

A P H I L O S O P H Y O F G U I D A N C E

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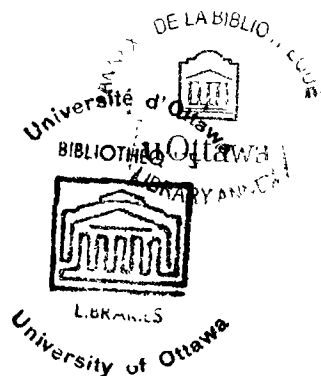
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*Approved
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of the Requirements for the Degree of
Doctor of Philosophy
in the
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TO MADELEINE O'BRIEN.



P R E F A C E

While the nature of this dissertation is largely philosophical and descriptive in scope, the experimental approach to the problem is treated in a specific manner. In this respect, the author was the subject of the many tests taken in Chapter VIII, not with a view to drawing wide conclusions from the results but from a desire to state a definite example for diagnosis showing the possibilities in vocational application.

This is a departure from the usual attack of delimitation to a narrow field of experimental evidence with a subsequent statistical treatment of all test data. The method employed herein can be justified by the fact that every Soul is unique and both educationally and vocationally requires individual guidance.

The single sample is reasonably exhaustive in extent. The number of measurements is sufficient to warrant a fairly comprehensive cross-section of the person concerned. Too often guidance resolves itself into useless theorizing and superficial examination. In the last analysis however, true guidance must look beyond material adjustment and accomplishment and only be content when it has realized the "ultima" in the Spiritual Sense.

A casual reading of the Bibliography and foot notes will show my indebtedness to many who are well known in the domains of philosophy, experimental psychology, and education. To Miss Patricia Jones special thanks are due for the care taken in the arduous work of the typing and proof-reading, and

to my wife for the administration of several tests. To all
the aforementioned the author extends grateful appreciation.

Halifax, Nova Scotia.

Feast of the Assumption, 1944.

T A B L E O F C O N T E N T S.

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CYRIL C. O'BRIEN.

A PHILOSOPHY OF GUIDANCE

CHAPTER I INTRODUCTION

The Urgent Need for a Sound Philosophy of Education.

Everywhere today a widespread variety of philosophies confronts us. In the secular press, in magazines, in literature of all types, an ever abiding parade of different "isms" continually presents itself to the eyes and minds of its readers. While a certain amount is true among such a vast array of verbiage, more often than not there is intermingled here and there, blatant falsities or half truths that are frequently concealed amidst the scattered truths that help lend popular weight to a confused mass of thought.

The vagaries of a great deal of modern thinking have endeavoured- and succeeded in many instances in placing their potent stamp upon the education of the age. A falsity of educational principle has permeated the very core of our Canadian and American secular educational system and by education is meant that process of living in every one of its phases involving all its social and moral obligations - both with and without formal schooling. If a correct and stolid philosophy of education has backed the provincial systems of Canada and the state systems of the United States, how account for the ever increasing proportion of crime in these lands? An increased population does not answer the question. Neither does the recreational use of leisure time adequately solve the problem. With the vaunted, improved methods of training in schooling, one would be led to expect a much improved society. Our present social set-up however,

shows the results of an inadequate structure upon which the public school system has been built.

The need for a secure system of education is almost self-evident. The present trend towards centralization and bureaucracy is manifested at present even in democratic countries. The dangers to education can become serious. Granted that the exigencies of war are partly responsible for this movement, yet even the needs of war fail to explain the attempt to deprive parents of their right to obtain an all-embracing Christian education for their children. Witness the present struggle of Catholics in England to maintain their God-given, inalienable rights to choose an all-inclusive, complete training - an education that will ensure eternal welfare. This striving against the difficulty goes on amid talks of the four freedoms and the integrity of democratic institutions. How important is a sound background of philosophic underbrush to foster the educational tree and keep it firmly rooted in the ground.

Both the young teacher in training and the seasoned veteran need to be imbued with a sound philosophy that will be the guiding light of all their pedagogic actions. It is true that many teachers when they become more or less fixed into a definite groove of the educational structure in a school system - provincial or otherwise - tend at times to become oblivious to the wider and larger issues involving the culmination of education in the general scheme of life. Some indeed, may see their teaching in relation to the grade or school, yet fail to comprehend the broader significance of education for life. Others may understand the educational implications for life, but fail to realize the relationship to life "in toto"

Before then, discussing a philosophy of guidance which is so closely associated with the educative process, it is the part of wisdom to maintain a comprehensive philosophy of education. Before the latter can be properly promulgated, it needs be that a sound philosophy support the groundwork of the educational structure.

Basic Principles. In order to formulate a consistent "modus Vivendi" the eschatological elements of life must be stressed. A short journey of any sort requires some preparation. A trip to a foreign land would entail further preparation. Preparation for the eternal journey must necessarily involve the most careful and complete planning. How often do we find educational systems neglecting the sine qua non of man's existence. Catholic philosophy has always emphasized the pro tem of present life and the permanency of the future abode, the temporary nature of material goods and the everlasting facts of eternity. Upon this and the Divine Mission to teach rests two of the fundamental aspects of Catholic educational principles. "We have not here a lasting city, but we seek one that is to come." (Hebrew Xl11,14.) The meaning and purpose of life must ever be the preamble to all Catholic education. "To know, love and serve God" so that we may be happy in this life and perfectly happy forever with God in the next life is of supreme importance in the tenets of Catholic education and underscores a Catholic philosophy of education. A philosophy of guidance in harmony with Catholic principles must necessarily be imbued with this basic purpose of life. That one may attain a certain amount of happiness in this life is certainly not antagonistic to Catholic thought. Indeed, a Catholic philosophy of guidance would emphasize this very fact. To discover the

proper vocation of an individual is of major concern. The following of a suitable occupation is of such importance that a serious mistake in this respect might destroy not only the earthly happiness, but more important still, the eternal happiness of the individual. The ethical aspects in guidance are so closely associated with the factual phases that they are inseparable.

If the word "guidance" is to be not merely nominal, it will be true to its name and imply the guidance of the individual, not part of the journey, but the whole way. So, an inclusive, complete philosophy of guidance will take cognizance of the everlasting welfare of the persons whom it seeks to lead. A part of its endeavour is to help one become fitted for an acceptable occupation but a successful mode of adjustment involves more than an immediate adaptation to environment. A good vocational counsellor in the accepted interpretation of the phrase today, diagnoses the individual in order to discover propensities to certain activities. Even after the subject has been placed in his abode of work, the trained adviser is not satisfied until a follow-up takes place. This may cover one year or many years. If a satisfactory adjustment has been made, the counsellor is generally content with the feeling that a round peg was placed in a round hole. Assuming that this is all and perhaps more than a good adviser is expected to accomplish in the modern sense, still a Catholic philosophy of guidance has deeper significance than even this well executed piece of aid to the individual. The guidance has been successful from one viewpoint. Has it been imbued with a background of Christian ethics? Will it enable the subject to become spiritually adjusted during life and accordingly, successfully adjusted eternally.

There are those who may argue that it is entirely beyond

the scope of an educational or vocational adviser to be responsible for such long range vision. Whether the adviser be answerable or not, he will sub-consciously, unwittingly, yea, even purposely, bring to bear his whole philosophy of life when aiding, counselling and guiding. This is brought home forcibly by Kilpatrick in his ideas on concomitant learning. You do not learn just mathematics from a mathematics teacher. You acquire attitudes of all sorts and types. Presumably, you might learn something of courtesy and etiquette. If an atheistic ideology permeate the mind of the teacher, he will somewhere, sometime, some place force his thoughts to the fore,-foreign as they might be to that most precise and definite subject.

Thus, a philosophy of guidance worthy of the name will be supported by a true philosophy of education, which in turn, will rest upon a solid foundation of fundamental truths and basic principles. In addition, also, an up-to-date system of guidance will employ all worthwhile scientific aid and modern discovery to assist in producing a contented people and in conserving the national wealth of talent by obtaining the most profitable, economical use of human resources.

Variety of Data in the Field of Present Day Guidance. The past twenty-five years has witnessed a volume of material on guidance emanating from the universities, colleges of education and personnel departments of large concerns. That a great deal of this research has been of practical worth cannot be gainsaid. Much there is that requires to be sifted. To separate the wheat of practical data from the chaff of ruminating theorizing is undoubtedly a chief concern of workers in the field of guidance.

In the realm of tests alone, there is much that is good

and more that is of little worth. A valid and reliable aptitude test is an invaluable aid in the hands of a careful and conscientious educational adviser. The exact and correct interpretation of such a test may clarify an otherwise difficult problem. Not that such a tool is the sole means of assistance to the adviser, but it is one of a number of distinct aids in diagnosing an individual's personality. A test of mechanical, artistic or of musical capacity is worthwhile giving, provided that it has been scientifically constructed and standardized - and hence having the quality of ferreting out the particular talents in question. The aforementioned tests are not the only aptitude tests. The aptitude test that is generally considered first is the intelligence test. This is natural since, apart from the specific traits needed, all occupations require various degrees of mental capacity in order to ensure success. The Stanford Revision of the Binet individual test of intelligence or a good group intelligence test that is valid and reliable, can be of great assistance in guidance if it be properly given and interpreted.

Achievement tests have developed side by side with aptitude tests. Such type may range from a highly reliable scale of rating progress in a particular field, to a more or less loosely constructed objective test that has not been standardized. It is very important to differentiate between aptitude and achievement. Upon this distinction falls frequently the burden of appreciating and stating a correct diagnosis. To forecast one or more possible successful careers of a pupil, certain aptitudes of the individual must be known. The ability to achieve, while dependent upon latent capacity in the form of latent and specific talents besides general talents, depends also upon that power of determining and persisting

in a choice of action independently of causation - commonly known as will power. Unfortunately, in many schools and systems of education, the will receives little or no training. This may account for the meagre attempts at the scientific measurement of strength of will, which are few in comparison with the vast number of tests of academic subjects and latent traits. Comparable norms for will, including correct choice and stick-to-it-ive-ness, should be established as those standards involving various degrees of excellence and inability in factual knowledge. There appears to be no end to the variety and diversification of measurements today, but this particular phase of personality is neglected. Perhaps the intangible entity of will has defied all attempts at rating at the present time and this may largely account for the paucity of positive research in this direction. Be that as it may, it is an acknowledged fact of long standing in Catholic education that the will can be **trained** and must be trained from the earliest ages, in order to produce a personality under control. Too many schools now are satisfied in producing a situation of readiness for much factual knowledge, encouraging a minimum of thinking among its students, entirely neglecting the will and calling it education. One might just as well load a high-powered bomber with many types of death-dealing weapons, send it aloft in any direction minus the pilot and expect it to reach its destination. The results in either case can be naught but disastrous. Not only "a little knowledge is a dangerous thing" but a great deal of information can be harmful, especially when it is divorced from its guiding principle and be permitted to be applied devoid of all ethical considerations. The dearth of tests of will in the field of measurement appears to be fruitful pioneering ground for objec-

tive research.

The Relation of Guidance to Education in General. So close is the relationship of guidance to education that it would not be amiss to claim that guidance is education. It is education in the sense that it is a means of aiding the individual in his adjustment to environment. The modern concept of the term guidance is usually interpreted to mean such diagnosis of the individual that will enable the person to embark upon a career or become engaged in an occupation with ultimate satisfaction and success. Education used in its widest meaning, includes all learning of every type that takes place in or out of school - from the cradle to the grave. The term guidance is employed generally to designate a certain amount of planning, testing, guiding, placement and follow-up. Education is very often meant formal schooling.

Guidance, then, in its widest interpretation is inseparable from education and education in its full meaning cannot be severed from ethics. Even the teacher who trains the child in its initial educational period in school, guides and directs. One may go further and say that the mother, father or guardian is the first educational counsellor. Long before there is thought of a technical adaptation to a career or occupation, the child receives guidance which may mar or benefit its personality for life. Guidance may be, in point of time, pre-school in nature. Its early function is concerned primarily with teaching correct responses and eliminating wrong habits. That this is part and parcel of character building technique is self-evident.

In a complete educational programme, the child from its earliest years receives guidance constantly, not only to enable a smooth adjustment to its immediate surroundings, but to ensure

its later adolescent and adult fit into life and ultimately to make it possible for the achievement of eternal welfare.

There is again the limited interpretation of guidance. In this sense, those who achieve a certain status in formal schooling, such as the completion of the elementary, junior or senior high school of the American system are advised to follow a certain occupation or the details of a specified group of careers are carefully laid before the student. In this case neither can guidance be consistently separated from education, nor can the moral implications be neglected. Whether one guides generally at age two or technically at age twelve, the same ethical considerations should be placed first and compel recognition of the eschatological elements which form the corner stone of any good system of education, underlie all component parts of such and which are interwoven with all its highly technical phases.

Purpose of the Present Study. To survey recent research in the domain of guidance, to evaluate the principles evolved and to formulate a modern philosophy of guidance in harmony with Catholic philosophic principles, these, -in fine- constitute the main intentions of the present study. At each rung of the educational ladder, -at the elementary stage, at the secondary and university level- guidance has its place. It is within the scope of the present survey to obtain a panoramic view of guidance at the various steps of formal schooling and co-ordinate all to suggest an age or grade when guidance- both educational and vocational- can be most effective.

A P H I L O S O P H Y O F G U I D A N C E

CHAPTER 11

GUIDANCE AT THE ELEMENTARY SCHOOL LEVEL OF LEARNING

Fundamental Principles of Elementary Education. The same necessity of placing first things first applies with equal force to every type of education - no matter in what manner it may be pigeon-holed or categorized. This is none the less true in the case of elementary education. Certainly, children who have reached the age of reason are responsible for their actions to their parents and teachers, but they are chiefly responsible to God. Their destiny is eternal happiness. Yet, they possess a powerful characteristic known as free will, which, if misused, will boomerang to their own destruction. There is a great need of cultivating in the child those habits which will be of assistance in making correct ethical responses.

Fortunate indeed are those children who come from homes that are constantly characterized by truly Christian principles. They begin school with everything in their favour. Even though they may be academically backward, they possess an habitual mode of conduct that will assist them through the period of formal schooling and later. They are the material upon which sound character can best be built. Granted that there are many from inadequate home environments who can be moulded and faced in the right moral direction, yet the labour involved in so doing is quite onerous-and is often a slow tedious process. The child fostered amid proper surroundings is already being educated. He is on the road towards the fulfilment of his destiny- both to God and the state. Would that law-makers could fully appreciate the importance of education in its true and ultimate sense and direct all

legislation towards the unfolding of the ideal-encouraging in the child the most complete development of its nature- spiritually, mentally, physically, culturally, vocationally and avocationally. If this were done, the teaching of citizenship would not resolve itself merely into a knowledge of governmental statutes- and in adolescent and later life, a disrespect and even contempt for the very regulations that early in the career were so assiduously studied. The study of civics would be a practical study, aided and abetted by sterling conditions of character. It would be easy to become a good citizen because the fundamental concepts of right and wrong would have been embedded into the very soul of the child. Proper attitudes towards all and a willing respect for legitimate authority would be automatically engendered. This is not to infer a sort of Utopian "patria" where the guiding educational light never ceases to shine in all its resplendent glory. Neither does it envision an authority that exists for its own sake but that kind of authority made famous by the title "Servus Servorum Dei" - "Servant of the Servants of God," first held by Innocent III and borne by all successors of St. Peter since that time. It has been claimed on many occasions by certain educators that education itself, while it cannot permanently improve the human race, can better in a large measure one generation. If this be true for one generation, then surely the special brand of education whatever it may be, can be utilized to alter for the better another generation- and still another generation. The biological inheritance, they claim, has always been potent - too powerful for a permanent change. However, if it can be modified for good over a certain period of years, it should be able to be altered at other

times.

