one.

The Case of Ezra.

Ezra is included here because of a different family background from many of our gifted children. His place in a family of ten children, of itself makes him in a different environment from the more usual contemporary child whose family is small. Being next to the youngest of the ten, Ezra has a much older father and mother than many children. Their reliance upon him has no doubt added to his trustworthiness and conscientiousness. His parents', and particularly his mother's, intense interest in religion has stimulated him in much the same direction. When asked what he hoped to do later he replied, "I am going to be a minister." He has had Bible instruction at school one period a week, and has memorized much more than the class requirement of Bible verses.

Ezra, a serious-looking, round-faced, clear-eyed, and chubby child, came into the tester's room during the regular third-grade routine Stanford-Binet testing program. He was eight-years-and-seven-months old, with a mental age of twelve-years-and-eight-months, and an IQ of 148. The tester found him to have excellent memory. He had the vocabulary of a ten-year old child. His power of organization was very good throughout the test and the interview. His reading ability was excellent.

In observing this boy in his classroom, the special teacher who had tested him found him to be most seriously conscientious. As he was starting to read an original report which he had written about the life of a frog as seen in a visual aid film, he decided he had written the report poorly. He asked permission to go to his seat, where he revised his story, and then asked permission from his teacher to read the new report to the class. All of his work receives the same painstaking care.

It is with the same painstaking care that he helps with the care of the baby sister at home. The oldest brother who has finished high school works with the father at carpentering. It is this grown brother particularly who spends much time with Ezra, answering his many questions, working out arithmetic problems with him, and teaching him the use of tools. Ezra could read before he entered school, as he had been taught by an older sister.

There is no discipline problem with Ezra. He is unusually courteous, even formal. Rather than having any particular fun in life, Ezra has satisfaction. He shows no evidence of emotional or nervous instability. There is no known reason for his unusual seriousness. If Ezra gains an adult position of leadership, it will be at least partly because people will know they can depend upon him.

While neither of his parents went farther in their educations than high school, in their encouragement of

Ezra to prepare for the ministry, they are preparing to send him to college. Teachers enjoy having Ezra in their classrooms.

The Case of Milton.

Milton is the boy whose superior intelligence has contributed to his sharp wit. His ready sense of humor has endeared him to classmates and teachers.

Milton's father, a welder, had one year of college. He is of English descent. Milton's mother is a college graduate of German descent.

Milton has an IQ of 145. The examiner who gave him his Stanford-Binet Test found him to be happy and spontaneous. He had a good vocabulary, and was quick with his answers. He said he did not like to work, but the examiner found that hard to believe.

Milton's third-grade teacher felt that he was not working up to capacity, possibly through laziness, but more likely through disinterest. Milton is not a discipline problem. His school grades have been satisfactory or excellent. Milton has a good singing voice. He writes and draws very well. With his superior ability and vivacious personality, Milton could be at the top of his class.

His parents recognize that he has more ability than he uses. Both feel that he would improve his work by being more serious about and working carefully. A special class

would fit Milton's need, but this town's school system has no special classes for gifted children. Through her interest in his needs and reading to find answers, Milton's mother may be able to guide him into full use of his abilities. He is very well socialized, having many friends. His older brother, two grades above him, is not a close companion. The brother tests more than twenty points lower than Milton, on the Binet Scale. He has a much less vivacious personality than Milton, and frequently finds Milton a nuisance.

The home problem and the school problem is to challenge Milton's ability with enough work in which he is interested. There is this possibility for special help from the school in Milton's case. He is wearing glasses and has had two operations for the correction of strabismus. If he can be certified as a visually handicapped child, then time can be scheduled for him to have work with the special teacher in his school building.

As explained in the introduction to this thesis, the amount of reimbursement to school districts for providing special education is based on the number of certified handicapped children in the district reimbursed. The certification requires a medical examination for the child, formal application for certification signed by both the school superintendent and the child's teacher, and approval of the application by the State Health Department.

One requirement is that the child must have average or better intelligence, at least enough to profit from instruction.

Where there is a visual defect, for example, the severity of the defect may be the deciding factor whether the child can be certified or not. In the case of strabismus or crossed-eyes, the child who needed surgical care to strengthen the weak muscles might be certified while one wearing glasses which accomplished needed correction could not be certified. Ideally, certification takes care of the greatest need. Since Milton's eyes have had medical attention and his parents have done everything possible for improved vision, and there is little the school can do in that regard, technically Milton is not eligible for certification as a handicapped child.

The Case of Frank.

Toward the end of his second year in school, i.e., 1946, his classroom teacher gave Frank a Stanford-Binet Intelligence Test. His chronological age was seven-years-and-one-month. His mental age was ten-years-and-two-months, giving him an IQ of 144. Frank was a big, alert-appearing boy, strong, and well-proportioned. He had the physique of a nine-year-old boy, yet his judgment and social maturity were like those of the normal boy of his age.

Frank had a poor start. He almost died when he was born. Then he lost so much weight that it was not until he was nine months old that he again weighed what he did at first. He had most of the diseases common to childhood. At the age of three a mastoid resulting from bruises behind the ear caused him to undergo surgery for three hours. After his recovery, he became the healthy big fellow that he is now. In fact, it seemed to be this very size and strength, combined with his aggressiveness and his desire to lead and to do things, that caused his accident. He rushed down the school hall ahead of his third-grade teacher to help two other boys push the small school piano into their room for the music period. He reached the piano first, jumped at the top of it with a hard pull to get it started before the others reached it.

It toppled over on him, and his left leg was fractured in five places. His hospitalization was short, but he could not return to school for the second half of the term. Home instruction was extended to him. The home teacher spent four hours with him each week. He had finished the work of the grade a month before the school term ended. Even his time in bed did not distress him particularly. The school lessons were fun. He likes the radio very much. At an early age he had been taught by his maternal grandmother to play the piano. He readily learned songs he heard over the radio. A new electric train was a

source of pleasure when he was able to be up on crutches.

Looking into his background, we find a mother who had gone through her junior year in high school with music as her chief interest and hobby. She had studied music for seven years, and played the pipe organ well before she was married. Frank's father was talented, earning grades of "A" in all of his high school courses. He lacked stability, however, and the mother had to separate from him before Frank entered school. It was fortunate that when he did start school, Frank had a teacher who understood him and his needs. In this school system the teacher goes on from the first grade through the second with the children. Frank was not hurried in his self-expression so his speech developed normally. With the confusion resulting from the child being separated from his father, Frank had tended to stutter. Through the confidence his teacher inspired in him, this period was filled until his mother married again and Frank had a complete and secure home. The emotional needs of the gifted child are like those of a normal child only stronger where there is very rapid growth coupled with a healthy curiosity. Now his mother and his step-father both come to P.T.A. and to programs where Frank plays in the school orchestra. The family attends the church where the mother plays the organ. There is a brother five years older than Frank who adds to a happy family relationship.

The Case of Sandy.

Sandy is a boy. His classroom teacher for the third grade had referred his case to the Child Guidance Clinic for the following reasons:

1. speech hesitation and stammering, extreme difficulty in expressing himself;
2. a specially subdued and penitent appearance when reprimanded;
3. an apparent inability to control actions when given freedom, accompanied by an ever-constant desire for attention; and
4. poor adjustment to both classroom and playground situations.

The Stanford-Binet test found Sandy to have an IQ of 142. His vocabulary was very poor for his mental ability. His methods in solving arithmetic problems were very poor, and were based on memory rather than on reasoning. He chewed his fingernails, and was restless. There seemed to be much pent-up energy in him. He had an attitude of complete composure and knowledge as he expressed himself, but gave up easily. His statement during the mental test that he was probably the poorest that the examiner had ever tested indicated an attitude of inferiority. He was unorganized in his thinking and mental patterns. While very sincere, he showed lack of the experience and the poise that one of his age and mental ability should have

had.

The teacher attempted to bring about adjustments in the child by showing him causes of his acting as he did, and explained why some of his behavior was unacceptable. The boy's answer about the causes of some of his acts was always, "I don't know," and his response to her explanations, "Yes, yes," without evidence of any deep penetration of these explanations. The teacher used light, but sudden and sharp, punishment to curb his wild activities, but was only moderately successful. She attempted to steer the boy's energy into constructive activities and entrusted responsibility to him with only moderate success.

The comments of Sandy's third-grade teacher at the time he was taken to the Child Guidance Clinic were: "Learning seems to reach a certain point, and nothing will encourage it further. An example is Sandy's writing. No amount of explanation or encouragement seems to lead to recognition of need for improvement or an attempt at improvement. Sandy has been under a doctor's care for nervousness."

This is a part of the report from the psychiatric examination made at the Child Guidance Clinic: "This boy is brought to the clinic with complaint of nervousness, inferiority, inability to adjust well socially, etc., the typical picture of an insecure, early, anxiety pattern. At nine years old, this boy has the intelligence of a boy

of twelve years six months of age, giving him an IQ of 142. However, he has come from a family just a little below average and the parents have had difficulty understanding the youngster, his needs, and his responses to them. The general symptomology found in this case is to be attributed to the boy's being unable to express himself as he is capable of doing. Both the family and his school must be told to think of him in terms of his mental age and gradually readjust his program until he is working up to his capacity. The general outlook of this case is extremely good, but it will probably take at least a year and one half to bring the boy up to what we would like."

The psychiatrist's recommendations for treatment included increased group play; activity under supervision such as that given by the Boy Scouts, instruction of the family in the ways to treat, educate, and deal with this boy in terms of his real mental age, and the gradually increasing of his load at school until he is doing more work.

At the time a social case study was begun, Sandy's mother was forty-one years of age and his father was forty-eight. As Sandy was then eight, the mother was thirty-three and the father was forty at his birth. The father worked as a day laborer except when ill health kept him at home. The mother devoted her time to the home.

The twenty-one year old brother of Sandy was with

the Army in England, and the nineteen year old brother was with the Navy in the South Pacific. Both brothers were successful in their chosen fields of dentistry and mechanics. Sandy's only sister, eighteen, ran away from home to marry when she was fifteen. Her husband was killed overseas, and she was at home with her year-old baby girl.

Sandy had never been in good health, and, for several weeks, was under the care of a children's hospital at the age of seven. It seemed the boy had suffered for years from what the doctor diagnosed as psychic vomiting. The mother showed no understanding of the mechanisms involved. She knew that Sandy had been extremely nervous all of his life, but could give no reasons or possible causes.

In January, 1945, the mother was interviewed at home by a social case worker. She seemed interested in cooperating with the school and clinic regarding Sandy's difficulties but, it was believed, the interest was superficial in comprehension and in concern. She did not feel that the boy presented any particular difficulties and that the complaints from the school were overdrawn. She believed that, since the boy's tonsils and adenoids had been removed, his behavior at school would change for the better within a short time. He had been fitted with glasses, also.

The sister and her baby had been living with the

family for several months. Recently she moved with the baby to an apartment of her own. Sandy's mother had been taking care of the infant while the mother attended high school. Sandy was greatly attached to the baby when it was in the home with them. He spent a great deal of time with her. Never at any time did the family notice any jealousy on the boy's part. He was very much disappointed when the sister moved away with the baby.

The mother also stated that the boy slept with her during the time that the sister and the baby were in the home. He would sleep with her every night if she would let him, but she believed that he was too old for such an infantile attitude and that he should be encouraged to sleep by himself. The boy had never asked any questions of any sort about sex. The mother believed that such questions should be answered freely and she recalled that the other children had asked numbers of questions on this subject through the years.

In February, 1945, Sandy was interviewed at school by the social worker. Sandy was thin, pale, and intensely nervous. Throughout the interview, his body quaked and shook. Every once in awhile he would stop shaking. He spoke well and expressed himself freely in every area except when the discussion touched closely on his family relationships. At these times, he would be silent for a moment and then would change the subject completely. When

speaking of his sister's baby, his face would light up and he said that he missed her very much. He did not miss his sister, as he does not like her. He thought of his older brothers a good deal and was glad when the family received letters from them.

Sandy was saving what money he earned to buy a bicycle. He had no regular income. As a gift, his oldest brother occasionally sent him money. Sandy liked to run errands for neighbors and was eager for a steady job. He had his own paper route for a while. His mother believed that a paper route was too heavy for him. She said, "Sandy cannot stand hard work. He is out of school a great deal of the time from sickness. He has not vomited more than twice a week for some time. It is usually after a meal that he does. When he feels that he is going to vomit, he usually does, then goes to bed for several hours."

In May, 1945, Sandy and his mother were again interviewed by the clinic psychiatrist who reported: "This boy is getting along exceptionally well, and I feel no new recommendations are needed. The mother shows considerably more insight into the boy's problem, and I think her conferences with the workers have been both instructive and of great benefit to her in handling Sandy. These contacts should continue, for she still has a little difficulty in recognizing the boy and his vast potentialities. I believe the boy is at the stage where

considerable instruction in terms of sex should begin. I feel that the boy should be seen in the fall clinic."

In the fall school term when Sandy was in the fourth grade, his case was closed at the school guidance clinic. A "special education" teacher had found that Sandy was interested in mechanics and taught him the principles of a typewriter. He came to her home on Saturdays and helped with chores for the privilege of typing. He would sit for hours at the machine, writing to his brothers or practicing words that he thought. He was generally most cooperative and tractable except when there were younger children around. Then he would tease these little children to the point of tears in an underhanded and sly manner.

Over a period of the last two years, his school work has fluctuated from poor to satisfactory as has his out-of-school behavior. None of his teachers has felt the boy works up to his capacity. Sandy's health and general appearance have improved greatly. He has gained well in both weight and height. He rides his bicycle, but has little other vigorous activity. Sandy is not one of the gifted children who finds his own place. He will have to be helped if he is to reach his fullest self-realization. His environment does not challenge him. He is restless, continually seeking diversion, and he fails to know what it is he truly wants.

The Case of Marie.

Marie was born in December, 1922. There is a record in the school guidance file of two Stanford-Binet Tests given to her. The first, given in April, 1938, shows an IQ of 141 on the M Form. The second was given two years later and showed an IQ of 149 on the L Form. Marie's entire school record through the grades, high school, and college have been in keeping with her ability.

Marie is descended from Czechoslovakian ancestors on her father's side. Her maternal grandfather's people were Pennsylvania Dutch; the maternal grandmother's were English and Scotch. Her maternal grandmother finished high school, then devoted her time to homemaking. Her maternal grandfather quit school when he was in the sixth grade, which was not unusual in that decade. He was apprenticed to a bookbinder, and learned the trade. He was a self-educated man, always interested in better reading, and had a good library for his children.

Marie's father was born in Czechoslovakia in 1889. He came to the United States with his parents when he was one year old. His father was a successful business man, at one time owning a chain of ready-to-wear clothing stores. His father became Americanized readily. It was more difficult for his mother to adopt American ways. She was a homemaker. There were four boys in Marie's father's family. The two who were twins were Phi Beta Kappa's, and

each received a degree of doctor of philosophy. Marie's father revolted against the orthodoxy of his parents and left home when he was a freshman in college. He was in World War I as a sergeant-major, and served as an interpreter in France. At the close of the war, he attended Sorbonne University in Paris for four months under an Army scholarship.

The paternal grandfather died of tuberculosis. The paternal grandmother had an arrested case of tuberculosis. One brother is living. Marie's father became a high school teacher after he met and married Marie's mother. He died of tuberculosis when Marie was ten.

Marie's mother had worked her way through high school. She had an additional year of training, and then taught school for a year before she met Marie's father. During his illness, she took enough additional training to qualify for an Oregon teaching certificate. She continued to teach, studying during the summers and through the Extension Service, until she earned her bachelor's degree. Because of her thorough preparation, her pleasant conscientiousness, and her philosophy of life, she has advanced in her profession as she met with success during each step of her progress.

Marie is the first-born child. Three-years-and-nine-months later, her only brother and sibling was born.

Marie's mother taught her to read at home the

autumn before she was six in order that she might enter the first grade in the middle of the year. She has always been a good pupil. Marie had and has the characteristics of amiability, modesty, poise, good humor, and reliability. She has always liked other children and entered happily into the group.

Before she started to school, Marie had an imaginary playmate with whom she talked. She did not like to play out-of-doors alone. When her mother and father were in the house, she much preferred to be with them. As a young school child, she kept well-organized families of paper dolls. This grew into her Camp Fire activities which interested her through high school. Later she became a Camp Fire counselor.

During the seventh, eighth, and ninth grades, Marie was shorter than most of the girls of her age. Then she went through a sudden, very rapid growth period in which she became tall, well-proportioned, and graceful.

While her mother believes that Marie did not excel in physical activities, Marie took part in many games and wanted to be on the school's teams for girls. She won honors in swimming in high school. In college, she took part in intramural sports and was a member of the Women's Athletic Association. Intramural sports only are conducted for women at the college which Marie attended.

Marie was on the Westminster Federated Church Play

House Committee. She served as a "Rookess Counselor," or "Big Sister" to freshman girls during her junior year. She earned much of her own expenses while in college by doing secretarial work. She was on the honor roll in college the winter of her senior year. This required a grade point average of 3.5 out of a possible 4.00. She also served as president of her independent living group.

After being graduated from college, she taught in a nursery school in Portland, later working as a private secretary until her marriage to a young lawyer.

The schools served Marie well because she served them well. Her diversity of interests, her self-responsibility, and her ease of making friends contributed to her success. Her home life is happy and constructive.

Since this writing was begun, Marie has her first child, a son who, in strong physique, large body build, and superior ability is like his parents.

The Case of Jan.

Jan was given his first Stanford-Binet Intelligence Test when he was in the sixth grade. This big, even-tempered boy with his steady and dependable nature has an IQ of 140. He likes to read, and says that it is the source of his somewhat unusual fund of information. He does not like to do the notebooks required at school, but loves to write stories. His younger sister is more

artistic in temperament and seems very different from Jan. The father gives the mother credit for doing most of the training of the children, although Jan told of things he did with his father, including attempts at learning the Swedish language from him.

Jan is of Swedish descent on his father's side. His mother's people have been in the United States since the seventeenth century. Jan did not know from what nation they came.

Jan's father is the owner and manager of a lumber manufacturing plant. He and his wife work as closely together in their united contributions to their home as the father's strenuous business life permits. Both parents have college training. They enjoy their home and children and are active in community projects, church, and school.

While there are gifted children with nervous and quick temperaments, who are usually more aggressive, or even ruthless, Jan is the quietly gentle type who knows what he wants and drives toward it without a degree of aggression which hurts others. He is well satisfied with school. His extra reading and musical interests keep him busy. He has a beautiful singing voice. Under the supervision of a special music teacher, he has learned duets with another gifted boy which they sing for civic groups and at school functions. There is no need of a special class for Jan. His individual needs are met in the normal

classroom, with the supplementary activities which he has found for himself--alone and with the help of his parents and teachers.

The Case of Ted.

Ted was a quiet little boy who enjoyed his grandparents and the members of his immediate family. He found his father understanding and companionable. His mother also was patient and enjoyed doing things with her sons. She was artistic, and included both boys in sharing her materials and enthusiasm. The family went on trips together and saw different parts of the country, developing hobbies together. These contributed to the boys' funds of information and enjoyment of their home.

When Ted was born his mother was thirty-two and his father was thirty-three. There was another boy in the family, seven years older. Both parents were college graduates.

His teachers liked Ted, and he went along through the grades in the usual way. When he reached the second half of the eighth grade he had rheumatic fever, and was bedfast for three months. He was able to complete the work of his grade through four hours of home instruction each week. It was before receiving home instruction that he was given a Stanford-Binet Intelligence Test. With a chronological age at the time of thirteen-years-and-six-

months, Ted showed a mental age of eighteen-years-and-eight-months on the Stanford-Binet Test, which indicated an IQ of 140. While Ted seemed rather shy, he entered actively into the tasks of the test, reacted in a rather confident manner, and showed little interference from distracting stimuli.

Ted was in public school again the next fall, completed his ninth grade and entered high school. He was given a second Binet Test near mid-term when his mathematics teacher questioned his first test score because of the type of work he was doing in second year algebra. Ted had become inclined to distrust his ability. He was no longer eager. While his basal age remained the same, he fell just short of scoring on items he had passed two years previously. The fluctuations in Ted's school experience which the second Binet Test summarized seem best understood by indications from his teachers in his guidance folder: "In the second grade, he was reading at a two year and four month level according to the Gates Primary Reading Test." "In the fourth grade, he needed to devote more effort toward self-made goals, and seemed to have lost a bit of his original vitality, thus losing some charming characteristics." "In the fifth grade, he was considered to be too shy and retiring, though possessing some excellent qualities. He needed to put more effort into his school work." The sixth grade teacher found "his

performance to be slow. He did not always complete his work. He needed to read more. He was interested in sports, was very dependable, and seemed to have overcome some of his shyness." In the eighth grade, he "developed an interest in architecture and decided to make it his vocation. He enjoyed singing, playing the piano, and the Boy Scouts and his many friends."

On his first Binet test, the tester found that Ted had an excellent memory and excellent comprehension from both visual and auditory stimuli. Her comments were, "He has the capacity to carry through his ambitions for architecture. He is a superior boy, with no feeling of superiority. He has need of the tools of learning, thorough foundations in spelling, written expression, and working knowledge of mathematics to serve him well in using the ability he has."

Following the second Binet test, the same tester put these remarks in his school record: "He did not do some of the items on which he had scored two years ago. He is going through a period of rapid growth and quick maturity. After his recovery from rheumatic fever, he is still subject to frequent sore throat. He seems to have slipped into habits of carelessness in his work, not purposely, but apparently through discouragement and lack of interest. He does not have the ability with figures that he does with ideas."

It can be predicted for Ted that, if his interest in school can be maintained, his poorer subjects, mathematics and English, can be brought up nearer to his ability level. As his health improves and he becomes more settled and secure, as high school pupils sometimes do in their junior years, it is quite possible that Ted will continue his plans for college and be successful.

The Case of Stephanie.

Now that Stephanie is in college, she is frequently pictured as one of a group of co-eds in her college paper. One is immediately impressed by the girl's beauty and charm. While the friendly personality of Stephanie contributes to her popularity, and her beauty brings added recognition, it is Stephanie's superior ability which makes her high scholastic achievement possible.

Stephanie's mother, who had one year of college, contributed much to her daughter's success through her activity in school and church, and her understanding of child development. The father, a high school graduate, was a successful butcher. An only child of young parents, Stephanie was early provided with plenty of play space and companionship. She learned to share, and developed leadership qualities early. Her mother enjoyed horseback riding, and taught her little girl to ride. Stephanie was

given a horse of her own when she was seven, and followed riding as a form of recreation into her college years.

Stephanie's grade school activities followed rather closely the pattern of the gifted girl of her community, as she belonged to a number of girls' clubs such as Camp Fire, Girl Scouts, and 4-H. She played with boys also, entering enthusiastically into games of their choice, competing with them successfully.

In high school Stephanie sang in the girls' chorus and girls' sextette in addition to doing solo work in two operettas. Her lead in both junior and senior class plays gave credit to her dramatic ability. Her dependability was shown also through her editorship of the high school paper, one which received national recognition.

It was through interest in the girl's diversified talents and interests that her high school principal gave Stephanie the Stanford-Binet Intelligence Test during her sophomore year. He found her to have an IQ of 140. Her school grades, her many activities, her continuing interest and success all indicated that Stephanie was working up to the capacity of her superior ability.

The future looks bright for her. Whether she may enter the field of psychiatry in which she has done much reading or may follow music or drama or journalism as a career is not known. Should she become a homemaker upon the completion of her college work, her alert mind, her

interest in people and her many talents will enable her to be a true asset to any community in which she may live.

The gifted children in these case studies are representative of others in the school system studied. In the low ability cases as in the high ones, few are at the greatest extremes, while more cases are found as the average group is approached.

The Case of Bert.

Bert's is the case of a boy, not in school, tested at the chronological age of fifteen-years-and-two-months. He was found to have a mental age of five-years-and-eight-months, and an IQ of 39. The question might well be asked why he was at home with six brothers and sisters instead of in an institution for the feeble-minded. The answer comes mainly from the fact that the parents of the boy did not want him in an institution. He is a physically strong and willing boy and is very fond of driving the farm truck and tractor. Under the supervision and direction of his father and the man for whom his father works, this boy can produce a good day's work. He is an asset to the family because he can work and because the family lives on a farm where the boy is learning from rote training.

The intelligence rating of the rest of the family is not known except for a ten-year-old brother, whose IQ is 59. He also had to be taken out of public school

because of his extreme inability to profit from public school instruction. While the father presented a fairly good appearance as a farm laborer, it could be expected from the mother's appearance that her mental ability might be very low.