Present Objectives in Elementary Education. A plan has been outlined in the previous paragraph for a return to bed-rock principles as the basis upon which to build any sound system of elementary education that will not only be advantageous to each individual in the state, but will also react favourably upon the social structure of the state as a whole. The education of children has far reaching implications stretching out to the very foundations of the spiritual and material prosperity of a country. The children of today are the adults of tomorrow. Some future citizens will succeed in spite of any deficiency of a system of education. Let us hope that others will not flounder and become mal-adjusted because of such lack of proper training.

If one were to scan the curricula of the various, provincial, educational systems of Canada, a certain uniformity of educational aims and ideals would meet the eye. It would be stated that the training of citizens was an important objective of the elementary course or that a grounding in the fundamental operations- a study of the three R's -was the prime purpose. Some courses of study would add and stress the need of the principles contained in the old maxim- "A sound mind in a sound body." Others would emphasize the necessity of a later, correct, occupational adjustment.

Guidance in Elementary School Grades. In the first few grades of the elementary school, guidance must be necessarily educational rather than vocational in scope. The interest in vocations and knowledge of such on the part of the pupils is at best very puerile. The typical solicitude of an eight-year-old boy for the policeman's badge and hat is a point of fact. The same child would probably change his "I want to be a policeman" - to

run the whole gamut of positions of his knowledge, before reaching high school. It is of course, possible for a child to adhere to his early choice of an adult occupation, but it is the exception rather than the rule. Although vocational guidance has been suggested as a study in, as low as Grade IV, such a step seems both unnecessary and a waste of time. A small percentage of children do leave school at this level and should be given guidance in order to help them get placed in some satisfactory employment, but the vast majority are still far from the time when it will be necessary for them to make a decision. Few systems base a course in guidance below the grade six level. Many start practical work in job selection in Grade Eight.

On the whole, guidance in the elementary school should be largely educational in nature, giving some practical assistance as a taught subject, particularly to those who are unsuited to the academic curriculum - for following in a vocational school - courses adapted to their specific talents and needs. But all this pre-supposes a minima of accomplishment in the elementary school. To learn to read, write and figure may sound old-fashioned, but this is precisely what many cannot do under many modern systems of education. The fault lies more often than not in the course of study which is over-burdened with too many elective subjects. The pupil receives a smattering of a great many things with the result that no subject, - for its comparative, graded degree of difficulty - is well learned.

The experience of those charged with the training and education of the various services is a case in point. A great many recruits, a number of them of high school standing, failed in

simple arithmetical operations. They were unable to be accurate in ordinary calculations because they neglected to over-learn them - and were permitted to pass them by in many cases undoubtedly - when attending school. Such fundamental, arithmetical operations in a great many instances, formed a necessary preliminary to acquiring essential knowledge of the arm of the service concerned. The Canadian Legion Educational Services have accomplished splendid work in bolstering lack of education in many cases, but the fact remains that many Canadians had failed, neglected to learn, or were not drilled in minor, mathematical procedures that were needed for a host of occupations.

This lack of thoroughness in the fundamentals of elementary education, appears widespread today throughout the Dominion, that is when considering the products of all the provincial systems as a whole - and taking into account those of elementary and secondary school level. The ability to read and comprehend, - again considering wide expanses of territory and not local areas - seems also to be neglected along with basic arithmetic. If not neglected, at least it is insufficiently practiced. Modern research has demonstrated that about ninety per cent of reading in adult life is silent reading. Thus, the reason for the greater proportion of teaching time spent generally upon this type of perusal. The importance of understanding the printed word is best stressed by silent reading. The moderns are adamant upon this point. It is true in the past that certain pedagogues were guilty of judging comprehension of subject matter by the oral reading aloud of a prose or poetry selection. Oral reading was over stressed. Yet today its value appears to be under-estimated. The utterance of words involving as it does sight, speech and hearing

has, by means of additional senses, a psychological advantage over silent reading in the matter of improvement in oral reading. Whatever relative importance be assigned to each phase of reading, teachers can adopt a common-sense attitude. Even oral reading can be very useful in life situations. This want of reliability in the ability to read appears to be a Canada-wide problem that has recently come to light in the need for a minimum of educational requirement for the various kinds of work required in the three services. It is not proposed here to attempt to analyse the reasons for such deficiency - a problem in itself - which is really at the root of many difficulties in the mastery of nearly all kinds of subject matter. It would be very interesting to rate scientifically and learn the average reading level of Canadians. Such a research problem would be worthy of the efforts of the ablest educationist or research worker. For the present however, we must rely on very inadequate surveys, scientifically speaking, - such as the percentage of literacy and illiteracy of the provinces as given in the Canada Year Book and other statistical reports.

It would appear that educational guidance in the elementary school grades can be most effective by first concentrating on essentials such as ensuring that the fundamental operations be thoroughly over-learned. It is not suggested at this point to delimit and narrow the curriculum at the expense of failing to recognize individual differences, but a sound philosophy of elementary education - pedagogically speaking - must insist upon a thorough foundation being laid in the key subjects of every-day life, - language and mathematics. These subjects, especially language form the stepping stones to further acquisition. Almost all occupational and professional training depend upon these pre-

requisites. Language opens the door to other subjects. A science text-book is of little value to a poor reader. A geography text is difficult to a pupil who has not attained a certain language proficiency. In fine, living without language would be a decided handicap.

Schools of Thought on Vocational Guidance. Some maintain that guidance, used in its modern connotation, is not a teaching job. It is difficult to understand how such a principle could be applied to the elementary school. In the grades more than on the upper rungs of the educational ladder, is teaching indispensable. Lecturing to elementary school children, generally speaking, is considered poor pedagogy - and rightly so, because the child of average mental talents has not at this stage matured to a period of mental growth and sufficient powers of concentration to absorb and digest material given frequently in this manner. A lesson on guidance to a Grade VIII pupil should necessarily employ the socratic method of question and answer and the active participation of the student not only in discussion, but also in written work and a certain amount of project activity,

Some uphold the idea that information on various occupations should be placed before the class and the pupils permitted to make their own selection. There are those who contend that a student should be tested in a number of the more important of the chief personality traits and then told what occupation should be followed. Possibly a "via media" between these two extremes would be the wisest manner of approach to the problem. However, those who possess outstanding talent along specific lines, and such capacity is discovered and rated with cer-

tainty, in the interests and benefits to society at large which would evidently accrue, it could be considered justifiable to use a certain amount of urging in order to persuade the pupil to follow a definite occupation, if not as a vocation, at least as an avocation.

Types of Elementary School Tests. With the present emphasis on tests and more tests in our educational administrations, many words which have become part and parcel of the psychological and educational vocabularies, have made their appearance. The words subjective, objective, diagnostic, and prognostic are a few of the many. Such words are significant inasmuch as they do point out essential differences between present-day and former methods of examining pupils. There is much merit in the well constructed, modern test. Examinations of the past century were oftentimes overburdened with elements of subjectivity. There is a trend today towards an over-accentuation on objectivity. Again, the happy medium would probably produce the best results. Such subjects as composition and the interpretative phases of history are undoubtedly subjective in design and would yield more or less to a subjective type of testing. Factual information in **most** subjects can be effectively tested by objective means. It is the custom in many examinations that are given now, to possess a combination of the two methods.

Objective tests are frequently diagnostic in plan. In this respect they serve a twofold purpose. They test a pupil's knowledge at the same time as they ferret out the strong and weak points. In this instance, a test in the fundamental operations of arithmetic shows and gauges scientifically the particular elements which are incorrect. Sufficient drill on these parts can ensure a permanency of learning. The factor of economy

of time receives its just due also. Objective tests may be constructed by the teacher without any thought or intention of standardization. Multiple choice tests, true-false tests, completion tests, one-word-answer-recall tests, matching tests and other objective ways in vogue are useful means of testing. When scientifically formed into a battery of tests and coupled with a subjective examination, they can often present a composite picture of the educational progress of a pupil. Of course, the characteristics of the subject matter tested must be taken into account. Some subjects lend themselves more readily to one special method of objective testing rather than another. It is the concern of the teacher to consider the peculiar properties of each elementary school subject and be guided by these traits in the construction of any test.

If the teacher desires an objective test which has been standardized, the educational progress of the pupils of the class may be compared with-in the subject matter concerned- those pupils in other school systems in other cities, states or provinces. An average mark of a great many unselected persons has a definite significance. Teachers can compare their own students not only student for student in their own class, but also make comparisons with others in various centres. This is an important advantage of a standardized test which can be used by an educational, administrative staff.

Achievement tests that have proved their worth are mentioned here. The Stanford Achievement Tests for grades seven to nine include six sub-tests. The entire group may be given in about one hour and forty minutes. This is, without doubt an excellent battery of tests. In some ways its emphasis on certain

American phases of subject matter, makes it not the most ideal test for Canadian students. The Dominion Arithmetic Tests for grades five to eight may be given in thirty-five minutes. This is one of the few distinctly Canadian tests. At the present time there is a vital need for a good Canadian Achievement Test subdivided into six or more sub-tests, which can be given completely within an hour or at the most an hour and a half. The lack of uniformity among text books and content of subjects of the provincial systems of education across Canada, makes this difficult of attainment.

As important as, and as useful as achievements tests are in measuring school progress, there is a type of test that measures weighty phases of personality that are latent in the individual. The most common type is the intelligence test. The knowledge of a person's intelligence does show considerable information. What is understood as general intelligence is required in nearly all of the activities of child and adult life in greater or lesser degree. A child's intelligence does grow until a certain age. It stops either before or shortly after the age of sixteen years. Psychologists differ on the exact age. It is generally agreed that bright adolescents continue to grow mentally beyond the age of sixteen years and dullards reach their maturity in this respect much sooner - the age depending upon the extent of the dullness or brightness accordingly. General intelligence or the capacity to learn, is innate in the individual. General intelligence is also considered to be the ability to do abstract thinking. This ability can be rated and from a guidance standpoint, is definitely applicable to the majority of occupations and professions in varying degrees.

For this reason, a good test of intelligence has prognostic value.

Uses of Elementary School Tests. During the latter part of the nineteenth and the beginning of the twentieth centuries, the majority of elementary school tests were used for the prime purpose of determining whether or not a pupil was sufficiently prepared to be promoted to the next grade. Examinations given to diagnose weak spots in the progress of pupils were rare. More infrequent still, were scientific ratings made to guide a pupil vocationally. Yet, examinations chiefly subjective in type - and very inadequate at best - became an easily understood method whereby pupils were moved a step or two up the educational ladder. Often, a disproportionate amount of importance was attached to them.

Now, at least in a good school system, tests and examinations are placed in their proper perspective. Teachers are using more and more standardized tests. They are becoming more discriminating in the selection of the numerous tests put at their disposal. The knowledge of educational statistics which many possess, helps to make their selection of such rating schemes scientific.

A great many uses have been discovered for the scientific tests of the present age. The proper educational and emotional adjustment are certainly not the least of these uses. Success in many lines of endeavour can be predicted. The academic standards of a school, of a group of schools, of a town, of a city and even wider areas can be scientifically determined. The efficiency with which teachers instil subject matter can be quite accurately gauged. In fine, the good standardized test has more

than merely local significance.

Social Significance of Guidance in the Grades. Guidance is so intimately related with the innumerable details of an ordinary teaching day that the conscientious teacher becomes, "ipso facto" an educational counsellor of the first order. The teacher may not have studied guidance as a specific subject as one of the many long list of requirements for the job of teaching. Nevertheless, the teacher guides - and guides constantly throughout the entire school day. Witness the incidental lessons in etiquette and politeness, the many opportunities taken to press home a point to inspire a sense and feeling of patriotism, the reminding of pupils to follow the essential rules of healthy living and the suggestions given to profit to the full by utilizing any available, leisure time. The making of a responsible citizen is no simple task. The grade teacher accomplishes this apparent, ordinary feat during the regular routine of the school day with a great many of the pupils present. Unfortunately, the influence of the school is frequently neutralized or overpowered by the ascendancy of extraneous factors which hold sway beyond the precincts of the school environment. There is a type of guidance, then, that is used consistently and constantly by conscientious teachers - it might be termed a moral guidance - through all the grades of the elementary school.

Guidance in Health. It is impossible to attain maximum possibilities in this phase of guidance unless school authorities fully realize their responsibility to youth and provide all necessary means to make the health programme complete. This entails first of all the co-operation of the community concerned

in ensuring sufficient funds for up-to-date buildings and their maintenance. A provincial or federal subsidy would help to solve this important problem. Health being a national asset is deserving of national assistance. The same can be said more emphatically for education. However, health is a most practical subject. Effective health can be best taught by precept and example. The school surroundings should be the acme of cleanliness, exemplifying in detail the ideal in all expressions of physical and mental health. Health with all its corresponding correlates - adequate lighting, adjustable desks for proper posture, an up-to-date ventilation system, parks and playgrounds, school clinics, school lunches and other items, - will enable the teacher to shape her hygienic programme so that it will be truly a living subject. With suitable equipment, the teacher is ready to disseminate her health instruction and health service, the latter in conjunction with the specialized attention rendered to the school.

It would be trite to enumerate all the pre-requisites to sound and healthful living but their insistence from the angle of teaching cannot be too often stressed. Pupils who practice the rules of health will be fit subjects for a lively and vigorous physical education programme involving exhilarating participation in physical activities in school and later throughout life. Corrective and physical exercises should form an important corollary to the health programme yet the health of the pupils must be first stabilized before physical education can play its complete role.

The healthy child is ready for activity of all physical proportions appropriate to its age and size. The unhealthy child lacks the necessary vim and energy to profit fully from physical training. Games are entered into with zest by healthy children. Those suffering from ill health are generally languid and apathetic.

The health education programme as far as the attention to the matter of instruction is concerned, is or should be the responsibility of the classroom teacher. In the last analysis, the classroom teacher bends all energies for the development of the whole child, morally, mentally and physically. The teacher is most closely associated with the pupil. Scientific health knowledge must not only be placed before the child, but must function as a daily habit in the child's life. From an administrative point of view, the teacher is best fitted to render this instruction and guidance. The health specialists can assist the health education programme by helping the teachers to become more health conscious.

Guidance in Good Citizenship. Genuine pupil guidance is not merely concerned with the successful placement of an individual in an appropriate vocational groove. The social implications of guidance come to the fore and demand a proper preparation for the responsibilities of citizenship. Again, as in the case of health education, the teaching of practical civics is largely the function and responsibility of the classroom teacher. It is the teacher who develops respect for law and order, builds desirable attitudes in civic pride and accomplishment and instils a sense of admiration for democratic government and traditions. It is true that the elements of governmental technique are also

broached and the main functions of federal, provincial and municipal governments taught, but the real guidance in citizenship is that which is not always evident on the surface. Those incidental, little lessons in the privilege of voting, the need and obligation of service to the community at large, those reminders of the rights of others - and a host of other details in practical citizenship, - these are the stock in trade of the classroom teachers who mould future free men and women. The classroom teacher should be careful not to moralize "ad infinitum" in an obtrusive manner but take instances of neglect and misconduct as examples for teaching the correct mode of behaviour, allowing the pupils to reason the matter out and decide what must be the best response. It is not the intention to utter a series of platitudes upon the special material required for a course in social training in the grades, but it does seem timely and opportune to mention the close relationship between citizenship and ethics. The pursuit of civics is not a specific, school subject to be categorized at will. Its very background is ethics. ^ It requires ethics as a partner in order to reveal and attain its pedagogic and ultimate goal. The very divorce of social training from its moral perspective has undoubtedly caused an increase in delinquency in our present age, whether we attribute it to the home, the school, or both. Outside factors-unfit movies, shows and other questionable, counteracting influences play their part also. This brings up the suggestion of a solution to the problem.

Increased recreational facilities, while needed most urgently in most sections of the country as a whole, are scarcely the complete answer. Successful training of pupils in the art of self-denial would go a long way in helping to curb the present tendency of youth towards an increasing delinquency. However, this,

after all, is just one phase of character education and in the latter lies to a great extent a happy and effective solution to the entire problem.

Guidance in Culture. There is an old but true saying that "You never miss the water till the well runs dry." The present era is, generally speaking, devoid of culture, culture in its broadest sense,-implying all those traits of mind, soul and body, which enables an individual to live at ease with at least some feeling of reciprocal behaviour upon the part of his compatriots. The trend towards modernism has succeeded in sniping at culture, considering it a very minor acquisition,-if not entirely unessential. Even children have become affected by the general tendency. In the grades, culture is sometimes synonymous with politeness. General culture may be fostered by practical teaching in politeness and etiquette. It is important that general principles of good, social behaviour be placed to advantage before elementary school pupils. These may be correlated with other subjects of the curriculum or given in instruction as a special topic of the course of study. Whatever type of pedagogic technique is employed in its presentation, its inclusion must necessarily represent an item in an all-inclusive, guidance programme in the elementary school.

Guidance in Extra-curricular Activities. The guidance counsellor has an excellent opportunity to view at close range pupils engaged in after-school pursuits. At least, the guidance adviser should consider attitudes, likes and dislikes, in the after-school diversions. From the observance of interests in this respect, much can be learned about the social adaptability of the pupil. In a period of more or less relaxed abandon, the

pupil often shows the true self, that part of personality which may at times defy the intricate pattern of a valid and reliable test.

It is the concensus of opinion that an organized programme of extra-curricular activities should form part of the life of the elementary school. Research has demonstrated that participation in extra-curricular activities within reasonable bounds does not affect scholastic progress. However, excessive out of school work of this nature does curtail scholastic achievement. The kinds of extra-curricular activity in vogue in the schools of the United States and Canada are many and varied. Scouting is frequently carried on outside the regular curriculum. The co-operation that it affords for instruction and training in citizenship not readily available in the regular curriculum, is excellent. Classes for the gifted in addition to an enriched curriculum, make provision for ample scope for pupils to engage in numerous types of extra-curricular activities. It is in these specific fields of school endeavour that the counselor can watch and note the various reactions of the students taking part. Considerable light upon an otherwise enigmatical aspect of a pupil's personality may thus be thrown.

Guidance in the Academic Subjects in the Elementary School. It is self-evident that the tool subjects and the common curriculum of the graded school form a necessary pre-requisite to successful work in nearly all occupations and certainly in all professions. For this reason alone, the ordinary subjects commonly taught in the elementary school should be stressed to the point of over-learning. There are other reasons

why this should be so. It is almost inconceivable now even the non-working population could dispense with reading ability and number facility.

The acquisition of a good reading technique has been always a problem more or less among students of the primary and upper levels of the common school. For the purposes of guidance, it is well to take cognizance of scientific studies and surveys in the realm of this key subject. In a Master's thesis entitled "A study of certain visual characteristics in reading at the fifth-grade level" which was written in 1939 at the Pennsylvania State College, - it was found that more than fifty per cent of the pupils in the fifth grade studied, had visual defects which necessitated their being referred to an eye specialist. Such cases that were referred were characterized by a greater degree of retardation than those not referred. The retardation was in the subject of reading. The main points of discovery made in this research by Lois E. Bird have been verified by other independent investigators.

In a Doctor's thesis "Phonics as a basis for improvement in reading." by Sister M. Dorothy Browne (C.U.A. 1938) many interesting facts are recorded. The experiment was performed with 326 children who were in the sixth grade of the parochial schools of Detroit, Chicago, and Washington, D.C. The research studied and determined the effect upon reading achievement of a ten-minute phonic drill immediately preceding the daily reading lesson. The study covered approximately one school year. It was discovered that children with low I.Q.'s were as likely to profit from instruction in phonics as those of high I.Q.'s; that the study of phonics is definitely helpful to students deficient in reading;

that the greatest gains in improvement in reading were made among those who had I.Q.'s between 90 and 109.

Other studies show that visual defects are frequently a cause of poor reading; that reading ability and intelligence are closely related; that kinaesthetic training increases the rate of reading significantly and that the child's emotional adjustment, interests, personal characteristics and socio-economic background are consistently important factors in retardation and acceleration in reading. With such wide ranges of reading ability as is found in most centres comprising elementary schools, it behooves guidance counsellors to regard growth in reading in terms of reading readiness rather than in terms of grade standards. Under such a programme, each child may progress at his or her own speed, making possible a much higher, ultimate achievement in the sphere of reading.

Guidance in Arithmetic. Recent research in the domain of teaching techniques and methods of arithmetic instruction, demonstrates its value both to teachers and counsellors. Mother Ruth Fullerton in her study of "Diagnostic and remedial procedures in occupational skills and reasoning processes in arithmetic" comes to the conclusion that "Instruction in abstract skills is not sufficient; that children must be taught to bridge the gap between the mastery of occupational skills and reasoning processes in arithmetic."

A few points of interest from a number of surveys recently made on the place and importance of arithmetic indicate that in order that the subject function adequately, it should be motivated by the needs and social interests of adult life. However, because a given type of problem is used infrequently

by adults is not sufficient reason for eliminating the problem from the curriculum. One point that comes up in certain provinces of Canada with respect to arithmetic is as follows:

Since certain fractions, such as one-half, one-quarter etc, are used more frequently in adult life than such ratios as one-nineteenth, seven-ninety-sixths, etc, therefore it is assumed that only the former should be studied. This false assumption has led to a lack of arithmetical skill, essential in so many industrial and war-time jobs, on the part of recent graduates - within the past ten years - of elementary schools. Many types of fractions must be taught - even those involving numerous figures - if for no other reason than giving the recipients of our schools practice in number facility. There is a direct relationship between practical arithmetic taught in school and that required in adult life on the job. Formerly, a great many teachers probably drove pupils to distraction by their unceasing drill and practice on certain fundamental operations, yet the pupils left school with an arithmetic skill that was to their advantage in later years.

A very interesting, comparative, experimental study with two equivalent groups of third and fourth-grade pupils in two neighboring, elementary schools of New York City, in the teaching and learning of multiplication- was carried on and conducted by Samuel C. Miller. The research set out to determine whether the insight method, which emphasizes meaning, understanding and relationships is preferable to the mechanical technique, in the main stressing drill in the teaching of multiplication. The conclusions were that "in third and fourth grade multiplication teaching and learning, where thoughtful, deliberate and meaningful responses to the number facts are required, the insight method

is preferable; where immediate mechanical responses are desired, the conventional method is preferable." It would seem that the chief purpose of teaching the multiplication tables would be the over-learning of a series of certain "number facts" and their particular use would be one for immediate recall.

Guidance in Geography. Methods of teaching this subject of the common branches vary considerably among different school and centres. It is generally conceded that visual aids supported by other enriched materials in the presentation of the subject are superior to the textbook method of teaching. Although political geography is taught today, the dominant note is on commercial geography. In other words, the practical significance of the subject is stressed.

It has been found that a substantial aid towards the improvement of retention of geographic knowledge is effected by issuing a sheet of questions on the lessons to be taught every day to the students. At present the tendency has been much less stress on definitions and greater emphasis upon opportunity for self-expression, stress on description and project exercises. Again, the human element is paramount and it has for its aims - moral, cultural and practical objectives. Geography offers the opportunity of demonstrating in an unobtrusive way many lessons in character building.

Guidance in History. The traditional textbook method is still employed in a great many instances. While this method will probably be continued to be used, additional effective aids for presenting historical material will make for more permanency of learning. As one of such means, the sound film has been

found to be invaluable. Since governmental terms are often difficult to comprehend, on the part of many pupils, purposeful teaching on historical terminology can considerably decrease comprehension time. The use of biography, although involving much time, is a splendid means of consolidating historical data. The correlation of the subject with other parts of the educational programme assists in its effective portrayal. The proper representation of true history can be partly responsible for the development of more friendly international and interracial attitudes. A formal recitation plan of teaching history, while productive of good results, can be improved by coupling with it, a directed study plan whereby pupils are guided in the more accurate application of their knowledge to concrete problems. Furthermore as a school subject, history should be taught in such a way that the pupils appreciate the relevance of the data as it is applied to their own particular interests and aims.

Guidance in Science. Viewing at close range the present status of science in a number of provincial school systems, it seems that the elementary school programme of science is concerned largely with type of teacher employed, the need for adequate equipment, a flexible programme permitting adaptation to local and other needs, a proper continuity of the content of the course of study applicable to a particular area and an economy of time allotment.

Taking for granted that this subject has been efficient from the standpoint of administration, its special attributes and offerings to the elementary pupil can be appraised. Class guidance in science, as far as methodology is concerned, shows

a trend towards an increase in the emphasis on the lecture-demonstration technique in fostering ability in this subject. This double method is used frequently and the tendency is to employ a combination of methods rather than guide the pupils by using some definite, specific method. The mere fact of studying general science throughout the grades has enabled many students to progress much more quickly later when pursuing chemistry and physics and other specific sciences in high school. Analysis of the New York Regents records of 1,802 science students showed that for the pupils studied, those who had taken general science did better in physics and chemistry in high school than those who did not take the course. As a guide and assistance to the pupil, it has been found that the lecture-demonstration method is somewhat superior in teaching necessary matter in the average science curriculum. The laboratory method is better for giving skill in manipulating laboratory materials. However, the former means of teaching is not as expensive and from considering the factor of economy of time, has many points in its favour.

GUIDANCE in Other Subjects of the Elementary Course.

Spelling progress can be best judged and rated by the use of one or more scientifically constructed spelling lists such as the Ayres or Thorndike Test. Pupils can be readily classified as to grade according to the Ayres' norms. Such ratings are of real use to educational counsellors.

Handwriting has lost much of its former importance owing to the advent of the typewriter and other producers of the printed word. Speed and legibility are the two most commonly respected attributes of this school subject. Class teach-

ing with individual correction of errors of pupils appears to be the usual manner and most effective way of guiding students to a certain level in this subject.

English Language as a means of oral and written expression must necessarily command the attention of the educational counsellor. A knowledge of the minimum essentials in spelling, grammar, capitalization and punctuation, since these are used constantly in life situations, must be ensured. Teachers of special subjects other than English, can aid the cause of language by insisting on correct English usage. As a further aid in the promotion of good language, children can be taught the use of the dictionary with little effort and a great deal of pleasure.

Literature presents a real challenge to the wide awake teacher. Although from surveys it has been found that a large proportion of children dislike the subject, its general value and cultural worth make it imperative for practical guidance in the form of suggestions of its beauties to inspire pupils to read - and read with zest.

French, while given prominence in the course of study of the upper elementary grades in some of the provinces, is not stressed sufficiently along conversational lines, as one would expect it to be in a bi-lingual country. In nearly all the provinces, most of the emphasis is placed on the attainment of facility in reading sentences and stories. Although not a great deal can be expected from a grade seven pupil in his first year of introduction to the subject, if he be an English student, yet much could be accomplished in the realm of elementary conversation. An interesting comparative study of the effectiveness of teaching French pronunciation to young students by the Phonetic

method and by direct imitation was conducted by Ione K. Flower in a study to obtain her Master's degree at the Massachusetts State College. A summary of the thesis is given herewith: The research "derives numerous tests to examine the results of instruction obtained in groups of pupils, and shows a constantly smaller number of pronunciation errors and a uniformly greater ability of comprehension in that group which had been taught pronunciation by the Phonetic method."

Music Education from the guidance angle, should be for the vast majority of pupils, one of music appreciation. Practical performance may be the goal of many, but there should be a minimum of talent to ensure success. The pursuit of music for pure enjoyment and as a leisure time activity has great possibilities in the elementary school. By the use of scientific aptitude tests, special capacities for music can be determined quite accurately at the age of eight. In the diagnosis of musical talent, the vocational counsellor has an excellent tool in the most recent measures of musical talents devised by Dean Carl E. Seashore.

Art like music requires a variety of talents for real success and for most students, appreciation will be the main objective, yet in the evaluation of achievement among elementary pupils in the domain of performance, the standards attained by the average student are quite high. Art, of course, covers a large field and the number of specific talents that can be directed into certain channels is large. The vocational adviser can again utilize good standardized tests for diagnosis and prognosis.

Vocational Guidance in the Elementary School. With the

return to normalcy during the post-war period, the employment situation will change considerably. It is probable that the pre-war problem of the profitable use of leisure will again be in the limelight and will require careful consideration and solution. Now is the time to prepare for such an emergency. Since many of our present attending elementary school pupils, particularly in the upper grades, will be seeking positions either before, or sometime after the war has terminated, it would be well to train these students now in the wise use of leisure time, because, if a difficult lack of employment should arise later, they will at least have a diversion and find some contentment in an avocation or hobby, even it brings no pecuniary rewards. However, the very fact of keen interest in a special activity has frequently resulted in the developing of above-average ability in the pursuit, which in turn has meant the marketing of the particular skill or knowledge,- in fine, the transformation of an avocation into a vocation.

Freedom of choice should be the watchword in any policy of avocational guidance for the elementary school. The teacher can develop a list of possible hobbies, suggest attractive ways to encourage the student to select at least one for following up, permitting the pupil a wide margin for choice. The important factor is not so much the type of selection made but rather that some choice has been made. The extent and variety of hobbies for young people is almost without limit. In the field of collection alone, there is ample opportunity for worthwhile, avocational activity. In the cultural subjects of art and music, endeavours can be most fruitful. In sport, radio, sound projection, photography, nature study and in the domain

of the numerous divisions and subdivisions of science, youths can discover several hobbies to appeal to their interests and cater to their individual differences. It requires only the skill of the enthusiastic teacher to guide the boy or girl in the right direction.

Vocational Guidance in the Elementary School. For those pupils in the grades who will continue their studies as far as high school and beyond, guidance can be largely educational in set-up. The others who plan to leave school when the school leaving age permits, will need assistance to guide them in making an appropriate choice of occupation. It is generally conceded that pupil guidance should be provided by the elementary school. One excellent method that has been found extremely useful and which can be readily adopted for a graded school is the compilation of a cumulative record card for each pupil. This report should contain the academic record of the child, information concerning home life, mental and achievement tests results, the marks of tests measuring specific capacities, health conditions and physical defects, special successes, hobbies and the range of interests. It is vitally important that occupational information be made available to the students. A survey of the local area or of the province in which the school is situated has proved to be invaluable. Occupational information thus gathered is of real practical use and significance to the pupils. The school can do much to bring the need for pupil guidance before the local district town or city by means of parent-teacher organizations, the radio and the press. The use of home rooms in a number of schools is a modern conception and the utilization of the idea for pupil guidance has been generally successful. In large

schools the work can be most expeditiously carried out and most effective through the medium of a guidance director or counsellor. Even in small schools a definitely assigned person to direct the guidance programme will ensure a more effectively administered guidance service than if the general teachers do the counselling.

From a study of applicants and their ultimate placements by various vocational placement bureaux, there appears to be an urgent need for continuous counselling and guidance service in conjunction with a continual survey of occupations to permit ample provision for adequate information on opportunities for employment, essential specifications for certain occupations and the various trends. From a study of the characteristics appertaining to the occupations themselves, nearly all occupations require common elements of character and personality. Recent research indicates that there are definite families of occupations. All in all there is a general tendency for occupational ability patterns to agree with occupational interest patterns. For elementary school pupils leaving school it would seem to be the part of wisdom for guidance to direct the student toward the proper family of occupations, which compare with his talents, abilities and interests, -and from that point advise the student to narrow down his vocational selection to more specific centres. As the subject obtains more skill and experience in the fundamental operations and knowledge of his particular field, he will be the more prepared to accomplish the aforementioned with comparative ease.