The tester spent exactly an hour giving Bert his Stanford-Binet Intelligence Test. This included giving all the items at the eight-, nine-, and ten-year levels without a single plus score. Usually a tester stops at the first age level scoring zero. All of Bert's responses came rapidly. It is true that feeble-minded children often take less time to respond but respond with poorer quality than do normal children of the same mental age. Bert was found to have a basal age of four years. On the five-year subtests, he scored eight months, missing the memory test and picture completion test. At the six-year level, he scored ten months, missing the maze tracing. The picture absurdities subtest was the only item passed at the seven-year level. Bert looked at the reading test at the ten year level as if he were trying to read and said, "I do not know any of the words." In naming as many words as he could in a minute, he named ten words and said, "All I know." Bert's attention was good; he entered actively into each task. Rapport was good between Bert and the tester, and he seemed to enjoy his hour with her. When the eleven year old brother came in for his test, Bert

remarked, "He can do anything I can do."

Both boys are fairly even-featured and would not look particularly "different" in any group of children except for the fact that they wear heavy farm shoes and are not too clean, either about their clothes or their persons.

The state should require registration of the feeble-minded and should follow such cases constantly. It should commit individuals and sexes on an equal basis. These pupils should not be dismissed from special classes at sixteen years of age. The feeble-minded should be confined chiefly during the child-bearing years, or they should be operated on. The state should frame laws carefully in order that they will be possible of enforcement and subject to public favor. The problem of commitment is partly economic, as institutions apparently can not be built fast enough, yet the feeble-minded not in institutions are the ones who reproduce their kind most freely as they are not repulsive nor sterile. Both Bert and his brother were put out of public school because they were not socially acceptable at their own rural social level, but what of their futures?

The Case of Lou.

A girl with a chin that trembled, kindly but dull eyes, and a poor skin was called in to the junior high

school counselor's office for a Stanford-Binet Intelligence Test. This was Lou, age fourteen-years-and-two-months, with a mental age of eight-years-and-two-months, and an IQ of 59. She had been "passed" from the eighth grade in a country school on a special slip which did not mean that she had succeeded in doing the work in the required subjects but only that responsibility for her education was being shifted from the school in which she was then enrolled. Lou could not succeed in any except a special school for her kind.

A year later, she was in the senior high school where the biology teacher said, "She can do beautiful copying of the diagrams I put on the board." The English teacher said, "She cannot do the assignments, but she isn't any trouble. She cannot do a thing in an examination, but she writes down all the questions very neatly." The typing teacher said, "I do not see how she can know so little and yet she turns out a fairly good typed letter from copy." Lou was again tested on a Stanford-Binet Scale, and scored 63 IQ. Her visual imagery was excellent at the levels on which she was tested; her pencilled responses were both neat and true.

Lou was tested for hearing defects, but her hearing was found to be normal. She said she liked school. She liked to help her father do farm chores, but did not like to cook and do the things about the house. When asked

if she were studying art because she could draw so well, she replied that she had taken it the year before but did not do well and that her sister could draw and paint much better than she. The tester asked her about her handwork and expressed interest in seeing what she had made. Lou said she did not like to sew dresses, but had something at home she liked. She did not bring anything to school, but she did come in to the tester's room a couple of days later and brought a camellia and some rolls from her Homemaking Class.

Lou will continue in high school perhaps for another year because teachers are kind to her. While she appears not to have friends, she likes the atmosphere of school, and it is "the thing to go to high school." She does not take part in "gym." Her teacher asked her if she would like to write her reasons for not wanting to play in gym, not thinking that she would do it. Her note shows what a fifteen-year-old girl of low ability can do when she tries very hard, puts forth her best effort, and wants to please her teacher. This is what she wrote:

"Then I was a little girl I hip disease and I had to go to Portland Oregon. To the Sherian Houspital for a long time they didn't put me in a bathtub for a long time. Then I got a little bit better I went home with a brass on my leg. I can't remember very far back.

"Then Daddy, Mother, Shirley and Linny came to get

me they had to catch a horse then they took the to a station then they came on to Portland Oregon where I was.

"For they came to get me I was waring a little dress. They brought me some cloths from home. They trying to make me happy. Then they send be some glass horse and color were brown spots and black spots.

"They wrote me letter about my leg. They want to now how my leg is. If it hurt a lot I'm going back to Portland Oregon.

"Then I had to go back for a recheet than I had to stay for a month or two. One of the nurse give a finger pelsh. Then I had a cast on my leg I had to lay down some. I get up and stand on my leg sot of. I had to lay down all the time tell my leg grew back.

"C. S. Then they took my bath my lag felt on top of the water. That why I can't do some of the things in gym. They up a tube down my nose than it went down my stomach. Then it came out the stiff it was nesty."

Her farm home has no doubt aided this girl's return to health. Her family felt that the physical illness had contributed to the girl's poor school record. Her parents have been contacted by the high school principal and told the findings of tests and the consideration she is being given and that, if they do not expect her to graduate, she may continue in public school. At this time, she offered no behavior problem (at the age of fifteen) and no

particular trouble to the teachers. She was quiet and unobtrusive, neatly groomed and dressed and, without question, worked to her maximum. She would be as well off or better in school than any other place available to her although, obviously, she could not do the work of the school. She should be in a special custodial school, but none is available. What the future holds for her in social, economic, and familial success or failure is difficult to predict. If she is fortunate, she will be protected and happy. If she is not fortunate, there will be only degradation, since she is not able to protect and manage herself.

The year predicted previously for her possible continuance in high school was cut short. When she reached the emotional peak of adolescence at approximately the age of sixteen, it became necessary for the school principal to call her mother in for a conference with him and two women school workers, who requested that Lou be taken out of school. The school could no longer be responsible for her when she had developed a tendency to run away. This is an example, short of enforced institutionalization, of the final responsibility resting upon the parents, notwithstanding the best intentions of the public school.

The Case of Buddy.

Buddy was referred by his teacher for a mental test

early in his first grade because of his lack of response to classroom directions and his general behavior, for example, his eating of colored crayons. The Stanford-Binet Test showed an IQ of 63; a chronological age of seven-years-and-four-months, and a mental age of four-years-and-seven-months.

By the end of his first school year, he was reading a little. In repeating the first grade, he made progress to the extent of being able to work alone with a small degree of efficiency.

According to the enrollment record, Buddy's father was not living with the family. His mother had sold a farm and bought a large house where the children could have the advantage of a town school. She blamed a country school for the fact that both of Buddy's older step-brothers were retarded mentally and educationally and had extreme reading difficulties. The older step-brother, Glen, when aged twelve and in the fourth grade, showed an IQ of 82 on the Stanford-Binet Test. The second step-brother was found to have an IQ of 89.

Glen has never been a disciplinary problem. He has tried hard and, under his own concentrated effort plus special help from his room teacher and the teacher of special education, has made some progress in reading. The younger step-brother was a classroom problem and a delinquent, in addition to influencing Buddy to aid him in

bicycle stealing.

While the school has no pertinent record of the fathers of any of these children, the mother shows indications of low mental ability in her lack of management of the children, the unclean way in which the children--especially Buddy--come to school, and her own general appearance and personality. In filling out the school registration blank for Buddy's entrance into the school, in the space for "Language Spoken at Home," the mother had written "fair." Buddy has three younger siblings still at home. He is a sturdy, well-proportioned youngster, much better-looking than his older step-brothers who are short and stocky with large heads and faces.

The school principal, working with the local police to get the boys' mother to cooperate, has taken care of the delinquency problem at least temporarily. Whether the thorough classroom guidance that is being done will be enough to lead Buddy into a self-supporting, self-respecting adulthood is questionable. His mentality and home background are all against it.

In Oregon schools, there is little or no special help in the usual school situation for mental defectives of Buddy's kind. Under the program for the education of handicapped children, as set up by the 1941 legislature in Oregon, special state funds can be used for the gifted child if he becomes maladjusted or is crippled or has other

physical handicaps. It is very difficult to get even a very low mentally defective child committed to Oregon's only institution for the feeble-minded unless the parents cannot care for him and both ask for his commitment. Except for the very lowest grade of feeble-minded children, others in this category come under the supervision of public school teachers or are not in school at all. These mental defectives are potentially social menaces. Because they do not have the power to reason through a problem or a situation, they are easily led into delinquency by those with somewhat more ability who are bright enough to use these duller people to increase their own chances of not being caught. Through realizing the many things which they do not have that others do have, the dull and feeble-minded take what does not belong to them--unless prevented through habit training--as the easiest and, usually, the only way they can obtain them. They have the same emotional drives as normal persons, without the controls, inhibitions, and reasoned values.

When the mentally defective is discovered early in his school life, if he is not institutionalized, he still can be taught in special classes adapted to the limits of his abilities. He can be kept profitably occupied within his limits with the limited and repetitive training which will be most valuable to him. The child or adult who is busy doing work which he can do and which interests him is

happy, and the happy individual is much less inclined to get into trouble with society. Buddy should be institutionalized and among his own kind, but this is at the present impossible and he will have to take his chances with life as it is lived.

The Case of Tom.

Because this is an unusual case, partially in the wide range between the two test scores and because of certain facts concerning Tom's mother which are not here included, Tom's case is presented in this study.

The first tester who examined Tom found him to have an IQ of 63, with a chronological age of ten-years-and-six-months and a mental age of six-years-and-eight-months. The first tester left these remarks on Tom's Stanford-Binet Test record sheet, when the boy was in the fifth grade:

"He seems to have a sight-memory for words, but he does not know what they mean. His muscle coordination is very poor. If he does know the meaning of a word, then he loses sight of combined meanings in sentences. His word meaning level is that of a child eight years old and he is ten and a half years old. He lacks reasoning ability."

Tom's grandfather was deeply concerned over the boy's lack of interest and lack of success in academic subjects. He realized when Tom was passed into the sixth grade that he was not doing the required work of the grade,

so he asked the school principal for a conference about his grandson. The director of guidance asked the supervisor of special education to retest Tom before the time set for the conference. This she did, finding an IQ of 87 on the test given exactly one year after the first test. Tom showed, at this time, a definite improvement in muscular coordination. His memory for design was still poor, but his auditory memory had improved. He did well with problem situations, and was much better organized in his thinking and responses.

The grandfather was able to accept, by reason of his home experience with the boy and through conversation with the two testers, the fact that Tom lacked normal or superior mental ability and the accompanying characteristics of such mental ability possessed by the other members of his family. Tom's own father is a practicing physician. His mother had been a nurse before her death. Tom's grandfather, a retired minister, carries on very successful farming operations. Tom has lived with his grandmother and grandfather since he was two years old. The grandfather is his legal guardian.

Tom thoroughly enjoyed his second Stanford-Binet Mental Test. He seemed hungry for commendation and attention. Possibly because it was not an entirely new experience, Tom felt more confidence. He acted like a boy whose whole experience was limited to his farm environment

and his grandparents. He seemed not to be as much suppressed and insecure as puzzled, as if more was being asked of him than he could understand. The tester felt his need for recognition of what he did do well.

It was natural for Tom's interest to center in his grandparent's farm, its buildings, and machinery because that was the environment which he knew and in which he could feel partial success. His father's second wife did not get along with Tom. His father was not well. For these reasons, Tom seldom visited them. The grandmother had little patience with Tom's slow, uncoordinated movements. To escape her fault-finding, Tom went to the fields and his grandfather. It was the grandfather who provided what he could for the boy's needs; for example, it was he who commended Tom for tightening a loose bolt on the fork of his bicycle. The grandfather permitted him to drive the farm tractor, and this he loved to do.

His teachers recognized that Tom tried fairly hard in school. They commended him when he joined in a group for work or play. When other children made fun of him, the teachers talked quietly and privately to the offenders but, in the sixth grade, his teacher left these notes for her successor concerning Tom: "Low IQ; bothers other people around him; is lazy; believe he could do a little better in his classwork; does not have any school activities and interests; is a Cub Scout; occasionally puts forth a little

effort; he brings his trouble on himself; once in a while he enjoys talking about bikes, etc.; has many problems to overcome; I have not noticed him having many friends."

Tom has some mechanical ability. He has interest in machines. This does not correspond to his general body movements and his lack of coordination at school. While there are as yet no scientific studies which show that one with low mentality may be relatively successful along mechanical lines, this may be possible in Tom's case. Some people with low intelligence can put simple mechanisms together very well, while others with much higher general intelligence can not work well with mechanics; but this is the exception rather than the rule.

Tom's school future does not look bright. He needs contacts with boys and girls near his level of ability. He is so limited in his own family circle that he has not had the socialization that would, possibly, increase his feelings of security. Tom's whole future security may depend on his skill in farming and the use of farm machinery and on a specialized and definite education toward definite and limited goals similar to the education given to pupils in schools for the feeble-minded but less limited in methods and goals and with even more emphasis on personality and behavioral development. The individual whose ability is below normal needs to be busy and self-respecting as much as the gifted person does. The properly

busy person is usually happy and not in trouble. Tom will need a guardian or protector all of his life. What will happen to him when he no longer has the guidance and protection of his grandfather can be a matter of speculation only.

The Case of Daisy.

Daisy came to this high school in the tenth grade. Her English teacher requested a Stanford-Binet Test for her. When given, it was found that Daisy had an IQ of 67.

Daisy said she could not draw, but she made brave attempts to follow the tester's requests to draw the simple figures in the early items of this test. She was unable to reproduce designs at any age level. With a basal age level of six years, Daisy failed in "picture absurdities" and in copying a diamond at the seven-year level. At the eight-year level, she made a full score, but passed none of the subtests at the test age of nine years. She missed making a plus score on verbal absurdities and rhymes by only one point. At the ten year level, she earned scores equivalent to ten months of mental age; at the twelve year test level, six months; and at the thirteen and fourteen year test levels, she made two months each. Some of her ideas showed maturity in keeping with her chronological age of seventeen years. Her vocabulary was that of a twelve-year-old child. She remembered having had a Stanford-Binet

Test previously, when she recognized an item at the twelve-year level.

Daisy had been in school in the middle west, moved with her family to California, and then to Oregon. She seemed to realize her limitations, yet tried to do the work of the regular classroom.

Both of Daisy's parents are college people, cultured, and above the average professionally, economically, and socially. They have two sons, both younger than Daisy. Both are doing excellent school work. Daisy feels the criticism of the older of her brothers when she cannot do the things that he does.

Daisy's complexion is slightly freckled, with pink cheeks when she is under special exertion. She is short in stature, with a short neck, stubby fingers, and thick lips. Her eyes are slightly Mongolian.

Daisy has no tendency toward delinquency whatever. She has a home which is superior from many standpoints, cultural, social, economic, religious, and emotional. She comes to high school tastefully and well dressed, well-groomed, and well cared-for. At school, she is always alone in the halls. In class, she asks for much detailed help from teachers.

While living in the middle west, she participated in the sports of skiing, skating, and sliding, which she enjoyed very much. She enjoys radio programs at home,

especially mystery stories and musical programs. Her hobbies are collecting story book dolls and stamps.

Daisy should be in an opportunity class for mentally retarded where she could take pride in relative accomplishments, make friends, and feel at ease. Daisy is fully aware that she is "different" where she is. One girl did befriend her until the girl's mother intervened. Daisy is often seen at the coke machine alone. Her future is limited to her family. It should hold some self-realization for her beyond the family, but the program of the high school she attends is forced to mold its curriculum around the needs of the normal pupils. More pressure is being put on the high school by townspeople who are interested in sending their sons and daughters to college to eliminate all but college preparatory courses from the high school curriculum. When a high school has to struggle to maintain even its vocational courses for the normal, it is certain that it must remain unable to care adequately for the needs of such pupils as Daisy.

Both of Daisy's parents and the maternal grandmother, who lives with the family, try to encourage the girl to take part in school activities. They talk to her about getting good grades. They supply her with good books in the home library and want her to read and enjoy them. This, for Daisy, is pressure. Because both brothers are meeting normal or superior standards of scholastic accomplishment,

it is very hard for the family to understand Daisy's limitations. The attitude of the parents is protective; the mother has told the school principal of numerous attempts they have made to help Daisy by means of psychiatry, but the family does not want other people to know of this attempt at treatment.

Daisy is fortunate in being so well cared for and protected now. If she insists on independence or if she loses her parents, one wonders what her fate will be.

The Case of John.

A generation ago there were few pupils in high schools who had dull normal ability or less. With the age for school attendance increased under later compulsory school attendance laws and the later and softer pedagogy, this is no longer true. It was not on account of the compulsory school law, however, that John was struggling with all his subjects in his junior year of high school. John insisted to the high school guidance director that he was going to college, yet he was failing in every high school subject which he was taking.

The guidance director requested that John have a Stanford-Binet Test. It was necessary to go to the seven-year level to find John's basal age, although John was seventeen-years-and-seven-months old. He went into the adult level on his vocabulary, but only on his vocabulary.

His mental age was found to be ten-years-and-six-months, which gave him an IQ of 70.

John tried pathetically hard. He seemed to be most conscientious about the mental test and about the English class he was missing while taking the test. (The examiner found later that his English teacher had been spending individual time with him trying to bring his work up to a grade more in keeping with his effort.) The boy's reading was his strongest asset. The special teaching and his heroic efforts had built up his vocabulary although he was able to use it only according to the ability he had. He said "defend" meant "To defend the rights you have like the liberty of the constitution." In explaining a proverb he said, "You must work or else be financially lost in time."

John's parents are farmers, but John does not care for the farm except as he enjoys the beauty of the woods or the quiet of a meadow. He told the guidance director, as he dropped casually into his office, "I went down to the river yesterday." "What did you do?" asked the director. John replied, "I had a good time." The director was able to point out to John through innumerable conferences that college would not be best for him. Through counseling, he was able to help John give up his strenuous efforts to achieve academic success in abstract subjects and to direct him into a light labor job that gave him confidence.

The subnormal boy who can play and is strong physically and who enjoys hard work is much better off than the one who becomes tense and more tense because he feels frustrated with repeated failures in fields in which he cannot succeed. He wants to feel that he is a successful part of his school group and, when he is not, does not know and cannot know why. Boys, like John, and girls too, need counseling from one who likes them and understands their problems. Special education is needed long after such a child leaves the grade school. Vocational guidance should be given John early because he is dull and large. A pupil below normal ability succeeds through the continual guidance and direction of another, whether the direction comes from parents if they have the ability to guide or from teacher or employer. There is also the matter of appearance, and again John serves as an example. He came from home to school neatly and appropriately dressed. John was a large boy with blonde coloring and fairly even features. His general physical appearance was not against him. He did have a severe acne. Under the instruction of his health teacher, he was taught skin care which greatly improved the condition. It was John's tenseness and lack of success that gave him an apologetic posture, drooping shoulders, forward-thrust head, and unrelaxed eyes. Here is the area in which a special class could have done most for this boy. In a group working at his own level, among

whom John had a superior vocabulary, he could have felt not only equality with others but on occasions he could excel. Posture is the result of habit, but habit results from inward feeling. If the inner feeling can be changed, there is a possibility of changing the habit pattern. John may never meet with social success. He has never had the opportunity to work in a group of his equals. It is probable, because he has been counseled by a very understanding high school principal and has been helped by a splendid English teacher who has given him extra time, that he will graduate from high school with a special diploma. Since he has been guided away from college entrance, there are vocational fields that will open to him in which he can succeed.

The Case of Lewis.

Lewis came to the first grade in this school system in the autumn of 1939. Because he seemed very immature and had poor muscular coordination, his teacher advised that he remain at home another year. His mother said that Lewis had had rickets when he was two years old and Bright's Disease when he was three. She thought that this might account for his immaturity. Lewis actually entered the first grade in September of 1940. He was still quite immature, physically and mentally. He remained in school, but made very little progress and was retained

in the first grade for a second year.

During 1941-1942, he made a noticeable improvement. He learned to write his name and to read at the level of an average first grader. He still did not learn to work independently. His concentration was very short. He was transferred to the second grade during this year and was quite happy but made little, if any, progress. He was sent on with his group at the end of the year because he was large for his age.

In the third grade, he accomplished nothing. He sat in the back of the room away from the other children because he constantly bothered them. The health observations by his teacher at that time, 1943-1944, indicated that Lewis was a persistent mouth-breather and had recurrent colds, poor muscular coordination, emotional disturbances, twitching movements, and general nervous tension. He made excessive use of the lavatory.

During his going-to-school period, Lewis was given three Stanford-Binet Tests at two-year intervals. On the first, he scored 71; on the second, 76; and on third, 68 IQ. He was taken out of school with the request that his parents confer with the superintendent of the Fairview Home for the Feebleminded about his institutionalization. They were unwilling to do this. They did not want the boy taken away from home. There were three siblings, a brother and two sisters younger than Lewis. The three were normal,

doing satisfactory work in school, and were kind and considerate of Lewis always. The parents felt there was more for him in life than institutionalization. They took him to the Doernbecker Hospital where he was thoroughly checked, physically and mentally, and returned home after a week. The electroencephalogram showed indication of idiopathic epilepsy. I think this was not told to the parents, but they were told that further hospitalization would not help the boy.

As far as the school system was concerned, Lewis was dropped for two years. Then, a new worker in special education came into the system, and Lewis' mother sought her out. The mother felt that Lewis had improved so much physically during his two years at home, that he should be in school. After careful investigation of all phases of the case and during which the special teacher worked with Lewis at home over a six-month period, it was decided not to return him to school. He showed both tenseness and nervousness when taking the hearing tests with a group of children. Though he could write numbers, it was impossible for him to keep up with the writing of numbers given in the test, although there was sufficient evidence that he heard them. It seemed impossible for Lewis to establish independent work habits. His muscular coordination remained poor. His memory was entirely rote memory. His reading was poor. He read at the second-grade level at the

chronological age of thirteen, even after much special assistance. If shown six objects and asked how many one more would be, Lewis would start counting from the first object and sometimes skip the added one. He knew that a thirteen-year-old boy is usually in the seventh grade. When asked what grade he was in by someone who did not know his circumstances, he would reply, "Seventh." If asked why he was not in school, he would reply, "I was in the hospital. There is something pressing on my brain, but I can't be operated on." In this way, he avoided embarrassment.

He was very happy about the arrival of a baby brother, but was in doubt as to how many that made in the family. His home was comfortable, built by the father in a part of town near the father's factory work. Both parents had been graduated from the local grade schools, and the mother had had three years of high school. Lewis, while sharing the family's general physical characteristics, was stooped--as he grew quite tall by the age of thirteen. He cared for and rode a horse. He operated and rode a motor skooter in his immediate neighborhood. His mother was careful and watchful that he did not go too far from home or get into company that would be a bad influence for him. He knew about a boy in the neighborhood who was involved in theft before the local newspaper wrote up the incident. Lewis said the boy had told him. Perhaps

the neighbor boy thought, and correctly too, that even if Lewis told on him, Lewis would not be believed. Lewis planned to make his living as a fisherman, he said. It may be possible for him to earn under the kindly supervision of his family.

The Case of Jim.

Jim lives with his parents. His father is employed as a clerk in a drug store, after having graduated from a state college. Jim's mother now devotes her time to homemaking and community activities. She taught for a few years after being graduated from normal school. Jim's home is in the most desirable part of town. It is substantial and attractive and, in fact, is one of the better homes of Jim's community.

When Jim was tested in preparation for the Child Guidance Clinic in an attempt to help him make better adjustment in a first grade classroom, his attention was very hard to hold. Jim could not sit still. He appeared over-confident, but his experience seemed very meager and he was socially immature for his age. His chronological age at that time was six-years-and-eleven-months; his mental age was five-years-and-three-months; and his IQ was 72 on the Stanford-Binet Test.

In the test given the following year, he asked if he were getting the answers right. It proved to be very

difficult to get the boy to try his utmost, especially when the questions were difficult for him. The examiner believed that he was able to measure all of the boy's ability, however. At that time, Jim's chronological age was seven-years-and-nine-months; his mental age five-years-and-eight-months; and his IQ was 73 on the Stanford-Binet Test.

At the end of his first year in school, his teacher wrote: "Jim is going into the second grade on trial, since his work has not been up to 'par.' Jim has made very good progress, considering his lack of maturity at the beginning of the year. Before he came to school, he had no desire to look at books or to color pictures. His muscular coordination was very bad, and he had great difficulty in drawing the simplest pictures with circles, squares, lines, etc. However, he has learned to like school and wanted to do the things other children were doing, and gradually began trying to do them. With the aid of the clinic teacher for an hour once a week, and lots of encouragement at home and school he has learned to read, write, and count fairly well. His mother will continue to work with him this summer, and we feel he will be able to do average work in the second grade next fall. We feel also, that because of his size and his social adjustment with this group of children, it would be best for him to be in the second grade."