One phase of guidance that must not be neglected is the extent of possible success that can be attained by indivi-

dual counselling through the personal interview. This method often brings to the fore idiosyncrasies that enable the counsellor to diagnose and advise more scientifically than otherwise would be possible. Trained advisers with sufficient practical experience, are capable not only of interpreting correctly case-history records, but also, by psychological questioning to enable the subject to show leanings and inclinations that can reveal specimens of vocational dispositions. Reasons for the selection of a certain vocation are frequently given in a personal interview. Interest in the vocation, remuneration, accident, family tradition, parental influences, recreations and hobbies are influencing factors in vocational choice as revealed by interviews and questionnaires. From the results of interviews with girls, those found employment who were more practical, efficient, demonstrated greater ability in leadership, possessed more initiative and were generally more attractive than the unemployed girls.

Religious Guidance. To a Catholic, the Church's stand upon the subject of true education is most explicit and binding. Canon 1373 from the Code of Canon Law (Section XXII) states that "In every elementary school religious instruction, adapted to the age of the children, must be given." From Canon 1113, we read that "Parents are bound by a most grave obligation to provide to the best of their ability for the religious and moral as well as for the physical and civil education of their children, and for their temporal well-being."

Canon 1374 respecting education as far as Catholics are concerned, requires special citation since it is either unknown

or misinterpreted: "Catholic children must not attend non-Catholic, neutral or mixed schools, that is such as are also open to non-Catholics. It is for the bishop of the place along to decide, according to the instructions of the Apostolic See, in what circumstances and with what precautions attendance at such schools may be tolerated, without danger of perversion to the pupils."

Pupils should be trained in religion and morality. Since most parents are unable to give such religious training adequately, it is necessary to send their children to Catholic schools. Where parents are permitted to send their children to non-Catholic schools, it is incumbent upon them to supply full and sufficient religious education.

As excellent as many non-Catholic schools are, academically and otherwise, such institutions of learning fail to render adequate religious and moral training from a Catholic standpoint. In many such schools, there is no religious education or moral training of any type. Often a materialistic atmosphere pervades their entire philosophic set-up. In some schools of this type, a religious recognition of the Deity is evidenced and a course of study in religion is followed. The latter is generally reduced to the perusal of externals, such as the singing of a few hymns, the recitation of passages of Scripture garbled beyond original recognition and the saying of prayers. Unquestionably, where sincerity reigns, they have a certain value and would that all non-Catholic schools could at least come to the point of recognizing God as fully and as capably as they know how. But, the idea is widespread that religion is one field of thought, -and must not interfere with

education. Religion must be placed in one compartment and religion must not venture forth as an ally of education.

For Catholics this is a long way from the ideal. Religious guidance for Catholic children must be practical to the core. The faith must be lived to be appreciated. Children have to be constantly encouraged to make use of the Sacraments to keep them good. A reminder from the teacher upon the value of assisting at the Holy Sacrifice of the Mass and the worthy reception of Holy Communion often has the desired effect.

The results of religious instruction that culminate in the practical application of the lessons learned are the ones that are most worthwhile. The mere retention of religious knowledge, while important, is not sufficient. It is interesting to note a study on retention, based on a course in religion for the elementary schools, the study of retention being made by Sister Mary Loyola Baitzer. From grades three to seven inclusive, studies were made on the effect of summer vacation upon retention of materials studied in religion by the children. It was discovered that there was a small but significant loss by the children in retention in each grade studied. It is a matter of practical experience that habits of going to Confession and Communion, and attending Mass, - have more or less a degree of permanency. With children, such lasting effects can be accomplished by continual checking of attendance and encouragement.

The subject matter of the religious courses in some Catholic schools depends often on the enthusiasm and ability of the administrative staff. This was found to be particularly

so in the case of Catholic high schools in the United States. Since courses vary from school to school, pupils transferring may miss important elements of religious instruction. A system of supervision can be a useful method for improving religious education. From an evaluation of thirty-seven diocesan courses of study for Catholic elementary schools in a Master's thesis for St. Louis University (1936), Sister Mary Leon Albin discovered a rapid growth in the last decade in the production of courses of study. The research shows that there are few courses in religion and these are poorly correlated with other courses.

A Philosophy of Education for the Elementary School.

Dean Carl E. Seashore, of the Graduate College of the State University of Iowa, has suggested "An Educational Decalogue" embodying an outline of important educational principles, which might very well serve as a modern guide for education. This comprises the recognition and implication of individual differences, the making of education student - centered rather than curriculum-centered, the replacing of much of our classroom teaching by the individual guidance of pupils at all levels, the organization of training for self-help in learning, making motivation the chief medium of instruction; furthermore, to speed up and vitalize education by the elimination of lockstep in assignment and promotion, the integration of the school with community life and career, the justice of awarding praise and blame on the basis of capacity, and finally, aiming to develop the individual in a well-rounded personality. Seashore envisions an optimistic future for education for we quote "we see now a wholesome growth in the direction of the development of the physical self, the moral self, the social self, the esthetic self,

the religious self, and may I say, the philosophical self.

It is in the pursuit of these things that we should keep the individual busy in a wholesome training at his highest natural level of successful achievement in order that he may be happy, successful, and good." And may the author of this thesis add that the aforementioned philosophy of training is splendid and portends real accomplishment in the realm of elementary and all education, provided the public schools of America remember and put into practice -

"Seek ye first the kingdom of heaven and all other things will be added unto you."

A P H I L O S O P H Y O F G U I D A N C E

CHAPTER III

GUIDANCE AT THE SECONDARY SCHOOL LEVEL.

Comparative Principles of Secondary Education. While there is a certain uniformity among the objectives to be achieved in high school education in the State systems of the United States and the Provincial systems of education throughout Canada, in the public schools,- in the accepted interpretation of the term, - there is little or no provision for adequate religious training. Where religion is permitted a place on the curriculum, the philosophy underlying it is often vague and nebulous. Thus, from the "Principles of Education" by Chapman and Counts, accepted by many as two authorities in the field of philosophy of education we read that, although there is a frank avowal of the importance of formal provision in the school programme for the fostering of religious experience in the life of the individual and society, "Under sympathetic guidance they (the pupils) should be made acquainted with the great religious figures in history." And in a previous paragraph, it is stated that the great religious figures include "Zoroaster, Amos, Buddha, Confucious, Jesus, Mohammed, St. Francis, and other rare spirits." God himself is accorded fifth place amongst a group that is chiefly paganistic. Undoubtedly, many pagan philosophers are historically interesting characters, yet they, or even a beautiful character like St. Francis, cannot be put on an equality with the Divine Saviour. However, the authors do not stop here but suggest that a universal religion should be adopted, one that would be acceptable by all-and one -

* Ibid, P.338.

"*surcharged with the universal, ethical principles enunciated by the Hebrew prophets rather than based on ancient or mediaeval doctrines, customs, and practices; a religion compatible with all scientific truth rather than based on the miraculous; a religion that conforms to the ideal of constant revelation rather than a single act of revelation; a religion without mysteries, without dogmas, hence without superstitions, without hatreds; a religion in principle so true, in belief so simple, in spirit so humane, and in action so inspired by love that it will guide its followers into that brotherhood which is the hope of man."

It would be quite in accordance with common sense to paraphrase such a mass of inconsistency as - a religion saturated with cosmopolitan dogmas of chameleon flexibility enunciated by individuals rather than based on the whole teaching of Christ; a religion compatible with every popular theory, proven or otherwise, - rather than based on the proofs of the miracles and resurrection of Christ; a religion that caters to the whims and passions of the modern age rather than that based on the revelation of an immutable Being; a religion man-made, sufficiently changeable to suit all the vagaries of the human ego; a religion permeated with egocentrism, devoid of any reference to penance or suffering, one without any authority or guide, in fine, one that would permit personal interpretation of its regulations, if it had any, enabling the individual to choose or reject at will.

Such a system, if it can be termed such, certainly has far reaching implications for education. For those of high school age it can cause serious character repercussions. At best the adolescent stage of development is a difficult one for many. Perhaps at this period more than any other is there a dire need

for sympathetic understanding and guidance. Confusion may reign in the mind of the adolescent. Some pass through the period more or less adjusted. Others, especially those of introvert type, have difficulty in reconciling certain facts and assimilating fundamental truths.

From the Catholic angle, a consistent, religious philosophy of life is the raison d'etre of secondary education. Safe guides for conduct, definite principles and tested rules offer a plan of existence that will help the individual to understand the meaning of life. An adequate knowledge of religion plus the means of interpretation, show how it applies in the light of life situations. In the Catholic secondary school, the why of life and the how of living are stressed. The development of moral ideals and habits are of primary consideration. The supernatural means placed at the disposal of the adolescent (the Sacraments, Mass, etc.) help him accomplish the purpose of this creation.

The term "secondary education" has dissimilar connotations in different countries. In the United States of America it implies a high school education for the masses - a training offered free and encouraged for the vast majority of the people. In many communities, at least fifty per cent of the adolescents are receiving a high school education and in some centres the number is as high as seventy per cent. This is in accordance with the American conception of democracy. Those south of the border have an implicit faith in the powers of education. A great many consider their public high school type of learning a panacea for most social and economic ills. Their naive faith in its possibilities amounts at times to sheer gullibility. The

mere wording of a great deal of educational offerings in national and other magazines and periodicals, bears witness to the fact. It is generally conceded that the products of the American high schools are definitely inferior intellectually to the students emanating from the European secondary schools. Pupils of the latter institutions - at least before the present conflict - were more highly selected. This would account to some extent for the differences in mental ability. In contrast with American figures, approximately fourteen per cent attend high schools or the equivalent in England. Here education is more aristocratic in tone. It is not provided for the masses as in America. In each country, the underlying concepts of education determine who shall receive its benefits and to what extent they shall receive.

Objectives of Secondary Education. Besides laying the groundwork for a proper philosophy of life, it is incumbent upon the teacher to develop attitudes and ideals of citizenship. Being social in nature and living in a society, man must realize and be taught to be a cooperating member of such a group. The fostering of Christian ideals will emphasize the Christian view of society and help to produce a social conscience, one thoroughly imbued with the respective rights of the individual and the group. The correct attitude toward family life and an understanding of the duties involved can ensure its proper role in society.

The individual should be given every opportunity of growing avocationally. By an accurate diagnosis, he can be shown his own peculiar abilities and limitations. Sufficient encouragement to his specific talents and wider interests will result in benefits to society as a whole. The individual should be trained to think, to use good judgement and provided various avenues for

the development of the imagination. Every facility for the promotion of creative talent should be made available. The secondary school pupil should be imbued with a love of the beautiful in literature and art. The pursuit of recreation should be in a wholesome direction and provision made for the cultivation of all worthwhile things in life. The accomplishment of these objectives must not take place at the expense of a solid grasp of the basic processes of secondary education, such as, reading, number facility and fundamental mathematics, spelling and composition, and a facile style of expression both in speaking and writing.

Educational Guidance in the High School. Pupil deficiencies in the tool subjects of the elementary grades, unless eradicated, have a decided effect upon high school achievement. Even determined upon the basis of teachers' marks, which are frequently quite subjective, there is a definite relationship between the consolidation of the fundamental subjects of the grades and progress in high school. While general intelligence accounts to a certain degree for high schools students' lack of knowledge of the tool subjects, it is not the only determining factor in explaining the deficiencies. Variable factors such as methods of teaching, age, interest, personality of the teacher, and environmental circumstances undoubtedly influence many individuals. Insofar as the mental ability of pupils and outside influences will permit, the teacher should insist upon as solid a mastery of the key subjects as possible. Even in high school, a survey of the fundamentals and the institution of a remedial programme to eliminate deficiencies can be effected with profit. As for the pre-

diction of achievement in the first years of secondary school, standardized tests are a better criterion of success than teachers' marks.

Vocational Guidance in the High School. From studies made of the relation of success in high school to occupational status ten or more years later, it has been found that prime consideration should be given to the guidance of pupils into occupations that are suited to their mentalities. Again, it may be stated that a good test of general intelligence is a definite help to a guidance counsellor. At the present time there appears to be a need for a wider range of vocational offerings that should be placed before the pupils. The first year of high school is certainly not too soon to place occupational information before the students. The ordinary curricula of schools which do not enable its pupils to meet the problems of life vocationally speaking, must be reinforced by the addition of a system that will ensure a practical knowledge of the main occupations. Nor should such a system stop here; a study and knowledge of various occupational trends can render further and invaluable assistance.

Future occupational success may be predicted to some extent by noting the scholastic attainments of high school pupils. From a follow-up study of Columbus (Nebraska) high school students, - graduates of the classes of 1917 to 1927, - it was found that men and women of the upper quartile excelled those of the lower quartile in "annual income, occupational rank, advanced training, vocational adjustment, and membership in organizations; that college men in the upper quartile have been more successful financially than non-graduates; for the lower quartile the opposite is true. "It is generally conceded that on the average, academic success meant vocational suc-

cess. This statement of course, must be interpreted with a certain amount of reservation. We might paraphrase it by saying that, on the average, the greater amount of general intelligence, the greater possibilities of occupational success. Certain specific skills are required in many kinds of work and there is a great variety of specific capacities and abilities. However, general intelligence is a factor common to the majority of jobs and positions and is a necessary pre-requisite for those aspiring to fill such occupations. Naturally, it is required in different degrees, some necessitating more, and some less mental equipment. It may be said that other things being equal, general intelligence will carry an individual along, for the greater the general intelligence the more pronounced the occupational success. Thus the importance of the guidance counsellor acquiring an adequate technique in the giving, scoring and interpretation of scientific, individual and group intelligence tests.

The Choices and Needs of High School Youth. The majority of boys and girls make definite vocational selections during the high school period. Frequently, boys aspire to higher vocational levels than were reached by their fathers. Generally, interest is the chief reason for a vocational choice with financial considerations ranking a close second. With girls, both parents are concerned with the child's choice of vocation, although, often-times the mother shows the greater interest.

While there is a lack of recreational and educational facilities for youth, which undoubtedly contributes largely to delinquency and in some cases incorrigibility, the great need of the present age is, - for the great majority of Americans and Canadians - a sound practical system of moral training. Catholic schools are

fortunate in this respect for the spiritual well-being of the individual is of prime importance. All other considerations must necessarily take second place.

Since the present war began, an ever-increasing wave of crime among youth is sweeping the country. This can be traced to a large extent to the almost deplorable lack of parental discipline and guidance. *In the current issue (March, 1944) of the Catholic Family Monthly, Monsignor J.M.Wolfe summarizes so well the results of a survey by a number of public and private agencies in Michigan that it is cited here as probably representative of many other sections of the United States and Canada:

"In a state-wide survey in Michigan last summer by 33 public and private agencies to find the chief cause of the upward trend in youthful waywardness and the increased rate of delinquency of 19.2 in the last two years in the state as against a national average increase of 18.3, the following were the findings:

1. Broken homes, indicated by a divorce rate of one divorce to every 3.5 marriages during a five year period.
2. A general "Moral and spiritual breakdown" indicating war takes its first toll in the family.
3. "Latch key children" left to shift for themselves while their parents work.
4. The breakdown of family ties as the result of army recruiting.
5. Overindulgent parents who have more money to spend than ever before. Boom conditions and easy money in the hands of youth, accompanied by a "sense of wartime abandon."

*Wolfe, J.M. Msgr. The Catholic Family Monthly, Our Sunday Visitor Press, Huntington, Indiana, March, 1944. pp.1-5.