It was necessary to retain Jim in the second grade for two years. At the end of that time, his teacher made these comments: "Special abilities--music; Accomplishments--language and story telling; Points which need improvement--meaning of numbers; Out-of-school activities--Cub Scouts."

Continuing in his desire to do what other children did, Jim came in voluntarily to re-take a Gates Reading Test which was given to a small group of late-comers to his third grade after the class had taken the test. Jim marked all of the items in the test, and missed most of them. Aside from having a little trouble with certain vowels in his speech and not enunciating distinctly, Jim has a normal health record. His speech has improved through training.

Jim's sixth grade teacher requested that another Stanford-Binet test be given him. She felt that he was learning nothing and the test was her reassurance that the fault was not with her teaching. At the age of thirteen years, Jim's mental age was eight-years-and-ten-months, giving him an IQ of 68. There remained evidence of lack of coordination. Jim could not copy a diamond accurately enough to score on three attempts.

The school is meeting Jim's needs only fairly well. A principal problem is to get his parents to accept his mental deficiency instead of continuing to push him along academic lines. Neither the home nor the school is giving

him vocational guidance about occupations which he may be able to perform successfully. His emotional, character, and personality training are all excellent. When his actual mental ability is accepted, it is probable that he will be guided into some occupation which he can do, and that the family supervision over him will be continued successfully.

The Case of Betsy.

In a hovel-like home the census clerk found Betsy, crowded in with an unstable, ignorant, and shiftless mother, a father who was little better, and four sickly smaller children.

At the end of Betsy's first year in school, her teacher had left this note in her record: "The principal and I both feel that Betsy and her family present a problem which must be shared by the community. Records show Betsy's ability to be meager, and, as she grows older, some form of special school may be necessary."

Her IQ on a Stanford-Binet test in 1940 was found to be 74. When she was given the California Test of Mental Maturity in 1945 with her classmates, her IQ was found as 69. Her school history is best told by teachers' notes left in her guidance folder: "1941, Grade 1; Second year in grade, quiet, not in attendance after Christmas due to scarlet fever in the family, diet poor, health

unsatisfactory; 1942, Grade 2; Work too difficult for her, enjoys art, quiet, does not play often with others, cleanliness could be stressed; 1943, Grade 2: Work is too hard, but she tries; very quiet, attendance irregular; 1944, Grade 3: Cannot write any spelling word from memory, cannot write last name, likes to draw; sluggish, acts indifferent to any situation, is absent a great deal of the time, her sister is her only 'pal,' mother sends excuses that show lack of organization at home, not clean; 1945, Grade 3: Was advanced to the fourth grade, but remained in the third to be with her sister, made very little progress during year; 1946, Grade 4: Very limited ability, shows some improvement in reading, quiet, very timid, frequent colds; moved away from community."

Betsy's next younger sibling, her sister, showed an IQ of 94 on the Stanford-Binet Test; but did better school work. She had much the same general characteristics as Betsy, such as shyness, sluggishness, and irregular attendance. The sister repeated the third grade, thus gaining enough skill to become more nearly a part of her group. She was happy in school, and played with other children. Coming from the extremely poor home that they did, both Betsy and her sister gained what happiness they had from sympathetic and understanding teachers in the public schools. The family moved to the country. Whether it was work conditions for the father or possibly the

girls' comfort in the town school is not known, but the family was back within a year. The girls were still serious and willing to try, but unable to cope with the competition in the average classroom.

The sad part of the present organization of social service is that usually nothing is done in the earlier stages of such cases that should be done until the child gets into delinquency or other difficulties. There is no history of delinquency in Betsy's family, but there is a history of low ability, economic inadequacy, lack of vigor, lack of home organization, cleanliness, and hope.

The Case of Orin.

Orin, the second child in a large family, was tested when he had a chronological age of nine-years-and-six-months and a mental age of seven years. His IQ was 74. Orin was very shy, but willing, during the test. He appeared to be a little hard-of-hearing, and not at all healthy. The boy was unable to read even the simplest words. He seemed worried and unhappy over the test situation. He missed eight subtests by small margins which, if passed, would have given him an IQ of 88.

Partly because of the extremely poor work Orin was doing in school, partly because of his generally poor physical condition, the public school made the recommendation to his parents that he be sent to the Oregon State

School for the Feeble-minded at Salem, and they concurred. Orin was ten when he went to the school at the institution for the feeble-minded, young enough that he soon fit into the society of those of his own mental level, as it is only those who have sufficient intelligence to profit by schooling that attend the classes. He never became a fluent reader but he did learn enough words to pick out articles from a grocery list and read the common signs along roads and in towns. He lived in the institution for four years, going home for part of each summer vacation. When he was felt to be as well-trained as the Fairview School could make him, he was dismissed at the age of fourteen to return to his family. Orin is exceptional in this family. His even disposition and his acceptance of circumstances have enabled him to make the most of his opportunity for training when away at school. It is Orin who has been the mainstay of the family. While the eldest boy who was well-liked and who fitted into the normal program at school, was away in service, it was Orin's earnings which kept the family sheltered and fed.

This school's file has records of low ability for four siblings in this one family. The school has little record of the father, except that he was a laborer, inclined to chide his children when they did not succeed in school. He and the mother were happy together; this contributed greatly to the emotional security of the

children, helping them to do as well as they have in a changing society of war and post-war years in a town that has found it difficult to keep up with a mushroom growth.

Notes from the Stanford-Binet Tests of these children show slight deviations of ability among the siblings, and give a good summary of characteristics of children at this mental level. All four tests were Stanford-Binet Tests, given within a two-months period in 1938.

Following the older boy and Orin were four girls. Lizzie, with a chronological age of twelve-years-and-two-months and a mental age of eight-years-and-eight-months, had an IQ of 71. Lizzie was a very sociable girl. Perhaps her friendliness set the pattern of friendliness for her younger sisters. Lizzie appeared to be very bright. She entered into each task vigorously, was rather self-confident, but proved to be active rather than intelligent. It was hard for the examiner to believe that the girl was twelve years old as she was small for her age and appeared younger than she was. Her conversation would have been satisfactory in a child of seven or eight years of age. Lizzie's affectionate nature was not satisfied in her crowded family circle. After Pearl Harbor, when the first young soldiers came for early training in the vicinity, Lizzie's "brightness" proved very attractive to them. Although the looks of the little sisters were against them,

the loneliness and freedom from restraint of the soldiers caught up even these little girls in their net. The lure of bright buttons on tailored uniforms and attention which they had never known before in their drab lives led them into patterns of behavior that were repeated thousands and thousands of times over the Nation in 1940-1945. Lizzie married one of the young soldiers a few months before her baby was born. When he returned from overseas, he came to see her, stayed for a few months and was gone. He got a divorce. Lizzie remained in the family home where her child was cared for two years. She worked as a waitress during this period, then met and married a returned soldier ten years her senior. Her extrovert personality offset her low ability to the extent that she is able to succeed as a homemaker with the help of her present husband. Her sisters have not fared as well as Lizzie.

Sue was eight-years-and-ten-months old when she had her Stanford-Binet Test. Her mental age was found to be six-years-and-eight-months. Her IQ was 75. Sue seemed willing and interested during the test, but she had definitely limited ability. When she could not give correct answers, she wandered off mentally and assigned household duties to no one in particular. She would say, "Now you make the bed. You must scrub the floor, and get it nice and clean. She has to sweep the bedroom." This would have continued indefinitely, if she had not been stopped by the

tester. It was considered an evidence of worry in trying to manage household responsibilities far beyond her years.

Sarah's chronological age was six-years-and-six-months. Her mental age was five-years-and-six-months, and her IQ 85. During the test, Sarah had the tendency to give one-word responses for all answers that she did not know, whether right or wrong. She missed the response to pictures at the six year level because she gave only one-word responses and did not give ideas. She excelled in counting. She told the tester that her brother went away to school. She seemed rather pleased about it. She liked her brother, and acted as though she thought he had had a happy privilege in going to the State School for the Feebleminded.

None of the girls had had any special education fitted to their limited abilities. Their mother taught them to work at home. The mother's jovial disposition and "don't care" attitude contributed to the girls' smiling and friendly ways.

Wherever special attention is given to the feeble-minded and they are given the training that is fitted to their defective abilities, they frequently become useful members of society--happy and contented and efficient to the extent of their capabilities. Orin is an excellent example of this. For some time, he has been working as a sweeper in a large grocery store. At this he succeeds and

probably will succeed as long as he can work for his present employer who understands him and his limitations. He puts articles on grocery shelves from lists he has written. He has shown his list to a teacher he had in the second grade in public school saying, "You taught me to write." This teacher questions whether there is a stigma attached to the fact that he has been in a School for the Feeble-minded. The writer of this thesis feels that his training in the school is what made it possible for him to succeed with his present job. Orin is a good-looking, tall young man. He is earning his living, and is leading a socially and economically acceptable life. How long he will continue to do so without special guidance and encouragement is problematic.

The Case of Harry.

The following is a case from a home of high quality in every way and one in which the parents are always compatible. They wanted their children when they were born, and worked with them as they grew, requiring completed tasks according to each individual's maturity and ability. The mother had college training, but the father did not although he has good native ability. The mother has worked outside of the home in a semi-professional capacity approximately six months a year for several years. The father has worked at skilled labor.

When Harry was referred by school authorities for a Stanford-Binet Intelligence Test, he appeared to be an intelligent boy but, as test questions approaching his age of eleven-years-and-four-months were asked, he could not give the right answers, although he did appear to be very much interested. His IQ was 74 or borderline between feeble-mindedness and normality. A borderline case of feeble-mindedness is also defined as one in which the test shows the child to be from two to three years retarded in mental age in relation to chronological age or three years retarded in school when he has had the usual opportunities in most or all ways. This boy's mental age was eight-years-and-four-months, or three years behind his chronological age.

Where borderline intelligence is indicated, no important decision should be based on the results of one test or of one tester alone. It is desirable to supplement such data with those of others. In the case of Harry, a second Stanford-Binet test was given when his chronological age was thirteen-years-and-two-months. At that time, his mental age was ten-years-and-six-months and his IQ was found to be 80. In the second test interview, Harry told the examiner that he felt lost as there was no one at home with whom he could play. He liked carpentry, but evidently there was no encouragement along those lines at home. He said his mother had told him that, if he was not a good boy,

he would end up in the reform school. He said he was told to be polite and never to act up in front of company. To a boy of borderline intelligence, this method of handling can be very worrying and repressive.

During the two-year interval between the Binet tests, Harry was referred to the school's Child Guidance Clinic for emotionality. The psychiatrist found that:

"This child cannot recall visually the details of even the instructor. On being shown a picture, he counts objects. He has no memory for color or form. He has apparently been under a great deal of stress on account of this difficulty and developed rather a negative attitude. Tells me he is 'dumb'; has been given no particular care, and shows considerable attention in regard to it. When the cause of his problem is explained he becomes very much interested in it and shows marked signs of relief. It is probable that he will be an unusually difficult case because of the extreme lack of visual association and organization. Interestingly enough the mother tells me that his father didn't learn to read until he was in the eighth grade and that the grandfather, who was a doctor, had difficulty with reading and spelling all the way through college, indicating that the ordinary concept is that it is of a hereditary pattern."

The psychiatrist recommended that the boy should be transferred to the special class which was used in these

schools at the time for pupils who were having difficulty with their regular classroom adjustment. The psychiatrist believed that the boy's security would return very rapidly with stimulation, but that he should not be held to detail in spelling because of the possibility that the boy might never learn to spell well. Three months later Harry was again seen by the visiting psychiatrist who left this report:

"This case will take a long period of training. I find that the clinic teacher has been able to make him concentrate in accuracy and attempt words. He still feels very discouraged about his reading and does not think he will ever know how. He has tried at times to read the funny papers, but gives it up. I feel that his grasp is sufficient that he himself will be able to see progress before very long and feel that he should have continued work the rest of the year. If the special teacher feels he is ready for it, suggest that some reading be picked out for him this summer."

Seven months later the Clinic closed Harry's case with these suggestions from the psychiatrist:

"This boy is in a different school placement and temporarily appears to be doing quite well. He has learned how to read some, although he is still way behind. I do not feel that there is any more that the clinic can do for this boy but that he will have to be continually passed on

from grade to grade until he is old enough so he can be released from school. There is a possibility that a better social adjustment might be made this year since it seems that there was quite an antagonism between himself and certain boys in the former school with whom he fought. So far there are no such antagonisms in his present situation. The mother has suggested that she would like to employ a private tutor in reading who would take him out of school for a period every day and work with him. I feel that if the mother wishes to do this it should be allowed."

When Harry was given his second Binet test, the tester found him to appear to be intelligent. It has been shown that the person without special training who thinks that he can recognize dullness or feeble-mindedness from the appearance of a person is not to be trusted; neither is the medical examiner or the school physician who has had little experience with the evidences of feeble-mindedness and therefore hunts for stigmata of degeneration or other physical peculiarities that sometimes go with feeble-mindedness. Children with mentalities below average are found who are physically strong and sometimes have very attractive features and personalities. At school, an awkward and illy-developed child may be considered to be very low in the scale of mental development when, in reality, he is gifted.

As Harry was growing into young manhood, he could be termed handsome, with a strong and erect body, even features, and striking coloring. Harry liked one junior high school teacher especially well, and stayed in school until this man went to war. Then, he dropped out of the ninth grade and went to work in a local factory. His earnings were high because of the times, and were spent entirely on himself for clothing and other things that appealed to him through his intense interest in horse-back riding. Early tendencies which neighbors feared might lead to sex delinquencies, disappeared as the boy became more secure through his own activity and later work success; but his future is far from secure socially and economically unless he has fairly close and competent guidance from some source.

The Case of Ted.

Ted's background is poor from the intellectual standpoint. Neither his mother nor father had gone far in grade school. The father works at a planing mill, and earns good wages during inflated times. He is of English-German ancestry. The mother cares for the home and works outside as a cook. Her ancestry is French and Irish. She gave birth to a daughter when she was seventeen. This daughter is now married. There is no available record of the family life at the earlier period.

Ted has a sister two years older than he who presents a pleasantly neat appearance. Their paternal grandmother, who pays extended visits to the family, compares Ted with the sister in her attempt to encourage him to do better school work. The sister shows an IQ of 35 on a Stanford-Binet Test.

The school guidance director attempted to test Ted when he was seven-years-and-three-months old; but was unable to get an acceptable rating as the boy was laggard, and tired very easily. He was extremely hard to understand on account of his severe articulatory defect. It was his tendency to make the same sound for everything. A grunt was many times his only answer.

He was refused entrance into school after a two-day trial because of his incoordinated physical behavior. He fell from his chair frequently, played on the floor, and showed lack of any response to simple directions. The school district did provide a home teacher for Ted during the spring and summer of 1944. Teaching Ted was slow and laborious, but his exceptionally patient and well-trained teacher accomplished much with his speech, improved his general behavior, and was able to teach him twenty words which he remembered well enough to do the simplest reading for her. She had accomplished enough that it became possible to give the boy a Stanford-Binet Test in two sittings. It was necessary to test him in his home under

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conditions which might have decreased the validity of the test score to some extent. However, his mental age of five-years-and-eleven-months compared favorably with the mental age derived by a Detroit Intelligence Test used the previous summer. His IQ was 74; his chronological age, eight years.

He was placed in school under an excellent teacher who found him so difficult to have in the room that his attendance was restricted to the afternoon. He became less fatigued under this program, and gained much in control of his muscular activities. Contacts with the other children improved his behavior, also. A new child coming into the room questioned, "What is that big boy doing here?" Generally the children came to accept him, not as one of them, because he could not do the work of first grade, but more as a part of their room. Ted was advanced into the second grade with the group of children who were used to him.

At nine years of age he was well developed physically--with strong muscles, an erect carriage, and usually a well-cared-for appearance. He was again given a Stanford-Binet Test, in his ninth year by the examiner of the previous year. The boy's rote counting and number concept both stopped at the number "5." He had almost no reading ability. His mental age was six-years-and-three-months, and his IQ was 66. On another Detroit Intelligence Test,

given four months previously to the second Binet, his IQ was 68.

Ted's playground behavior had changed during his year in school from a loud, boisterous, and trouble-making pattern into that of a docile but unwanted boy. When he came for the afternoon session instead of joining the other children on the playground, he began to come into his room and sit alone quietly until one o'clock. His classmates tried to encourage him, admiring his handwork when the teacher showed it to the class. One day a child asked the teacher, "Why doesn't Ted write spelling words as we do?" His attempts resulted in pencil scratches such as a three-year old child might make.

There seemed so little for Ted at school. He does have an interest in farming. The first words he said intelligibly in his first successful intelligence test were about his pony on the farm the family had left in another state. Plans for regular training in the handling of tools were not carried out by the family. Ted had freedom to run the streets on foot or on his bicycle, though he was often seen uptown walking with his sister. Sometimes he had to be told the way home from school. He argued with children along the way. The school's problem under current local conditions was whether or not to refuse him admission.

About the time school opened in the fall, the County Health Unit called the School Guidance Office for information about Ted. The parents had been advised by the School Nurse to apply for commitment of Ted to the Fairview Home for the Feeble-minded at Salem. This they did; Ted was committed and his name placed on a waiting list. His home was a good average American home in a small growing city. Both parents worked to provide the home income. While Ted was waiting for a place in the Fairview Home, his mother paid a home teacher well for instructing Ted an hour each day. In five months from the time of his commitment, Ted went to Fairview. His family will pay for his care. There he will be educated in small classes to the extent of his individual ability. He will be trained to work. Ted should be a fairly good farmer. He has grown sturdy and muscular. He will feel that he "belongs" in a group more like himself. His future looks far brighter since he has gone to a school planned for his needs where there is a farm and farm animals and supervision. Running the streets would in all probability have led Ted into delinquency.

The Case of Jane.

Jane was referred to Child Guidance Clinic by her room-teacher who felt that Jane's speech problem might be causing her poor school work. The contrary is more often

true. Because of the slower development of the low-ability child, the speech area of the brain is also often slower in developing, and habits of defective speech are set up which are difficult to correct.

In the Stanford-Binet Test given to Jane in 1941 when she was ten-years-and-ten-months old, her mental age was eight-years-and-two-months, giving her an IQ of 75. She was unable to reproduce any part of the designs in the test from memory. Her reading and reasoning were very poor, although she succeeded in reorganizing one of the hardest of the mixed sentences. Her vocabulary was good. She could not recognize the points of the verbal absurdities. Her memory for numbers was very good, however.

Her parents had little knowledge of the child's speech problem except that Jane had always had difficulty. Both parents were willing for the child to have special help and were willing to cooperate as best they could. Theirs was a normal family life. The father, aged 43, provided a good income doing construction work on county roads. He had had a high school education. The mother, aged 42, was very neat and attractive. She was interested in her children and her home. She took part in P.T.A., besides working in other local organizations. The children were congenial. The brother, at sixteen, was a well-adjusted high school boy. The sister older than Jane did average school work. This sister at times became somewhat

irritated with Jane because of her slowness, but usually was quite understanding.

Jane had always been slow and was very unhappy at the time she began school. Her mother stated that Jane had become more insecure since she had begun school, partly she believed, because Jane's cousin started school at the same time and had done much better work. The cousin was very mature and advanced in her school work, and teased Jane by making fun of her poor reading and her speech handicap. The mother was in the hospital during most of this trying time.

Jane liked to cook, sew, and play house. She was very shy and retiring. She had few playmates, never took the lead, and seldom played on the school grounds. She was also frail, and had little endurance.

Jane always handed in her school work, but it was of poor construction. She did her very best and was willing to take work home. Her muscular coordination was poor. Jane did well in arithmetic processes, but could not apply the processes to problem solving. She was very poor in spelling and reading, and had little "spelling sense." She did not seem able to attack unfamiliar words in reading. She read slowly, with very little thought content.

At the Child Guidance Clinic, Jane's speech difficulty was diagnosed as "multiple stammering" and "flat-tongue articulation." As soon as she was asked to put her

tongue up when pronouncing the "l" sounds, and shown how to do this, she responded surprisingly fast.

The following recommendations for treatment were given at the Clinic by the late Dr. R. Margaret Ringer:

"Have a physical examination run on this child, especially a check-up on adenoids. Give a hearing test. Child should take cod liver oil, if possible, and plenty of fresh air. Mother should help child at home to improve her muscle coordination and help her overcome her self-consciousness.

"Special teacher will work with child on her speech and help her adjust herself to the group, also work out a program with her class-room teacher.

"This child needs daily work to teach her up-tongue articulation, more or less broadening into a combined reading, writing, speaking method. With this, the child should gain confidence in herself and in her spelling and reading ability. She should be praised at school before the whole class group. Small assignments should be given to her, such as cleaning the blackboards or carrying back books."

This case was closed in 1942 when the family moved out of the clinic area into the country. Since Oregon now has specialists in the fields of vision, hearing, speech, and crippled conditions who visit schools on a state-wide basis, the problems of children with these

defects are met in separate educational clinics or in conference with specialists. The Child Guidance Clinic now serves the maladjusted, who are seen by one of a number of psychiatrists working in the nine clinics in the state, from the Oregon Medical School at Portland. Through this present Oregon set-up a child like Jane would have been receiving speech corrective instruction in the first grade or soon after entering an Oregon School from a special teacher. Her education will of necessity be limited to what she is capable of doing. Through her interest, she could have been a domestic if not frail. Jane is one of the marginal ones--too able to be institutionalized and too weak to keep up with the world outside.

The Case of Nick.

Nick was sent to Woodburn, the State Training School for Boys, in the winter of 1947. He is an example of truancy which led to delinquency. His home background contributed directly to his insecurity. His father found it difficult to support his family of seven children on the income of a common laborer. Nick's mother, a pretty, trim, young-looking woman worked, too. She was appropriately and becomingly dressed at the time of her interview at an educational clinic attended by Nick's younger sister for speech correction. The mother had gone to the eleventh grade in school in Oklahoma. She had left her home, her

husband, and her children for a time, with another man. Shortly after her return, Nick began to be truant from school. After an absence, he usually appeared with an excuse that he had been sick. If he was absent and the school principal went to the home, usually no one was there. If an older sister was home, neither she nor the mother in the turkey-picking shed knew where to find Nick. When a truancy charge was filed and the parents had to appear in court, Nick's school attendance improved for a time, then dropped back to irregularity.

Nick was a willing but very poor worker in his classroom. He was quiet there, but a troublemaker on the playground during the period of his early truancy. He was rough and not accepted well by his classmates. He was considered more of a behavior problem than an ability problem, so an individual test was not requested for him as early as it might have been--with benefit to him. A Stanford-Binet Test was given Nick two years later, when he was still absent from school a great deal, and a show-off when with his contemporaries. In the test situation, he presented a different picture--that of a thin, nervous, insecure lad. He showed use of knowledge which he had learned on his own outside of school. His responses to questions on verbal absurdities and problem situations were very good. He had almost no use of the basic classroom skills such as reading, spelling, or

using numbers. He defined "pity" as abusing people, and "obedience" as beat. At the time of his test, Nick was eleven-years-and-ten-months old chronologically, with a mental age of nine-years-and-two-months. This showed an IQ of 77. Nick said in all sincerity that he liked his teacher. It is rather characteristic of border-line pupils, that they do like a teacher very much. The school teacher often gives them an outlet for their emotional need for someone they can love.

At this stage of Nick's experience, his school success continued to lessen. Through absence and lack of application even the simplest assignments in the classroom were far above Nick's ability to grasp, yet outside of school Nick's wiryness, his insight into situations and quick way of handling them to his own advantage, which he had developed through holding his own in a quarreling and abusive home atmosphere, made him successful in the small group of young boys which became Nick's gang. Petty thievery was the outgrowth of earlier mischief-making when neither school nor home knew Nick's whereabouts.

The parents came to realize that someone had to be at home. The mother quit outside work; the family moved onto a small acreage where it was possible to produce part of the family's food supply and where the children could have parental supervision and where there would be more things for them to do. The move was too

late to help Nick. He had previously been paroled to his parents for petty larceny. The next offense sent him to the State Training School for Boys.

A great deal might have been accomplished through a constructive home environment and a special class at school where Nick could have learned to feel success in a constructive way through ability to compete scholastically with his mental equals. This was shown by his experience at the State Training School. While the state school at Woodburn has pupils of various abilities, the boys are put in classes at their own levels. Nick was kept the minimum length of time, by reason of the merit system in use there. His stealing seemed to be for the excitement and prestige it brought him in the small group with which he associated rather than for profit. Back in his rural home, it is hoped that his family can become stable enough on a farm that Nick will find his place as one of the family and can apply the knowledge he learned at the State Training School to become of real value in the management of the farm and its products.