6. Immature emotional responses by "teen-age" girls who feel that they must make any sacrifice asked of them by soldiers and sailors.
7. Wartime changes and regulations which raised resentments amongst children against society.
8. Congestion, unsanitary conditions, and inadequate recreational facilities in areas where families have crowded together for defense work.
9. Adult absorption in "home front" activities, which fail to give children an opportunity to expend their emotions under proper supervision.
10. The "illogical" economic situation which permits 16 year-old youngsters to leave school and to earn as much or more in industry as the teachers under whom they studied.
11. Shorter school terms and the tendency by school authorities to grant working permits to problem pupils, passing on disciplinary problems to employers.
12. Community slowness in recognizing that a delinquency problem exists, lack of coordination of corrective efforts, and the craze of "teen age" girls for uniforms.

Monsignor Wolfe continues the article by showing how the shortage of manpower has been responsible for the Government of the United States pressing for the employment of mothers of children in industries without first ensuring that they were receiving sufficient care and protection allotted to their children. With such social problems crying for solution, is it any wonder that the educational needs have increased an hundred fold?

Guidance Functions in a Catholic High School. One of the chief functions of vocational guidance in the Catholic High

School is that of placement. Full-time employment must be found for many about to graduate and part-time work for a number of those remaining in the school. The guidance counsellor can render valuable service in effecting the proper placement of pupils. Many helps towards the accomplishment of this end have been found feasible.

The cooperation of government and private employment agencies with the school will result in the job adjustment of a certain number of pupils. Personnel managers of department stores and other firms are a possible means of contact for guidance counsellors. Often, people in representative trades and professions willingly come to the school and give the pupils the benefit of their specialized knowledge and experience. Form letters sent to business firms offering the guidance and employment services of the school is an excellent way of obtaining placement of students. By keeping a card index of the firms replying, a ready job listing is at hand for consultation. Counsellors should see that ample notification is posted concerning all Civil Service positions. It has been found useful to advise those seeking certain types of employment to work for a few days in a store in order to receive experience in salesmanship and other routine duties associated with such work.

Counsellors can encourage and further facilitate the satisfactory placement of pupils by having career books properly kept. The career book will help to lay bare the occupational opportunities awaiting the wide awake student. A study of the careers in which a pupil is interested along with the particular trends thereof will serve to train the judgment of the pupil and enable him to make a wise choice of life work. To eliminate false

notions about the role of women in Christian society, the noble and sacred career of wife and mother should be mentioned by the counsellor. Record cards that give the school history and social background of the pupil can be of great assistance to the counsellor in determining those of the school who are in need of part-time jobs. In order to encourage vocations to the religious life, the counsellor can cause a project study to be made of the various orders and secular clergy. In fine, the counsellor should pray fervently for the success of his labours and institute a vigorous program of follow-up of all pupil placement. In this way, he will take a more long-range view of his efforts.

Avocational Guidance in Secondary Institutions. There is not as much concern today with the importance of the wise use of leisure time as there was in times of depression. The war has been largely responsible for this change in attitude. Owing to the war with the present scarcity of labour and constant pressure from all sides, few people have leisure time. Jobs are plentiful and the problems of hobbies and diversions have faded from view.

There may come a time when training for leisure time may assume its pre-war importance. With a change from war time to peace time activity, , hours of free time will again for many loom on the horizon. The school must be prepared to play its part. The guidance department must be especially organized and ready to render a complete service. The high school counsellor must be prepared to guide avocationally as well as vocationally. It may not amount to a major problem but it will be one requiring careful consideration.

A Philosophy of Guidance for the Secondary School. Let it be said that first of all, it is imperative that a high school

inculcate in its pupils a sound religious philosophy of life. The adolescent is in dire need of everything that will promote his eternal welfare. When adequate provision is made for this, then the secondary aims of high school education can assume their rightful place in the life plan.

Complete growth of the individual adolescents socially, mentally, physically, culturally and in every manner consonant with their own latent capacities and limited only by the maximum potentialities of their own innate traits; the development of each one to the fullest extent of his capabilities; all these, together with the greatest emphasis upon the spiritual development of the individual, should comprise the main objectives of a sound philosophy of secondary education. The ultimate goal of complete adolescent growth may not be fully achieved during this period of personality expansion. However, a steady progress towards the final realization can be made.

A P H I L O S O P H Y O F G U I D A N C E

CHAPTER IV

COLLEGE AND UNIVERSITY GUIDANCE

The Standard Arts Course. The chief fundamental objective of a standard arts course is to give the student a broad preparation for life. At least this has been the aim portended by many of the college and universities on our continent. They claim to offer a liberal education, an ample and open-minded curricula not technical or professional but directed towards the general enlargement of the mind yet securing a basis for professional training although in some instances, actually rendering knowledge and skill of direct service in a particular field. How well some have accomplished their purpose is seriously open to question. The interpretation of the word "liberal" has strayed far from its original meaning and is all too often synonymous with licence.

Numerous benefactors of certain institutions of learning, if they could return to the scene of the present day results of their bequests, would bitterly regret the use and the false philosophic background of their endowments. What was intended for the betterment of the human race has unfortunately been used for the propagation of insidious doctrine resulting in the indoctrination of ideologies that have permeated the very vitals of the nation. Suffice it is to mention a few harmful teachings such as, euthanasia, free love and birth control. A score of other cankerous, soul-destroying tenets and equally malignant teachings are slowing up genuine, true education under the guise of a misnomer--progressive education.

The chief characteristics of any worthwhile arts course

will always be true philosophic values, broadening influences and the promotion of culture. The mere taking of an arts course or even the most ardent devotion to its cultural curriculum will not guarantee its possessor economic goods or wealth, but it does provide the essential environment for an all-round development of the student. The genuine arts course that is permeated with a correct religious-philosophy of life aim, will serve as an ideal background for any career or occupation. With such guiding aim, the Catholic college is supreme in its own sphere. The teachers who staff such a college are motivated towards the same objectives. Whatever is taught, whether it be a subject like history requiring a correct interpretation, or a matter of fact, inflexible topic upon some phase of mathematics - the underlying philosophy behind it must be truly Christian in tone. Those who maintain that it does not matter who teaches such a subject as mathematics, because of the extreme objectivity of the material generally involved, are inclined to forget a very important concomitant of the teacher's art. Professors who lecture on precise themes which do not admit of any possible, alternative reasoning, if they have not a Christian outlook, - frequently reveal by means of associative remarks interspersed throughout their teaching, their warped philosophic slant on life. It is also generally impossible for one thoroughly imbued with a true philosophy of life, not to show his true colours, even lecturing on a "cut and dried" subject as mathematics. Lecturers in non-Catholic universities are prone to dispense false principles whether these remarks are related to the subject matter in course or not. Their own philosophy will find expression somewhere in the routine of their lectures. The need of knowing the philosophy of a teacher is self-evident.

The Catholic college, to ensure the integrity of its arts course, insists upon this knowledge for the obvious reason also that pupils are so greatly influenced by their teachers. Attitudes, whether right or wrong, are built,- and if the latter, are difficult to eradicate.

The Value of the Classics. There is a strong conviction upon the part of many teachers of Latin in America today that if the subject of Latin is to continue on the curriculum of the majority of our schools, it will be necessary to make a real effort to convince public opinion and the educationists (so-called) in general of its indispensable worth. During the past two decades, the subject has not only been gradually disappearing as a compulsory item of the arts course, but even as an elective. Catholic colleges and universities are somewhat in a preferred position with respect to the security of Latin on the curriculum, but even in such cases, the strong trend towards abolition has been felt.

Professor Harold G. Thompson, Supervisor of Ancient Languages in the State Education Department of New York, places the blame for one of the weaknesses of Latin teaching upon the Latin teachers themselves. There has been a cry today for easy work, for easy thinking. In many places, the demand is for oversimplification. In the desire to educate everyone, to give a great many a college education, there has been a lessening of standards. Latin is essentially a subject that requires real thinking. Why attempt to make it easy and destroy some of its inherent traits? Without question, learning Latin is difficult. However, the subject presents a challenge to a student. At the present time, the majority of arts students are not fond of hard work, but if they can be shown that Latin makes for a keener intel-

lect and a stronger will, that they will have partaken of cultural values, that their modern language vocabularies will have become considerably enlarged, - such inducements will help to outweigh the difficulties.

If Latin has fallen into disfavour, Greek has further faded from the average arts curriculum. The number of students attending lectures in Greek in our universities is becoming fewer year by year. This is indeed unfortunate, for the subject can be of inestimable value for many. Apart from its cultural value, those undertaking a career in medicine or science will find their vocabulary enrichment greatly augmented by a study of the Greek language. Numerous technical terms used in English are derived from Greek. The language has a disciplinary value for the pupil inasmuch as the study of it requires constant word discrimination, thinking and considerable persistence. Whether one agrees or disagrees with the theory of mental discipline, it is generally agreed that certain subjects afford a challenge to students by requiring an above-average stick-to-it-ive-ness. Greek is one of such subjects.

There is a quality of American education in general that assumes if not always openly, at least indirectly, -that there is no such thing as hardship. Anything that savours at all of the difficult should be banished - according to the dicta of many educationists. In the same category of ostracism is placed any tendency towards poverty, -voluntary or otherwise. It is taught in many schools that self-discipline and self-mastery are unnecessary virtues. A number of universities have subscribed to these ideas whole-heartedly.

Transfer of Training. Because they resemble each other

so closely, mental discipline (formal discipline) and transfer of training are frequently considered - almost synonymous. To some, the interpretation of the words "mental discipline" imply that the study of certain subjects develop the mind so that it will be more capable of handling certain life situations. In other words, experiences and training acquired in school and college situations transfer to similar and different situations in life. Transfer of training is often thought of - in specific fashion. The question of the transfer of training may be broached by interposing the interrogation - "To what degree does knowledge acquired in one subject transfer to another subject?" It has been generally conceded that transfer between many situations actually exists, but, during recent years, the query is put - "To what extent does the particular transfer exist?" In considering the problem as a whole, there are two widely divergent schools of thought on the matter. Thorndike and Judd - each has his own following. We may adhere to the idea that transfer takes place only when there are identical elements between the two subjects or situations concerned-with the sum total of transfer depending upon the number of similar elements involved. There appears to be much in the idea of "Generalized Experience" supported by Judd. The process of learning to react to certain necessary elements and of neglecting other elements - this generalization goes on constantly in life situations. Under certain conditions, it is probable that all subjects have a transfer effect and ideals such as truth and honesty, probably transfer under all conditions.

The liberal arts course should be admirably suited for the promotion of all ideals and offer a sensible philosophy of life to its students. The cementing of the bonds of idealism must be a

major prerogative among the offerings to an arts student. There are many qualities derived from such a course that yield to no present scientific measurement but this is no assurance that such traits do not exist. Rather is it an admittance that there are entities among the sum total of the characteristics of the human personality that are intangible and which cannot be adequately appraised in a statistical manner. Even to attempt to classify certain human qualities requires searching diagnosis. In some instances, an abstruse approximation to the human soul borders on the transcendental for the approach thereto is often impalpable. Insofar as transfer of training is concerned in the consideration of the utilitarian value of the liberal arts course, while little scientific data is available upon the matter, there is a deep-rooted conviction among many that the recipient of a genuine liberal arts training is indeed a favoured individual, - one who has imbibed of knowledge, character props and attitudes that will be a mainstay in all the vicissitudes of life. Undoubtedly, the content of a full liberal arts course has considerable transfer value. Perhaps a future era may be better disposed to appraise it more adequately and appreciate the complete significance of its worth.

Theory of Utilitarianism. What subjects are of most worth and what techniques are most practical and useful in every day life have long been the criteria determining the curricular changes in the liberal arts courses of the colleges of America. The more important matter of developing good citizenship has been cast aside. The supreme educational task of preparation for the eternal abode is not only disregarded, but derided and openly attacked in many quarters. Where true education is tolerated, the insistence is upon the separation of education from religion.

This is characteristic of the public school system which motion carries through to the upper rungs of the educational ladder in the colleges and universities of secular standing.

It is not to be inferred that vocational success is inconsequential. The chief criticism is the undue emphasis placed upon it. Its relative importance must be recognized. But its present, utter deification should be modified in order to reveal it in its proper perspective.

An interesting study of the relationship between age at graduation from college and success in life was made by William Harold Lyons for his Master's degree at the University of Colorado. The study comprised the comparison of four hundred individuals mentioned in "Who's Who in America" (1934-35) who received their bachelor's degree from four mid-western universities between the years 1890 and 1910, with an equal number of graduates from the same schools of learning who were not listed in "Who's Who". The research indicated that those who had attained vocational success in life received their bachelor's degrees at less than the average age at the time of graduation.

In the prediction of success in college it has been found that the accomplishment of pupils in the high school curricula is one of the best bases of judging. To predict future achievement in college, secondary school marks are a fair means of measurement. In other words, other things being equal, an ordinary high school student will be a similar college student. Generally speaking, college success is not dependent upon the size of the secondary school from which graduates emanate. In the last analysis however, each student should be regarded as an individual to be guided. Before any educational prognosis is attempted, all available knowledge

about the student should be procured. There is a tendency today to place too much stress upon the general conclusions of statistical data without making sufficient allowance for individual differences.

The prediction of vocational success in life involves a much more complicated technique, which is yet in the pioneering stage, yet the hopes for the future are encouraging. However, the principal danger at present seems to be the accentuation on the doctrine of pragmatism which has had, and still has, - tremendous influence in urging that material success in the sine qua non of existence.

Present Day Trends. There is no doubt that at the present time the acquisition of a liberal education is the privilege of the few. Only those courses and affairs which contribute to the scientific progress of the race are given real encouragement. Culture and the arts are being steadily penalized. Governments take the lead in discouraging pupils from pursuing arts courses. The present war emergency is given as the reason. Many believe that the enforced curtailment of the general, liberal arts course is a short-sighted policy. The aim of any satisfactory system of education is not merely the production of scientific specialists but should at least imply the all-round development of those coming under its wing.

The president of the University of Chicago, Dr. Robert Hutchins, recently stated that "liberal education in the United States was so dead that the war was unable to kill it." Dr. Hutchins urged the return to liberal education, condemning extremes in vocationalism and specialism in education. In a recent address, he claimed that some people obtain a liberal education in spite of the colleges and universities - not because of them. This is cer-

tainly a strong indictment against many of our higher institutions and indicates a serious plight.

Concepts of higher education have changed even within the last decade. Political and economic factors have been the cause of some alterations. Religious and philosophical circumstances have been the reason of others. Without attempting to evaluate these trends in our own country, it may be said that the Catholic ideal of higher education has always been the complete realization of man's prime purpose on earth. The great problems that engaged the minds of Aristotle and St. Thomas Aquinas are still the great problems of today. Even from purely selfish and utilitarian motives, the liberal arts courses should be retained in order to provide and promote basic cultural studies as distinguished from technical pursuits, not only for their inherent and intrinsic worth, but also as essentials for the more successful study of advanced knowledge.

THE SPECIALIZED FACULTIES. I. LAW

What criteria should be adopted in the selection of students for the profession of law? The past few years have witnessed considerable research along these lines and much has been of a positive nature. Vocational guidance counsellors can proceed in this particular sphere of guidance of college students with more than a small amount of assurance. In citing a few highlights in a particular study - "The relation of certain factors to success in the law school" by Leonard J. Luker (Doctor's Thesis, University of Minnesota, 1935), we find that a reliable, law aptitude test can be of real assistance in determining law success; that the combined college average marks and the Minnesota Law Aptitude Test enabled the counsellors to predict the placement

of students correctly for more than fifty per cent of the cases in the upper, lower, and middle quarters according to marks actually earned in the law school; that the Minnesota Law Aptitude Test is a very valuable, single means for the prediction of success in the Minnesota Law School; that the average marks made in college are a much better prognostic measure than the high school record for success in the Law School. Most of the studies in guidance for the profession of law have indicated that academic achievements and intelligence tests scores correlate well with success in the law school and also subsequent legal practice.

It is to be inferred from recent research then, that students, in order to make a success of their law school training and have reasonable assurance of later, future success in actual legal practice, should have above average college marks and better than mean intelligence tests scores. Those who are only fair students should be advised to seek other avenues than law. Many lack the necessary capacities, mental and otherwise, for becoming proficient in this profession. It is claimed by some and in fact, is a current belief that one or two years in the law school would be valuable for a variety of occupations such as newspaper work, business or an insurance occupation. This belief has goaded many a mediocre student to try law, the time spent at which might have been more profitably given to pursuits more in line with his particular aptitudes. It also accounts for the great mortality among first-year law students in certain universities. Thus, without the possession of the first pre-requisites of strong vocational intent, keen mentality and academic achievements, a student would be better advised to seek elsewhere. At the

present time in the United States the trend for the more rigid standards of preprofessional education indicates that even junior colleges are becoming a more important factor in preparing students for law school. The majority of professional schools prefer limiting their enrolment rather than expanding the facilities already existing.

To enter into the vocational sphere itself. Let us ponder some of the chief characteristics of legal practice. Without question, this is one of the most varied of professions. Popular feeling has it that public speaking ability is a prime prerequisite. Certainly, it is no disadvantage and in many instances can be a decided boon, but taking an over-all view of legal activities, it is far from the most important. Many of those engaged in legal practice never plead cases in court. In metropolitan areas, the law has taken on the aspects of specialized functions. Some lawyers specialize in the administration of estates; others, devote their energies to contracts, corporation law, labour relations or perhaps, some type of transportation. In the general field, however, the giving of guidance to clients seems to occupy first place. This single activity is a chief characteristic of the legal realm. To be successful in this sphere of activity requires first and foremost mental ability that is definitely above average; to attain success in any phase of the legal profession requires keen, mental discernment. Aptitude for law comprises among other requirements, the capacity to learn, the possession of an analytical type of mind, the ability to assimilate and arrange facts in due order, the mental acumen to grasp a concentration of details and understand their intricate relationships.

But, it may be argued that considerable intelligence is also necessary for the professions of medicine, dentistry, the crea-

tive arts etc. How differentiate the particular kinds of qualities needed for law? It is at this place that reliably constructed, scientific tests of aptitude which are given and interpreted by trained vocational guidance counsellors can be much assistance. The general characteristic interests of the legal mind have become sufficiently well known to differentiate them from the congenialities and aversions of engineers and other professional people. Strong's Vocational Interest Blank, the Law Aptitude Examination of Ferson and Stoddard, and the Minnesota Law Aptitude Test are definite aids in the hands of an efficient, vocational guidance counsellor.

Aside from the domain of intellect with its intrinsic concomitants such as, large vocabulary, fertile imagination, etc, which frequently accompany mental brightness, there are character traits required for success in the profession of law. Qualities like persistence, sense of responsibility, personal integrity, a high sense of ethics,- these elements of personality, while extremely difficult to appraise at times,- are none the less important and indispensable. At present, there are a number of tests on the market for the determination of character but their reliability is too low to warrant their effective use with individual persons. It is interesting to note that in personality scales that portend to rate ascendancy-submission, objectivity, subjectivity, and extraversion-introversion, lawyers tend to be ascendant, objective, and extraverted. Successful lawyers are generally not retiring in disposition and unlike their professional confreres,- the engineer, the doctor, the research worker,-are more likely to be socially inclined and have social aspirations.

Effective guidance for the profession of law lies in

the taking cognizance of a varied combination of data revealing the innate capabilities of the individual and considering carefully their relationship to the chief characteristics of the profession itself. By a detailed analysis of the traits symptomatic of the profession and of the special capabilities of the most successful practitioners, prudent guidance in respect to the career of law can be made.

2. MEDICINE

Many administrative officers of professional schools of medicine have not been satisfied with the type of student aspiring to the career of physician and accordingly, the trend is towards a general raising of standards in this respect with a pronounced tendency towards greater emphasis upon mental and aptitude tests as qualifications for admittance to the medical school. Professional medical associations have also been important factors in the establishment of standards and determining minimum qualifications for entrance. It is generally agreed that a special interest in subjects such as organic chemistry, bacteriology, zoology and kindred pre-medical sciences with a superior attainment in the study of them is a very good index of future accomplishment in a medical school. Not that this alone is sufficient. Other talents and abilities are necessary to ensure success. Interest tests, college marks, intelligence scores, aptitude for science, and both manual and mechanical tests will enable the guidance counsellor to advise prospective students in a wise manner. Tests of medical aptitude are also available but just how well they are able to predict success in the profession itself is at present vague and uncertain. However, the Aptitude Tests for Medical Students devised by the Association of American Medical Colleges have been found capable

of yielding prognostic results which determine fairly significantly subsequent success in the medical school. They have even advanced one step further. A comparison between first-year students and their subsequent internship five years later showed that the tests revealed both a positive and meanful relationship.

In all probability, in the general run of affairs, aptitude for medical work shows itself gradually. The student often begins by indicating a keen interest in the work of a physician. The biological sciences have a peculiar fascination for him. By observing the doctor working in the laboratory, his interest grows. He is still far from the goal and interest alone will not make him a medical man. At this point it would be well to appraise his intelligence in order to determine if he have the innate ability to grasp the minute details of medical knowledge. A medical course places considerable demands upon the memory. After a good intelligence test has been given, it would not be amiss to consider carefully the score on the memory phases of the test before final interpretation.

To summarize briefly, guidance technique in this particular field would ordinarily employ a vocational interest schedule; a scholastic aptitude examination; an intelligence test of high validity and reliability; a test of scientific aptitude; a good manual test; an acceptable mechanical aptitude test; specific tests of memory, vocabulary and reasoning ability.

While manual and mechanical tests are included in most batteries of tests to determine subsequent medical success, these individual tests are really essential for any adequate prognostication of achievement in the realm of dentistry or surgery. At least, manual dexterity and mechanical facility, if not actually

measured by standardized tests should be appraised subjectively by competent people.

It should be noted that medicine and its close correlates - surgery and dentistry - have many subdivisions which offer vocational scope to many and varied talents. Public health, psychiatry, sanitation, ophthalmology, pharmacology, radiology, orthopedic surgery, preventive medicine, and many others are auxiliary fields that call for a variety of special abilities. However, the majority of these branches of the main field presuppose the necessary aptitudes and pre-requisites for success in the medical school.

It seems platitudinous to mention the necessity of including under guidance for a medical career the possession of the highest sense of moral values. More is needed in some cases than a course in medical ethics. Unscrupulous individuals can cause tremendous havoc, not only physically, but spiritually. What matter how brilliant the student, if he lacks truly Christian principles, - if the oath of Hippocrates is to him nothing more than a sham? How important it is to guide into the profession men of calibre, persons with a fine code of ethics. What is absolutely necessary for all medical students and members of the profession is a correct sense of morality.

3. ENGINEERING

The importance of adequate college guidance for the field of engineering cannot be too strongly stressed. The Mortality of those who fail to complete their studies in learning this profession is quite high. During the first year of the course in colleges of engineering, about sixty-two per cent of those attending, leave. Some discontinue for financial reasons

but many leave because they are unable to do the work successfully. As in other professions, a high level of intellectual ability is required for success. Liking for, and the intelligence to pass examinations in the physical and chemical sciences are essential. If one were to state one single factor that would be a determiner for success in engineering, it would be the subject of mathematics. The capacity to comprehend and execute analytical geometry, differential and integral calculus, theory of functions and other advanced mathematical work is a prime pre-requisite for undertaking the career. The guidance counsellor can early diagnose mathematical aptitude and accomplishment by giving the student the Iowa Placement Tests in Mathematics.

A particular talent possessed by a great many engineers is the capacity to visualize to a marked degree. This is quite understandable since the engineer must prepare and read blue prints, read topographical profiles and be otherwise skilled in appreciating spatial relations. Being able to perceive relative sizes and shapes is invaluable in the pursuit of such subjects as mechanics, drafting and descriptive geometry. The Minnesota Spatial Relations Test - a manipulative test, is used to give an estimate of a pupil's ability along the aforementioned lines.

In addition to appraising the aptitudes of a student for the subject of mathematics, his general scholastic ability, his interests and ambitions, his comprehension of mechanisms, his capacity for visualization, his talent for the physical sciences and general intellectual ability, the counsellor should take stock of other qualities which have a direct bearing on attainment in the field. Character and personality traits together with health and vitality cannot be neglected in the summation of essentials for such a career.

Trends in professional engineering education indicate that there is a tendency to insist that graduation from a college or university be a pre-requisite for entry into the profession, that is, first degrees in engineering are nearly always a pre-requisite for admittance into the profession. The extent of post-graduate^{work}/in the field of engineering is not particularly great. In the field of engineering, there is a wide area for selecting a particular line of activity. Many engineers choose a specialized function and the transfer from the profession to other professional fields is insignificant.

4. EDUCATION

The term "education" is so broad that guidance towards this field of endeavour as a professional career must take cognizance of the specialized occupations which comprise the main vocation as a whole. In the present instance it is interpreted to mean teaching. With this profession every one has had more or less experience. The majority of people have had at some time or other the opportunity of witnessing the work of a teacher. They have passed through the hands of various teachers and have watched pedagogic technique in action. Not that they always have understood the reasons behind the different methods employed in varying circumstances but at least, they have had the chance to view at close range the teacher's art, and whether they wished or not, have probably appraised it. For this reason, perhaps, teaching is one of the first occupations considered when the matter of a career is mooted. Not being versed in the art of teaching is no bar to being able to distinguish a good from an indifferent teacher. Even young children have the intuitive sense of discerning the teacher who knows the job and generally react in a cooperative manner. Most

people have gone through the elementary school and are familiar to some extent with this type of teaching.

Most guidance counsellors know the profession of teaching very well since the majority of them have been at one time or another teachers themselves, if not actively engaged in the occupation at the moment. Understanding the necessary qualities demanded by the art and the exigencies and trends in the profession, they are generally competent to give very effective guidance to any one contemplating such a career. Having been through the mill themselves, they are well versed with the activities of the teaching art.

In the guidance of any student for this well-known occupation, a survey of the qualities required in the teacher is of prime consideration. What constitutes a good teacher? Without doubt, in the rating of the prominence given to certain characteristics, discussion might arise, but in the determination of essential requirements that are common to the most efficient and best of the profession, there is general agreement. No one would question the fact that of prime importance in teaching, sound character and knowledge of subject matter with an infectious zeal for the task must be considered. Scholastic aptitude and success are indications that a person might deliberate and investigate the possibilities of a teaching career. No one who rates poorly throughout the school attendance years on academic pursuits should give serious consideration to teaching as a possible life work. Then, the type of instructing to be done and at what particular level of the educational ladder should be deliberated. The trend towards specialization is everywhere evident in all kinds of instruction. Varied intellectual talents are required in different positions.

Granted that the student has the intelligence, there is still the point whether he can impart his knowledge to others, and has a natural liking for helping others. This is especially imperative in the elementary school. As one ascends the academic scale, it becomes less pressing. In college and university, intellectual power and performance are cogent factors among the teaching personnel and supplant to some degree at least the teaching aptness expedient at the lower levels of learning. In post-graduate research, students are eager to collaborate with experts who devote themselves to a particular subject or branch of a profession, even though they be unattractive and lack teaching qualities. Luckily, the most intellectual and best qualified scholars are generally also the most adroit and inspiring teachers.

Students who are pondering the possibility of a teaching career would do well to reflect upon the following questions before seeking advice of a vocational guidance counsellor:

1. Am I interested in teaching?
2. Am I interested in the people whom I wish to teach?
3. Do I like helping others to iron out difficulties?
4. Am I really zealous about the work of teaching?
5. Am I looking for the opportunity to render service to others rather than reap rewards?
6. Am I able to adjust myself quickly to changes in my immediate environment?
7. Can I cooperate with others and secure their esteem?
8. Has my scholastic success been above average?
9. Is my appearance always neat and in good taste?
10. Is Courtesy an habitual trait and not one adopted for a special occasion.
11. Am I generally optimistic?
12. Have I control over my moods and not permit them to be inflicted upon others?
13. Have I the common sense not to take innocent remarks of pupils as personal affronts?
14. Do I guard against always being on the defensive?
15. Am I able to inspire and lead others?
16. Have I the common traits of ordinary good character—honesty, a sense of fair play, truthfulness, moral integrity?

17. Have I an above-average possession of the common virtues?
18. Have I the necessary bent to learn how to discipline and control the conduct of others.
19. Am I observant, prudent, thorough and accurate?
20. Am I anxious to acquire new improved methods in teaching
21. Am I constantly adding to my general knowledge?
22. Do I enjoy study?
23. Is my health good?
24. Am I sufficiently stable and mature?
25. Have I or Can I develop a sense of humour?
26. Have I enough patience to become a teacher and more than enough patience to remain a teacher?
27. Am I able to express myself clearly and fluently?
28. Am I free from serious, physiological vocal defects?
29. Have I a surplus of vitality?
30. Do I possess all other personality traits essential to the teaching job?

It is not to be inferred that the foregoing represents all the pre-requisites for the profession of teaching. They do cover needful points, however. It is the job of the guidance counsellor to assist the student in finding, if he has essential requirements, his proper place in the wide expanse of the teaching field.

There is no certain method of telling in advance whether or not a candidate for teaching in the professional school can acquire all the traits required for success but there are indications that give reasonable assurance. For example, culture is a very desirable acquisition for any one in the teaching profession yet it is very complex and difficult to appraise accurately. But capacities such as intellectual grasp and mental acumen, scholastic aptitude, skill in academic subjects and extent of vocabulary can be rated with a considerable degree of precision. Coupled to these, the counsellor is frequently aided by the Coxe-Orleans Prognosis Test of Teaching ability. M.B. Jenson who devised the Stanford Educational Aptitudes test, has developed a means for the advanced student of education to discover whether

his forte is actual teaching, research, or educational administration.

The large amount of research that has emanated from normal schools and particularly from the faculties of education of the various universities in America have thrown much light upon the diverse aspects of teacher training, teacher training in service normal school and college of education policies, practice teaching, the rating and status of teachers, and other matters intimately related to the profession. While some of the problems undertaken have a tendency to incline towards the extreme in the matter of specialization, the trend towards continual research shows a healthy dissatisfaction with educational affairs and a constant desire to improve them to the best possible limit.

Thus, in the realm of practice teaching, Mary Isabelle Cole in her study of the degree of cooperation between the faculties of the campus elementary training school and the other departments of twenty-five teacher-training institutions in different parts of the United States (Contributions to Education, No.746, New York, Teachers College, Columbia University, 1939),- concludes that few college department instructors observe the teaching of student teachers with any degree of regularity unless they have been designated as training school supervisors or administrators by the administration of the school; that instructors in college who are appointed training school supervisors make a follow up of student observation with a conference; that most of the college department professors who aid students to plan work that they are teaching in the training school are those who teach courses in the subject of education

or allied fields or are those who are training school supervisors; that with the exception of training school administrative officers and supervisors, there are few university professors who assist critic teachers in the rating and grading of student teachers; and there was little revision of student teaching manuals. For the purpose of evaluating the efforts of the student teachers and the work of the faculty of the training schools, the author suggested the use of a score card.