It adds to the over-all picture of this family to consider the other children, illustrating that Nick's troubles were not unique where there is instability and discord. There is not a school test record in the community studied, of the three oldest children. The history of the younger four is one of low ability, frustrations,

and fighting at home and at school. In the order of the children's ages, there are records of these Stanford-Binet scores: boy, 67 IQ; girl, 86 IQ; Nick, 77 IQ; and a girl 68 IQ. The older boy was a school problem because of his learning difficulties, poor health, and irregular attendance. The older girl was capable of doing fairly good school work, but she offered a discipline problem, going so far in a fit of anger as to strike her sixth-grade teacher. She was unmanageable at home, and dropped out of school at an early age. The youngest girl was happy in school, working along as if she were actually learning as the other children in her third grade were. She could not spell--try as hard as she might to learn words. There was very slight memory carry-over. While the girl did respond quite readily to speech correction for her lisp, she could not succeed with her reading or any subject requiring reasoning. Because of the instability within this family, the tendency to low ability, the fact that the parents early lost control of their children through their own instability and economic insecurity, it seems mere chance as to which sibling may find a fairly satisfactory place in society and which may become a full burden on society either through public welfare or institutions. The outlook is not good.

The Case of Fay.

When Fay was given an intelligence test in the junior high school at the request of her home-room teacher, she had been in this system one month. Her mental age was found to be twelve-years-and-five-months; her chronological age was sixteen-years-and-two-months; and her IQ 77 on the 1937 revision of the Stanford-Binet Scale. This places her near the bottom of the dull normal group but out of the definitely feeble-minded group except that she is so close to the dividing line of IQ 75 that she is in the borderline group. Another test on a day when she did not do so well might place her in the upper moron group, although she would probably still be within the borderline group.

Her whole physical and mental picture was one of dejection, privation, and frustration. Her father and mother had separated when she was one or two years of age. She had lived with one and then the other parent, moving about a great deal when she was in school. Her father had died when she was fourteen. Then, she came west to be with her mother, who was in her third marriage. The large local school frightened her. She dreaded gymnasium class where, in her words, 'the kids laughed at me because I didn't know how to play.' Fay's shoulders were stooped and, as she talked, an odd glassy light would come into her eyes.

Fay liked her homemaking class, the only class in

which she could feel a measure of success. Her teacher took a special interest in her and encouraged a girl who could help Fay to be a friend to her. This saved Fay from her lonely vigil at the teacher's door before classes and at noon. Before the constructive work undertaken with Fay had much chance, she had to move away with her mother and half-sister. The mother herself was pathetic, worried, insecure, and unhappy. The half-sister was more attractive than Fay. This intensified the mother's favoring of the younger girl. Fay was scolded, blamed for what she could not help, told there was not enough money for her school needs and generally made to feel that she was unwelcome in the home. She showed undernourishment and other results of inadequate income.

Fay has reached the peak of her school education unless she can be stationary for a long enough period of time in a city which has classes for pupils of her ability and interests. Her social future seems very dark, as her home is poor and inadequate. Her extremely withdrawn personality makes it hard for her to find friends. Fay has not the physical stamina to do work of a strenuous nature, and she has not the mental power to succeed through learning from books. If she could be placed where she felt secure and sure of friendship and understanding, her neatness in hand-work and her liking for color and an interesting use of it in her own simple costumes, might enable her to earn

enough to meet at least partially her needs and reasonable wants in life.

The Case of Margaret.

In contrast with Fay, yet only two points above her in IQ score, is Margaret. Through consideration of Margaret in a faculty guidance meeting at the high school, she was given a Stanford-Binet Intelligence Test. Her chronological age at the time was seventeen-years-and-ten-months and her mental age was eleven-years-and-ten-months. Her IQ was 79, or low dull normal.

Margaret was a very pretty girl with careful and becoming make-up. Her heavy dark brown hair was curled; and rather elaborately, though becomingly, dressed. She wore an appropriate skirt and black sweater costume which would have looked well on the page of a fashion magazine for teen-agers. She was plump in a pleasing way, with snapping dark eyes and a personality which radiated vitality and fun and friendliness.

She had sisters, the three girls being a year apart in school. There was also a four-year old brother who received loving attention from the older children. Margaret realized that her mother's counsel to her was wise and helpful. She welcomed encouragement from her father in her school training and future plans for work in a telephone office.

The home was a good substantial farm home, with unity and cooperation among the family members. It would be hard to believe that Margaret could be less than an average school girl in general accomplishment without knowing the results of her test or seeing her grade card with its low or failing grades in the majority. Art was the exception. Her grades were high in art, in keeping with her entire appearance and use of her hands. Margaret was interested, too, in the homemaking class, and had taken all of the courses in this subject which were offered, though her school grades in this field were not all passing. Even in the Stanford-Binet Test, Margaret gave the tester the feeling that she could score even when she failed to do so. About all the school can do for Margaret is guide her into courses which will be most useful to her and in which she has greatest chance for success. As Margaret will soon be eighteen, a work situation or possibly a part-time job supplemented by part-time school classes will be of most value to her. The local school system has studied such a program and, though the work supervision from school is better suited to the average or above-average pupil, it is most needed by both pupils and society for the sub-average pupil.

The future for Margaret does not look discouraging. She may not even work long, but probably will marry young and follow much the pattern of her mother--interested,

happy, and active although there is less chance of her succeeding as well as her mother on account of her lower intelligence and probably lower stability. Much will depend upon the type of young man to whom she is married and upon her remaining in a situation which does not demand the use of more ability than she has.

The Case of James.

James came to this school system, an eleven-year-old boy in the fourth grade. He had attended several different schools in which conscientious teachers had spent extra time with him without getting the desired results. He could not write legibly, read with enough word pronunciation or understanding to make any score on the Gates Basic Reading Test, nor could he spell the most common words. He worked hard, but accomplished nothing. His room-teacher referred him to the school tester, who found his IQ to be 80 and his mental age to be nine years. The test showed poor comprehension and poor auditory memory, fair organization of the knowledge he had, good visual memory, and good reasoning. James' vocabulary was that of a seven-year-old child. His terribly bitten fingernails showed nervous tension and insecurity. He talked with the tester of visiting friends and told of ways in which the girl who now sat back of him in school bothered him, but stated that he had liked a girl in his prior fourth grade.

The school knows nothing of James' own father. His step-father is busy cooking in the cafe he owns. The mother devotes most of her time to the home and keeps it in an attractive and comfortable condition. She helps in her husband's cafe when the need for extra help is urgent. James can depend on his home, including his mother and step-father. That eliminates one frequent and most important cause of a child's insecurity, but James has numerous others.

James' mother thinks he can learn if someone can find the real reason for his not learning. She is a parent who refused to accept the fact of low mentality in her child. In the case of James, this is most fortunate.

There is a type of individual whose hearing may be considered normal on an ordinary auditory room-screening test, yet whose hearing difficulty may be in certain tonal or sound frequencies which prevent him from hearing certain sounds and combinations of sounds. A child with such a hearing defect may have trouble with spelling, reading, writing, or speech. He surely cannot execute what he fails to hear. On James' health card at school, his hearing is marked normal. If James' mother had not persisted, it would not have been discovered that he has such an auditory defect. With a definite hearing lack determined, the school does have a program for James. He can be certified to the State Department of Public

Instruction as a physically handicapped child, fitted with a hearing aid if he needs one, given special auditory and supplementary training by the special teacher to distinguish sounds he possibly has never heard, and begin to build up the learning he has had to miss for so many years because the schools are from necessity planned for the average child.

James needs to be taught something he can learn, but he can not learn auditorally what he cannot hear. His future school program will have to be determined by his new ability to learn after his hearing defect has been compensated for. The Stanford-Binet Test showed that he has good coordination, his fingers are agile in manipulating objects, and he is able to reproduce what he has understood. In the learning processes which call largely for motor responses there is little demand made upon the intellect when the motor habit has once been organized in the nervous system. His training may have to be principally in some repetitive muscular skill. This school has no program for James if his ability proves to be only border-line ability. In the meantime, he feels out of place in classes with younger children. He is under pressure at home for not succeeding at school. He has spent many hours with teachers trying to bring him up to grade, but teachers without understanding that he has a hearing defect. This may or may not be considerably changed after his hearing is corrected and he has had a new chance to learn what he has missed before.

James has had no tendency toward mischief or delinquency. He may not be classified as dull when he begins to hear fully. His is a different problem from that of the strictly mentally deficient, and might have been a tragic one if he is actually of normal or nearly normal intelligence but defective in hearing only.

The Case of Lela.

From a Stanford-Binet Test given in 1940, when Lela was six-years-and-eight-months of age chronologically, her IQ was found to be 80. Lela did not seem to be sure of her answers, and she watched the examiner very carefully during the test. She gave the impression that she was afraid of being criticized. Her eyes, a pasty dark brown color, appeared lifeless, like the eyes of some people who are blind; but she apparently could see without difficulty. She appeared bright at some things, but she was very slow at giving answers. She drawled out her answers. The examiner felt that she was too immature for the first grade. She passed all of the tests at the five-year level, but only two tests in the six-year level. She responded to pictures, and successfully counted thirteen pennies by pointing to them. When asked for her father's first name she said, "Daddy."

Her first grade teacher reported: "Lela is very immature for a child of six years. She isn't naughty, but

directions for doing things mean very little to her. She needs individual help with her seatwork and, when I can't give it, she goes to sit with her classmates who usually do the work for her. After directions are given, she usually speaks out in her little high-pitched voice and tells what she is going to do--i.e., 'I make it yellow', etc. She likes to leave the room quite often and wander about the building. At times, she goes into other rooms or perhaps down to the basement where there are storage shelves and amuses herself by playing with the Christmas decorations and other things stored there. Naturally, reading is entirely foreign to her and she needs a lot of 'readiness work.' Lela is an affectionate child and likes to follow me around holding my hand."

When Lela was in the first grade, her father who was a laborer, was thirty-two. He had attended school through the seventh grade. He married Lela's mother when he was twenty-one and she was sixteen. They separated after four years of married life and the birth of three children. He took the two younger children and went to board with the woman who later became the step-mother.

The step-mother, a neat appearing woman of forty years, appeared to be normally intelligent. She seemed to have little use for the children's mother who, she said, was a "moron." She felt that Lela was just like her mother, and feared the child would become a behavior and

sex problem later because of "her affectionate nature."

"To guard against this," the step-mother said, "I have given the child little or no affection."

The mother remarried soon after her separation and continued to live in California. She had neglected Lela during the first three months of the baby's life, according to the step-mother who at first became the child's foster mother when the parents separated. A woman in California wished to adopt the baby when she was about a year old, but the father would not consent. The step-mother has grown children of her own.

Lela was studied at the Child Guidance Clinic in 1941 when she was seven. Then the family moved away, to return again in September, 1946, when this report was written by her third grade teacher at the request of the director of special education:

"Lela entered the country school where I taught in the fall of 1944. She had been advanced to the third grade by her previous teacher. In getting acquainted with her, I found she could read primer level so we started working there. To me, she seemed to be very afraid and timid. When asked to read, she would tremble and be very nervous. She acted just like a mistreated, unloved, little animal. She was kept very clean and she was careful with her clothes. Her brother told me that their step-mother did not have any patience with her. He said that Lela got on

his step-mother's nerves.

"Lela told me about her (true) mother and how unhappy they were because her father did not care for her (true) mother and the children any more. She said, 'My mother was so worried that she did not know what to do, so she took all us kids and went to the church to pray.'

"Her brother told me that I could not depend upon all that Lela told me because she got so excited and sometimes told things that were not true, but I really believe this story she told because we were just having a conversation and she seemed to be sincere in her talk.

"We worked away all that term. I could see very little improvement in Lela. She began to notice the boys the last of the term, but not any more than other girls her age. Of course, Lela did not have the help she needed as our room was over-crowded. I had to depend upon faster pupils to help her. I kept her busy doing room chores as I found she could do these well. She washed the bowl, kept erasers clean and swept up around the room at noon and recess. She was happy to do these things, and was pleased to know she could help. She could color and draw well, and she also liked to sing.