There is a feeling in certain quarters that faculties are not well equipped in staff, that is the education faculties of the universities are not as effective guides in the matter of teaching practice for student teachers as the normal schools. Of course, in the conducting of research in education they are more at home and frequently surpass the normal schools both in quantity and quality of output. Normal schools are, as a rule, staffed by teachers who have had experience throughout the entire school system and are often more sympathetic and better able to understand the problems that beset the elementary and junior-high school teachers. Actual teaching practice by the student teacher is given a great deal of attention. It is generally conceded that the difficulties and requirements of beginning teachers can be utilized as criteria in the improvement and enrichment of the student teaching programme in many normal schools and faculties of education. Guidance counsellors should bear in mind the insufficiencies of teacher training courses in any advice proffered to students on the point of embarking upon a teaching career. Obviously, standards are not the same in all institutions, and after making allowance for provincial or state certification requirements, it is incumbent upon the part of

advisers to select the best. It is the policy in some centres of Canada for normal schools to admit only those without a complete college course, leaving those with arts and science degrees for attention by the faculties of education of the universities.

Post-graduate achievement in the sphere of educational research has increased to a large extent. Numerous faculties of education have expanded their facilities in this respect during the last twenty years, although the present war is responsible for a decline in activity. Capable students are accepted for advanced work in administration or research. In exceptional circumstances, students are permitted by many universities in Canada and the United States to fulfil many of the requirements for advanced degrees away from the institution. This special registration privilege for work off the campus is frequently called projected registration. It is only permitted upon the recommendation of the professor who is to supervise the work and of the department head or special committee. Some attendance at the university is usually required. Correspondence courses along advanced educational lines are offered by many institutions but only a very limited credit is permitted towards an advanced degree. Guidance of university students planning to pursue post-graduate studies in the subject of education and allied fields, is frequently undertaken by a committee. At Harvard University the administration of the programmes for advanced degrees in education are in charge of special committees. Many other universities in the United States and Canada have a similar system of administration.

The Boundaries of the field of education have become greatly enlarged within recent years thus making the sphere of action of the guidance counsellor more momentous. When we behold

the diversity of occupations in the domain of education along, some realization of the complexity of the problems of the average guidance counsellor are presented. The following list shows a few of the positions that are available in the field of education:

- Teacher of Mathematics
- Supervisor of Mathematics
- Teacher of French
- Supervisor of French
- Teacher of Social Studies
- Supervisor of Social Studies
- Teacher of English
- Supervisor of English
- Teacher of History
- Supervisor of History
- Teacher of Geography
- Supervisor of Geography
- Teacher of German
- Supervisor of German
- Teacher of Italian
- Supervisor of Italian
- Teacher of Spanish
- Supervisor of Spanish
- Teacher of Fine Arts
- Supervisor of Fine Arts
- Teacher of Latin
- Supervisor of Latin
- Teacher of Economics
- Supervisor of Economics
- Teacher of Industrial Arts In Elementary Schools

Teacher of Industrial Arts in Secondary Schools

Teacher of Industrial Arts in Normal Schools or
Teachers Colleges

Supervisor of Industrial Arts

Teacher of Health Education

Supervisor of Health Education

Teacher of School Music

Supervisor of School Music

Teacher of Business Education

Supervisor of Business Education

Teacher of Health and Physical Education

Supervisor of Health and Physical Education

Teacher of Household Arts.

Supervisor of Household Arts.

Teacher in Special Classes

Supervisor of Special Classes

Teacher of Elementary School Science

Teacher of Secondary School Science

Supervisor of Science

Director of Educational Research

Teacher or Professor of Education

Instructor in Child Development and Child Psychology.

Vocational and Educational Counsellor

Psychological Counsellor

School Psychologist

Principal of Elementary School

Principal of Junior High School

Principal of High School

Superintendent of Schools

Principal of Vocational School

Director of Vocational Education
Specialist in Adult Education
Rural Community Specialist
Director of Rural Education
Supervisor of Rural Schools
Director of Student Practice in Normal Schools
or Teachers Colleges.
Normal School Teacher
Supervisor of Early Childhood Education
Teacher in Nursery School
Kindergarten Teacher
Director of Curriculum and Instruction
Supervisor of Elementary Schools
Critic Teacher in Normal School
Specialist in Parent Education
Leader in Recreation
Director in Community Recreation
Teacher of Health and Home Nursing
Director of Nursery Schools
Director of Technical Education
Instructor in Public Health Nursing
Director of Public Health Nursing
Supervisor of Public Health Nursing
Public Health Nurse and School Nurse
Principal of School of Nursing
Director of Nursing Service
Instructor in Schools of Nursing
Consultant in Elementary Science
Director of Speech Improvement
Director of Dramatics

Dean of Men

Dean of Women

Director of Character Education

Director of General Arts

Educational Statistician

The aforementioned list is by no means a complete inventory. Several additional educational positions have been catalogued and with the changing times, more are appearing on the horizon. Indeed, it is an age of specialization and many of those listed above exist in various sub-divisions already.

The task of the counsellor is, in truth, a complicated one. If an individual be placed in the appropriate general field, whether it be education or otherwise, the more particular adaptation to a definite groove can better take place after a period of trial and experience. It is a matter of finding the right church first, then avoiding the wrong pews. A skilful adjustment to a specific occupation can hardly be determined always on first attempt. In fact, certain types of endeavour rely upon some traits of personality like tact and seasoned maturity, that depend to a large extent on age and experience.

5. COMMERCE

The principal aims of the college of commerce of the majority of universities are to provide vocational education for students intending to engage in commercial, industrial, or financial endeavours. These objectives are based upon the assumption that a careful training in the basic principles underlying our present economic system is necessary for sufficient comprehension of the purpose and technique of commercial activities.

Preparatory for the work in the school of commerce comes

the pupil performance in commercial education in the public high and the private secondary schools of the country at large. A thorough foundation laid in either of these types of schools or in the commercial department of a vocational school portends well for the student who continues his studies to the college of commerce. Some of the aims of the secondary school commerce course that are generally accepted are sufficiently weighty to consider when one contemplates the general objectives of the average college of commerce. The aims of the upper grades of the high school course in commerce and those of the first years of the college course are quite similar.

One practical motive that is not particularly vocational in nature is the imparting of knowledge and developing skills which will equip pupils for handling their personal business affairs and be definitely useful in social and civic life. From a purely vocational standpoint, students will be equipped with occupational skills and understanding essential for securing and operating in a competent manner the main business techniques. In addition to knowing our business and economic system better, they will learn to have a scientific outlook. In the college of commerce they will acquire, not only scientific attitudes towards business, but also the statistical procedure that will enable them to forecast trends in the commercial world. Many schools of commerce acquaint their students ^{with} vocational opportunities in the field. A most pressing phase of a functioning college of commerce is the instilling of high standards of business conduct. A great need exists in the world today for the highest ethical principles in regard to

this vocation. Many problems in economics would be solved if general adherence to such principles were acceded. These are solid grounds upon which any sound philosophy of business education might be based.

Although vocational commercial education is needed at the present time, there should be also more emphasis upon general commercial education. Courses in junior business training are quite valuable for giving general business knowledge. In aptitude for commercial work judged on the basis of accomplishments in bookkeeping there is no difference between boys and girls. The junior college prevalent throughout the United States is especially adapted for general commercial education and particularly for secretarial training. This latter field is chiefly stressed in women's colleges.

In many small centres, the high school provides most of the office employees needed by business men. The average curriculum includes typewriting, shorthand, penmanship, bookkeeping, business arithmetic, commercial law and business English. To employers these are among the most practical of subjects. Young people obtaining first positions are employed largely as stenographers, office clerks, salesmen and saleswomen. Accountants and bookkeepers are generally more mature people. At the present time there is, in the United States, a dearth of secretarial training at the college level. The present emergency has been largely the cause of it.

In an evaluation of shorthand and typewriting for personal use made by Agnes Elizabeth Osborne (Master's Thesis, 1934, T.C. Col. Univ.-52 P.ms.) - is a description of an experiment conducted with one hundred students at Whittier Hall, and with

2499 students from Yonkers and Pleasantville, N.Y. and Englewood, N.J. The results indicate that typewriting was an important and valuable tool for the type of college students considered in the study. Miss Osborne found that one year was ample time to spend on learning typewriting for personal use and that shorthand did not function as a personal use college study tool. It was discovered that typewriting cannot be justified for personal use in the high schools unless typewriters are available for the in-school use of students. Aside from its vocational intent, it would seem that the ability to typewrite with reasonable speed is a desirable acquisition for anyone. It is interesting to note that it has been found that the typing of words with one hand is conducive to a greater number of errors than when both hands are used.

In another study, - "A follow-up Study of Commercial Graduates,"- (Ruth E. Arnold, Master's Thesis, 1936, Ohio State University, 68 p. ms.), in the analysis of information secured from ninety-one out of one hundred graduates who had taken commercial work, it was found that typewriting was of higher occupational and personal value than either shorthand or bookkeeping; that one year of shorthand was of little occupational value, that only twenty per cent of those who had studied bookkeeping use it occupationally and about forty-three per cent of those who had studied shorthand made use of it occupationally. Most of the graduates lost much time in seeking work, although they eventually secured work in the community. The study showed a definite need for a knowledge of salesmanship and office practice. It was discovered that the graduates had more difficulty in learning English than any other one thing. Economic trends

have altered a great deal since the year 1936, and accordingly, the placement of graduates in commercial work is more quickly dispatched today. It appears futile to forecast what it will be in post-war years unless a detailed research of the matter be undertaken.

One phase of commercial activity that is frequently neglected from the educational standpoint is that of salesmanship. In many places there is a trial and error method of hiring and training salesmen. This should be replaced by more scientific methods, based upon statistical studies and objective data. In progressive institutions and companies, up-to-date methods and media are employed in the training of salesmen. Some use individual methods while others employ group training methods. A number of college faculties have added the subject of salesmanship to the commerce curriculum which indicates its increasing importance in the commercial world. There is a strong trend towards the use of sales literature, demonstration sales portfolios, sales manuals, letters, bulletins, charts and films in sales training. Commercial educators feel that urgent need of training capable commercial teachers not only in technical skills, but also in consumer-business and social-business subjects. At present there is a scarcity of efficiently trained commercial teachers. The status of not a few shows that they are not as well trained as teachers in other fields and that their certification requirements are lower. Many of the teachers have neither majors or minors in commercial education. Those who have given considerable thought to the problem feel that much of the trial and error method can be eliminated by studying recognized authorities. Remedial methods vary greatly

and there is much discontent with commercial education in general. Colleges of commerce stress at times the lack of adequate preparation in the secondary schools. If this be commonly true, then it is a serious hindrance to the establishment of higher standards. Evidently, more cooperation between leaders in the field is required.

Post-baccalaureate work is offered by some faculties of commerce of certain universities. Harvard University has a post-graduate course leading to an M.B.A. degree. The advanced work in commerce at Yale University comes under the scope of the Faculty of Economics. In this department courses of post-graduate caliber are given in Public Control of Business, Public Utilities and Trade Regulations, Business Cycles, General Economic Theory, The Development of Economic Thought, Economic Statistics, Imperfect Competition,, Econometrics, Quantitative Economics, Modern Economic History, Industrial Relations and the Labour Movement, Money, Credit and Banking, International Trade and Finance, Comparative Economics, Transportation and Public Finance. Other courses are listed but the aforestated include the main ones.

One of the most modern and excellent courses in the realm of advanced business knowledge and activity is a correspondence course entitled "Modern Business" published by the Alexander Hamilton Institute of New York City. This is, without doubt, one of the most complete works on commercial information and literature of practical value that has been compiled. It has been likened to a post-graduate course in commerce that would ordinarily be taken at a university. Since, in many educational circles, there is a certain odium attached to courses

taken by correspondence, this excellent scholarly and graded commercial output has not attained the widespread circulation that it well deserves.

The titles of the Texts included in "Modern Business" are listed below to indicate the range of the commercial sphere that is covered:

- Business Organization
- Marketing
- Corporation Finance
- Advertising Principles
- Advertising Campaigns
- Business Correspondence
- Personnel Management
- Office Administration
- Accounting Principles and
- Credit and Collections
- Salesmanship
- Sales Management
- Real Estate
- Insurance
- Factory Management
- Inland Traffic
- Foreign Trade
- Cost Finding
- Banking
- Financial and Business Statements
- Budgetary Control
- Corporate Consolidations and Reorganizations
- Purchasing and Storing

Investment and Speculation

Marketing Geography

Commercial Law.

Each Text is accompanied by a Reading Guide outlining the best plan of attack, a special supplement to the text citing trends, and finally a problem to test the application of what has been learned. The author has carefully examined the various texts and supplementary literature and believes them to be of very practical significance, factually correct and pedagogically sound. The course is used in diverse ways by faculties of commerce and economics.

Comparatively speaking, guidance in commerce at the college level will be restricted to few students. Commercial education on the whole is largely secondary insofar as numbers of pupils enrolled is concerned. Nevertheless, there is need of guidance at the upper level of accomplishment. In a careful consideration of each student's capacities, aptitudes, scholastic attainments, interests and personality traits, placement, follow-up and trends in the commercial field, lie the hopes for a really effective guidance programme.

6. MUSIC.

Faculties of music have long been associated with conservatories of music where the preliminary foundations in the technical phases have been laid preparatory to the finishing off processes in theory and all-round musicianship that are laid in the academic music curriculum of the university. At this level of scholarship, the musical course of study is usually broad in range of subjects studied and is largely academic in content,

although a certain facility in one or two practical subjects is generally imperative. The trend is towards applied music and in addition to the regular Bachelor of Music degree course, many institutions have courses such as the Bachelor of Music course with major in voice, piano, organ, music education, etc. Master of Music degree courses are coming into vogue in many universities. Post-graduate work in music in the United States has reached a new high level. Undoubtedly, the great attention paid to the subject in the elementary, junior-high, senior-high and private secondary schools in America is to a large extent responsible for these excellent attainments at the graduate and post-graduate levels.

The very nature of music and the demands of proficiency and virtuosity in the subject, require that educational and vocational guidance be started at an early age. Guidance at university level pre-supposes necessarily guidance at the lower levels of learning. Then, practical music is such that skill can only be thoroughly developed by beginning at an early age. Many years of practice are required and this necessitates starting lessons when the student is quite young. Music is in this respect quite different from other subjects. When many careers are just beginning at the end of the adolescent period, the keel of the musical ship has been laid many years previously and the vessel has already left port on its professional voyage.

Guidance in music can be rendered in the most effective manner by subscribing whole-heartedly to the tenets of a sound philosophy of music education, Whether music is to form only an ordinary accessory to the individual's regular education,

or whether it is to be followed as a diversion, avocation or vocation, can be determined to a large extent by an apt guidance programme. The principles underlying such a programme should be categorized and appraised from the start.

The author has found the following criteria to be an effective basis for an adequate educational and vocational guidance programme in music:

1. Musical Talents

(a) The Seashore Measures of Musical Talents are diagnostic tools and prognostic instruments of the first order in the hands of a trained psychologist in music. They rate these capacities:

Pitch

Loudness

Time

Timbre

Rhythm

Tonal Memory

The Measures, comprising two series - Series A. and Series B - are on Columbia Phonograph Company Records (450A to 455B). These are known as the 1939 Revision.

The original measures devised by Seashore were called:

Sense of Pitch

Sense of Intensity

Sense of Time

Sense of Consonance

Sense of Rhythm

Tonal Memory

The original measures with the exception of Sense of Consonance are still an effective means of measuring basic musical capacities although not as economical in point of time as the 1939 Revision.

(b) The Kwalwasser-Dykema Tests.

These measure certain propensities for music some of which are latent in nature and others acquired by practice. They all presuppose some innate aptitude. The names of these Tests are enumerated below:

Tonal Memory

Quality Discreimination

Intensity Discrimination

Tonal Movement

Time Discrimination

Rhythm Discrimination

Pitch Discrimination

Melodic Taste.