"The next year, 1945-1946, we started reading in the first reader. It was slow going, but Lela tried. She did not stay with it long when she worked alone. Her brother came to me in October and told me that his Daddy

could not have Lela mistreated by her step-mother any longer so he was going to board her out, so she started living with some people who lived in the community. Their oldest girl helped Lela at home, and she seemed to do some better in her school work.

"Lela and her brother are much attached to each other. At recess and noon the other teacher and I have often noticed them standing in the hall or coatroom talking. This same year in December, the brother went to California to make his home. When he left, Lela was very sad. She cried and told me that now she was all alone. She wondered if she would ever see her brother again. I told her that she could write to him which she did...."

After her move back to the town school, Lela sat in a fourth grade room all year, and was transferred on into the fifth at the close of the term. She did not disturb any one. She seldom paid any attention to the lesson being presented and, contrary to the above report that she liked to sing, many times Lela was observed sitting coloring at her desk while all other children in the room were enjoying their music lesson. She seldom spoke at school.

She was given another Binet test at the age of thirteen years and two months, near the end of her fourth grade. She responded well, appearing to enjoy the undivided attention of an interested person. Her mental age had

increased to eight years and eight months, but her IQ was 66.

Should Lela be institutionalized? Those who have visited the Fairview Home, the Oregon institution for the feeble-minded, know that children who go to school at the institution are housed in extremely close proximity to the custodial cases and that there is need for a separate school building. Nevertheless, the training given is excellently conceived and carried out although the institution is overcrowded and has a long waiting list. In addition, much careful work on parent education is needed in many communities to get for the children what is best for them as individuals in the way of special classes to meet their needs in the public schools. There is the ever present item of expense.

The effects of a good program of special education upon the mentally handicapped is far-reaching. Lela has not had enough to develop her self-confidence. As long as they are members of a normal class group, children who are slow to learn seldom have that feeling of success which comes from accomplishment. They come to accept themselves as failures. It is no wonder they show so little initiative. The public school has succeeded in assuring so far Lela's conformity to the standards of her own social group. She has not been under pressure at school to do more than she can do. Her appearance is very neat. Her long black

hair is always well brushed. Her clothes are becoming and suitable to her type. In the group, she is not set apart. She appears well with any of her classmates. Whether she will repeat the pattern of her own mother cannot be known at this time. Her father does not want her to be placed in an institution. The training in domestic duties that her step-mother is giving her should fit her to earn her living. Last summer she carried on a chicken-raising project of her own. Her brother has returned to the father's home and Lela shows the happiness his company has brought her. The need to love and to be loved is as strong in the person of low ability as it is in the normal individual.

The Case of Eleanor.

Eleanor, when tested by the school guidance director, was inclined to distrust her own ability and was rather shy. Her attention, during the test, was very hard to attract and retain. When she seemed not to know the answer, she just shrugged her shoulders. Her appearance was untidy. Her clothes did not fit, and were held in place by safety pins. Her nose ran, and her hair continually fell into her eyes. She had an odor of uncleanness about her. Perspiration came out on her face during the test. With a chronological age of ten years and a mental age of eight, her IQ was 80. Her school grades up to the time of the

test had been barely satisfactory. At the close of the fourth grade, she was promoted on trial. Another year found her transferred to the sixth grade, and then transferred again, this time to seventh grade in junior high school, because of her age and limited ability. From the fourth and on through the seventh grades, Eleanor was absent frequently. Her mother sent characterizing excuses, of which these are typical examples: "Eleanor didn't feel too well yesterday and she had no shoes until last nite so let her stay out." "Eleanor didn't feel like going so I let her stay home and watch the house." "I let Eleanor stay out yesterday afternoon to stay with her sister who has been sick. I went to town in the afternoon." "Please excuse Eleanor if she is late. We were all behind time for once." "I needed Eleanor yesterday afternoon so let her stay out."

This picture of Eleanor illustrates two-thirds of her family--dirty, unkempt, unstable, and socially and economically deficient. The next younger sister tested slightly higher than Eleanor, or 85 on one form of the Stanford-Binet Test and 81 on another form. There is another sister, well-liked and well-adjusted at school, who has an IQ of 112. The young brother, now ten years old, has an IQ of 131.

The father, an alcoholic laborer, has a severe tic. Eleanor looks like him, minus the tic. The mother

is short and fat and bustling. She has turned to religion for solace and excuse. During a home call by the school principal and the visiting teacher to find reasons for the next younger sister not being in school, the interview was held outside the small but painted house which had puddles of mud and water standing under and around it. The mother said the sister did not have any shoes to wear, but that the next day was pay-day and that then she could come to school. The father complained about the speed with which shoes were worn out. During the early part of the interview, Eleanor lolled over her mother's shoulder; then she went to throw rocks at another visitor's car. The mother said, during the interview, that Eleanor would be back in school the next year but, instead, she married during the summer.

The mother did not state what Eleanor had been doing during her long absence from school. It was found through searching among various records that Eleanor had spent the year in the Louise Home for Girls in Portland. This nonsectarian home for delinquent minor girls is operated by the Oregon Protective Society. Admission is through court commitment, personal application, or recommendation to the Home of physicians, county health units, teachers, or county welfare commissions. Eleanor had been placed there by court commitment. The Home placed her in a boarding school under its direction where

Eleanor completed the eighth grade creditably. Her attitude was good. She was attentive, and did her work well. During her previous school experience and prior to her year in the boarding school, she had been very shy and lacked confidence, always the type that was shunned and not given a place in the social life of her school class. This was in addition to her unkemptness.

Eleanor was sixteen when she married a man forty years of age. She had had a permanent wave and her general appearance was much cleaner and greatly improved. The next year Eleanor had a baby, a sweet little girl. Her husband is enough smarter than Eleanor to do for both on a simple social level. The training Eleanor received the year she was away enables her to keep a neat home, give the baby the care it needs, and feed the family on her husband's income as a day laborer. He is steadier than Eleanor's father. What the future holds for the couple can only be a matter of conjecture, however.

The Case of Jerome.

Here is a limited study of an only child of nonprofessional parents who had only fair educations themselves. In this home, as is often the situation when all members of the family cannot be together, the child lost security through separation from his father. Security is more important than schooling. The boy needed

early training toward a vocation, without being held to formal academic requirements.

During Jerome's early years, his father worked for the Bonneville Power Authority and similar corporations. Jerome's mother attempted to keep him in school regularly and did not go to the various places to which the father's work took him.

In three years, Jerome was given three Stanford-Binet Tests. During the first one, the boy appeared to be interested, but acted as though he were on his guard and seemed rather afraid that something embarrassing or painful would happen. He was not self-assured and was rather shy. His chronological age was six-years-and-eight-months, his mental age was five-years-and-four-months, giving him an IQ of 80.

During the next test, he wanted to give up too easily and probably did not try up to his capacity. He seemed to be brighter than his test showed. This time, he had a chronological age of seven years, a mental age of six years, and an IQ of 86.

During the third test, he was very pleasant but it seemed difficult for him to follow directions. He could not seem to get the idea of likenesses. His appearance was that of a bright youngster. He tested 76 IQ, with a chronological age of nine-years-and-eight-months, and a mental age of seven-years-and-four-months.

Jerome's case is presented as an example of a child of borderline ability with a personality and emotional disturbances which make his exact mental capacity questionable. Since Jerome's trouble was slow academic response, and emotional personality, he needs individual attention which is not available in the ordinary classroom and there are no special classrooms in this school system. The boy is too well endowed to be institutionalized, no classes adapted to his needs are available, and he is not well enough endowed to do the work of the regular classroom. As soon as he is old enough, he can go to work at unskilled and eventually semi-skilled labor. Cases like these of Jerome and the ones preceding show the unsatisfactoriness of Oregon's school law requiring all pupils to remain in school attendance until they are eighteen years of age or have completed high school except in special cases when they may leave school at sixteen years of age.

CHAPTER IV

Summary: "That We May Serve."

One of the purposes in studying history is that of understanding the past better in order that the future may be improved. By including in this thesis a brief history of child guidance through the clinic method, some suggestions are provided for others who may be building a program of either guidance or special education for those pupils who do not fit into the pattern of behavior or of scholastic success which is suitable for the normal or average.

If the schools are to provide equal educational opportunities for all, and this means the chance to develop appropriate competence in all major fields of living--self-realization, human relationships, civic responsibility, and economic efficiency--for all children; then education, if it is to be as adequate as it should be, requires the provision of needed services for exceptional children that are at least equivalent to and coextensive with those available for non-exceptional children.

If education is to provide for exceptional children, teachers must be able to understand the exceptional child and be able to locate him or her in the classroom. There are physical, emotional, behavioral, and mental exceptions

to the average or normal. Children have been selected, for the case studies included, primarily on the basis of mental ability exceptions, both high and low, but showing their most marked deviations in other fields also. A number of physical deviations from the normal have been mentioned to show that these occur in brilliant children as well as in mentally defective children. Other traits reviewed here were found in children in the different levels of mental ability and are among the traits most easily recognized in pupils of any group.

The gifted child has ease of assimilation and, as a rule, quick reaction time. His ability to absorb the same amount of material in a fraction of the time required by an average group, of itself, calls for either some acceleration in grade for the pupil or an enriched program of more to do. Superior pupils have a greater degree of concentration, waste less time--if challenged, and usually grasp an idea at its first presentation. Gifted pupils have unusual power of focusing their attentions upon a task, and they are able to stay with a task without fatigue longer than the average. The superior pupil is comparatively self-directing through his qualities of intellectual curiosity, originality, and initiative. His powers of generalization enable him to see underlying principles quickly, relate similarities, and foresee results. The gifted pupil, with his ability to work with

abstractions, not only learns facts but he also delves into the principles underlying the facts and into the inferences to be derived from them. Many gifted children seem particularly competent in self-criticism, that ability to know when they do not know. There is usually among them versatility and vitality of interests and a high degree of special talent.

In contrast, the dull pupils are slow in reaction time. They are slow in getting under way, and weak in mental transfer. They cannot transfer things learned in one situation out of their original settings at all well. The dull child must, therefore, acquire through direct teaching and much repetition knowledge that the bright child acquires incidentally. The attention span of the dull pupil is short. He lacks the ability to carry a sequence of ideas long enough to reach a conclusion or principle. He is illogical, partly due to his limited number of ideas, and partly to his inability to deal with principles. Dull pupils, frequently, have little initiative. They are dependent upon the constant guidance and encouragement of the teacher. With dull pupils, emphasis must be placed upon details, not upon broad general ideas. Lacking in their power to evaluate their efforts, the dull are consequently often unable to correct their failures.

Many books have been written on the exceptional child, the one who is either so much higher or so much

lower than normal that he offers special problems to his parents and his home, his school, and his community. Public attention has been called to the need for special training of the defectives earlier than for the gifted because they were the sources of more trouble. The gifted child has been forced more often to find his own way.

Although he may not be causing a particular problem, the gifted or superior child, if his capacity is not first recognized and then challenged, does not accomplish what he should to be most effective and happy, and society has lost, at least temporarily, some potential leadership. Superior environment and training are required to develop to their optimum those who can meet the world's unsolved problems.

Experience gives to a teacher a better acquaintance with the individual differences of her pupils. It is hoped that the reading of the case studies in this thesis will serve to build the knowledge of beginning testers or teachers who may read them, and their confidence in this knowledge as exemplified here and by their own experiences, as the case-studies and suggestions of the former guidance director in the schools in which this study was made helped the author of this thesis. Unexpected problems may come to any teacher. If the few problems presented here give the beginner any ideas for their possible solutions or any inspiration, they will have served their purpose, at

least in part. It may help a beginning teacher to know that there are general trends of behavior as well as individual differences among those of both superior and inferior abilities. In the summary and application of these trends to individual cases, the teacher may do best when she does nothing when reasonably effective facilities are not available to correct the situation, as in the case of Lou--for whom neither the high school or the community could do anything effective and who was a menace to both through her low mentality.

Charles' case is a common example of the very bright child who gets into mischief because he does not have enough to do to challenge his ability. His case shows that the exceptionally bright may need special attention to help them adjust, both socially and scholastically.

The literature in this thesis can show the beginning teacher something of the time and thought and energy that have gone into the building and the uses of reliable tests in order that she may have not only accurate measuring tools to tell her whether a child can learn but that she may have confidence in these tools. This will help her to be a better teacher and to bring the child nearer to full self-realization--be this large or small. This is at least a partial fulfillment of Thorndike's definition of education, that is, the changing of human beings for the better so that they may have more humane and useful wants and be better able to satisfy them.

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