Pitch Imagery

Rhythm Imagery

Six of these tests are comparable to the Seashore Measures of Musical Talents, Revised Edition, but their validity and reliability are not as reliable as the Seashore Measures. The authors of these measures pool all the marks from the ten tests into a single index number or musical I.Q. which, both statistically and pedagogically, is scarcely defen-

sible. As diagnostic tests they have definite value and the results from the battery gives a general picture of musical aptitude. Each rating, however, should be considered as an individual measure. In this manner the particular type of psycho-physical talent for music can be best diagnosed.

(c) The Drake Musical Memory Test.

This Test measures precisely that which it portends to rate, namely, musical memory or memory for retaining musical tonal patterns. There are two forms, A and B, both of which can be administered to an individual or group in approximately forty-five minutes.

It can be given to any group, of any age, with or without musical training.

It is a most useful diagnostic and prognostic tool for determining the amount of an important phase of fundamental, musical talent.

(d) Other Objective and Subjective Ratings

Acuity of Hearing.

Motility

Timed Action

Voice Control

Register of Voice

Quality of Voice

Singing Key.

Singing Interval

11. Academic Intelligence

(a) Intelligence Tests

Individual and Group Tests

Stanford-Binet, Terman, Otis, Etc.

- (b) Scholastic Success and Attainment
 - Progress in Academic Subjects
- (c) Objective Tests in Theory of Music
- (d) Examinations and Tests in Theory of Music
- (e) Subjective Opinion of Possible Accomplishment

III. Social Intelligence

- (a) Ability of adaptation to novel environment
- (b) Social Poise
- (c) Personality Traits
- (d) Extroversion- Introversion Rating

IV. Adjustability of Physiological Characteristics

- (a) Adaptability to specific musical instruments.

Piano.

Facility of muscular control and its capability of being developed. Strength, and the speed of extensor and reflex motion of fingers. Relaxation of arms.

Organ.

Flexibility of hands, arms and legs. Power of independent muscular reaction. The psycho-physical sense of tone colour.

- (b) Natural facility in bowing stringed instruments as the violin, viola, violoncello and contra bass.

Aptitude for finger and arm orientation.

- (c) Voice Classification.

Range of voice. Timbre. Muscular Control.
Pitch Control

(d) **Woodwind Instruments.**

Condition and alignment of teeth.

Breath Control

(e) **Brasswind Instruments.**

Elasticity of lip movement. Natural Physique.

Control of intonation.

(f) **Instruments of Percussion.**

Rhythmic action and sense of rhythm.

Nimbleness of wrist action. Reflex and extensor speed. Intensity discrimination.

V. **Ethical Principles and Standard of Morality.**

Although placed fifth on the list, the most important requisite in the final analysis.

VI. **Nervous Stability.**

An important pre-requisite for the study of practical music.

Supply of nervous energy.

Emotional control.

Temperamental reactions.

Maturity of feelings and emotions.

VII. **Thoroughness and Accuracy.**

Exactitude of execution.

Precise perception and observation.

VIII. **Speed of Reaction.**

Decisive reaction to stimuli.

Visual acuity and incisive response

Synchronization of mental, nervous and muscular responses.

IX. **Persistence.**

Stick-to-it-ive-ness.

Power of application

Power of concentration

Ability of sustained attention against
counter attraction, particularly audi-
tory attraction.

X. Co-operation.

Especially valuable and essential in
ensemble playing and accompaniment.

Required in choral and orchestra work.

Definitely helpful in general circum-
stances.

XI. General Health

Strength and vitality

Bodily physique

Endurance and fortitude

XII. Appearance

Appropriate and pressing for public perfor-
mance.

A consideration for aspirants for virtuosity
in vocal art.

Required for musical phases of the dramatic
art such as opera.

An advantage in other avenues of musical en-
deavour and musical art.

At the graduate and post-graduate stages of musical
application the foregoing touchstones are minutely apropos in
rendering to the individual, educational and vocational guid-
ance that will be personally apt and serviceable. By estimating
the relative importance of each of the twelve criteria and by
evaluating the comparable weight of the specific capacities and

aptitudes, it is possible to decide with ample assurance what kind of musical activity should be followed. The pianist does not require the keen psycho-physical capacities of pitch, and timbre that are indispensable to the violin, viola, cello or contra bass player. This merely emphasizes the fact that musical talents are of different types and kinds. A conductor of the first rank would need intelligence of a high order in addition to excellent ratings on all the fundamental capacities, not to mention a variety of other essential qualities. A composer among other things, must have excellence in the entire field of musical theory and auditory imagination.

The faculty of music of a university should have first and foremost, a broadened and enriched curriculum; one that can administer to the most diverse tastes and talents; a course of musical study designed to include the entire literature of history, appreciation, theory, harmony and counterpoint, form and analysis, canon and fugue, conducting, orchestration and composition, acoustics, the scientific aspects, the field of musicology, music education, the psychological branches, facilities for the practical needs, the plans for an expanded church music department comprising all the associative ramifications of liturgical music; in fine, no division of the subject should be neglected. Few, if any of the faculties of music that are in Canadian universities, are curricularly complete in all respects.

7. PHILOSOPHY

The curricula of philosophy in Catholic colleges and universities have become more or less standardized as to content and subject matter. This is what is to be expected in view of the supreme importance of the subject in Catholic education at

the university level. Its preliminary perusal as an indispensable pre-requisite to the study of theology has further enhanced its value and usefulness. The church has long guarded this subject with watchful eye jealously protecting its solidarity against insidious errors and misconceptions. Few, if any Catholic colleges regard it as an elective subject and generally insist that future leaders of both Church and State become imbued with its main principles.

The college curriculum usually includes logic, epistemology, fundamental and rational psychology, Metaphysics and cosmology, theodicy (a theological topic but frequently given in philosophy courses), general and applied ethics, history of philosophy (ancient, mediaeval, modern), natural philosophy, criteriology, specific phases of moral philosophy and economic philosophy. The terminology of subjects catalogued under the chief title varies at time slightly from college to college but the ingredients of the matter contained therein are the same.

Non-Catholic colleges have definitely an entirely different approach to the subject, with rare exceptions. A glance at some of the courses given at Yale University in the field of philosophy will serve to show, by title alone, a different outlook on the subject:

Philosophy of Science

Symbolic Logic

Philosophy of History

Fundamental Problems of Law, Ethics, and Politics.

The Philosophy of Descartes, Spinoza and Leibnitz.

The Philosophy of Schopenhauer.

Fichte and Hegel.

The Philosophy of Language

Greek Philosophy

The Philosophy of Religion

Social and Political Philosophy

Philosophy of Aesthetics

The Philosophy of Plato.

Contemporary Philosophy

The Philosophy of Aristotle.

English Philosophical Thought in the

Seventeenth and Eighteenth Century.

Ethics. "A study of the basis of moral standards with reading from Plato, Hume, Kant, Mill, and several contemporary authors, including Russell and Dewey."

Methodology. "Analysis of method in Natural and Social Science and Philosophy with special reference to problems of value."

Metaphysics

Theory of Knowledge

Ethics and Value Theory

Psychology of Religion.

Of course, it is realized that philosophy in the Catholic sense is accepted on the basis of its own rational evidence; good philosophy can be proved to be true. Although the philosophy of Aristotle and St. Thomas Aquinas fit admirably with the Catholic faith, it is reason alone that determines its acceptance.

Again, from a Catholic standpoint, a thorough grounding in genuine philosophy is an integral part of the liberal arts programme. The college curriculum is not only organized in terms of social needs and to a certain degree vocational objectives, but involves a wider sphere of activity embracing the realization of the more important phases of man's existence. Always will a major function of a Catholic arts student's knowledge be the correct theological application of philosophic principles.

8. THEOLOGY

From a study of the environmental factors in the personal history of young people who had recently chosen religious vocations, Thomas S. Bowdern found *that young men and women who select a religious calling come from large families whose economic status is better than average. It was discovered that the most powerful forces in determining their choice were very fervent Catholic parents, taking part in religious services, pastors, Catholic schools and teachers. From this particular study, it is shown that they are superior students. Keen interest was manifested by the group under observation in extra-curricular activities. Little or no attention was paid to dancing, movies, smoking or drinking. Apparently, girls received less home encouragement than boys to follow their vocation. In the majority of cases, after serious consideration of their vocational selection they leave home at the age of eighteen to follow their choice.

College training is a necessary pre-requisite for candidates for the priesthood. A definite type of college training can best prepare the student for the seminary course which

* Bowdern, Thos. Stephen. "A Study of Vocations", Doctor's, 1936. St. Louis.

will follow. Adequate study of English, French, Philosophy, Social Science, Apologetics and Ancient Languages are invaluable for future seminarians and are considered compulsory in many colleges.

To summarize in a general way, there are three requirements or qualifications for the priesthood, viz., donum Sanitatis, the gift of health; donum scientiae, that is the gift of knowledge; donum sanctitatis, the gift of piety. The Church exercises the greatest caution in the acceptance of those who believe that they possess the essential qualities and dispositions for this high calling. After a searching investigation of the individual's character and granted that he has the necessary preliminary education also, there is required at least four years of training in the Seminary. During this period, his superiors appraise thoroughly his various traits and capabilities and if he measures up to all that is expected of a candidate for the priesthood, he is recommended to the Bishop of his Diocese. The Bishop then reviews the case history of the individual, and if satisfied of the worthiness of the candidate, ordains him. For many of the religious orders of the Church, much longer periods of training are required than for the secular clergy.

Catholic teachers are in a position to render incalculable service when it comes to the matter of the stimulation and promotion of vocations. A certain portion of the religion period can and should be set aside at stated times to bring before students this all important question. The custom of holding a vocation week is gaining ground and this laudable practice is being followed by a continually growing number of schools throughout the Dominion and the United States. Both

in Catholic high schools and colleges we find fruitful fields for the stressing of vocations to the religious life. The students who are acquiring a liberal arts education in college are particularly amenable, chronologically and educationally speaking, -to a complete exposition of the sublimity and the characteristics of ecclesiastical life in the diverse orders of the Church.

LITERATURE

Emphasis on literature during high school and college years is an invaluable, preliminary, basic training for anyone intending to embark on the subsequent career of journalist. Not the least of the benefits derived is the acquisition of a steadily increasing vocabulary. The study of literature produces an improved power of comprehension in that pupils display a strong interest in the subject as a source of information concerning persons, places and events. Sometimes new ideas are acquired and a better philosophy of life. By means of an effectively organized and integrated programme of study involving teaching and testing to focus the attention of pupils on the larger areas of thought that characterize the subject, considerable progress can be attained by even slower students.

A number of colleges in the United States in their freshman course in literature duplicate high school work. This frequently results in the alienation of the interest of the student in the subject. Literature courses in college have been criticized on the score of using too many authors and their works. An independent, pupil reaction to the subject is needed rather than the pre-ponderance of the lecturer's point of view. This of course presupposes that the student is at the educational

level where he can make an appropriate appraisal. The first year college courses in the subject of literature should be so constructed that they are suited to the needs and the aspirations of the individual without also disregarding the inherent literary values of the subject.

Concerning literary appreciation, freshman students generally know what appeals to them and why, realizing how literature can be made valuable to them. The inculcation of literary discrimination is largely the responsibility of the teacher. A proper presentation of the subject makes the task of building enjoyment in the classroom comparatively easy.

In a study entitled "An enriched program in appreciation of literature for college sophomores," by Elizabeth L. Meeks (Master's Thesis, 1939. Peabody.130 p. ms.), there is described and evaluated an enriched programme of diverse activities planned to intensify the appreciation of literature particularly in the domain of poetry and drama. It was discovered that "students derived pleasure from such a course of varied activities; that through the free-reading program of an extensive nature they became convinced that reading good literature is an enjoyable activity and were determined to continue such reading in the future; that through the combination of intensive and extensive approach students were led to develop critical judgment and discrimination and an awareness of the characteristic elements of good literature; that through the activities included in a remedial reading programme they were able to improve reading speed, comprehension, and habits of eye movement."

JOURNALISM

Preparation for the career of journalism can be en-

couraged in elementary and secondary schools by the promotion of student publications. In this manner there will be a carry over of the knowledge acquired, when and if the student enters college. A newspaper is probably the most satisfactory type of publication for secondary students to attempt to publish and finance. This, along with a yearbook, is an excellent means of fostering literary talent. Active student participation in such an enterprise gives it the added value of a project. It is a good method of teaching creative writing. Besides providing experiences for writing, problems of publication are encountered which gives a worthwhile training in another aspect of journalism.

It is generally conceded that if the courses in journalism and subsidiary activities are to be successful, those who undertake to teach the subject should have specialized as well as general training. This implies that they must have become conversant with both the theory and practice of journalism. With sufficient experience in the field, they should be able to uncover possible pitfalls and point out the way. There are still many who believe that journalism is best prepared for in the job itself. They claim that nothing can compare with training on the spot. However, they agree that certain college courses in the subject can be of considerable assistance to the budding journalist. At present there is a real need of carefully compiled courses at the college level with direct vocational intent in mind.

ART.

A philosophy of art that is proportionate to the requirements of the age must include aesthetic experience, art

in general, the artist, beauty and art appreciation. The teaching of the subject should be philosophical in spirit employing a versatile formula. There should be an avoidance of too much stress upon exact rules for analysing elements in types of art. Since the ultimate purpose of most art is enjoyment and appreciation, too much dissection can prevent the realization of these objectives.

Art departments in the universities of the continent range from the most progressive to the most conservative types. Art education is becoming more prevalent at the college level. This is partly owing to an ever-increasing field in vocations requiring art knowledge. There appears to be a tendency to emphasize general cultural training and education as a foundation for such vocations, with the result that industry and art are being dove-tailed more closely. From a perusal of present trends, it seems that the most remunerative positions will continue to be for some time in the fields of industrial and commercial art.

Pre-art educational qualifications for admission to colleges of fine arts of various universities vary from place to place. However, there is a general uniformity of requirements demanded. Most institutions of high standard insist upon languages, algebra, plane geometry, history and science. In addition to the purely art subjects, at least one academic elective is carried through the four years leading to the Bachelor of Fine Arts or similar degree. The course while general in many aspects, is frequently followed with a major in one of such subjects, such as, painting, design, illustration or interior decoration.

ARCHITECTURE

Pre-requisite subjects for admission to four and five-year courses in the subject of architecture usually include languages, plane and solid geometry, algebra, trigonometry, physics and one or more elective subjects. University standards generally require the foregoing.

For the courses in architecture at the college level, a number of engineering subjects are required. Besides this special education considerable experience in the field itself is needed in order to lay a substantial foundation for a professional career.

Courses frequently perused in architecture in institutions of high standard comprise the following:

- Design
- Theory of Architecture
- Freehand Drawing
- Introduction of Construction
- Architectural Graphics
- Analytic Geometry
- Descriptive Geometry
- Mechanics for Architects
- Materials of Construction
- Shading and Perspective
- History of Architecture
- Graphic Statics
- Specifications and Contracts
- Theory of Ornament
- Reinforced Concrete
- Sanitation

Heating and Ventilation
 Modeling
 Illumination
 Electrical Installation
 Greek Architecture
 Roman Architecture
 Medieval Architecture
 Modern Architecture
 A Philosophy of Architecture
 Economics
 Real Estate
 Money and Banking
 Office Administration
 Sociology
 Language
 Architectural Practice.

It is almost obvious that those who intend to follow the profession seriously should possess intellectual endowments above the average if they desire to be successful. Special talents for art must also be present. A flare for mathematics and science is essential. Manual and digital dexterity in a variety of particular endeavours of the profession are required in no small measure.

There is a dearth of architects in Canada today and even those who are in the profession are comparatively old. The field is an excellent one to undertake for adolescents with sufficient diversity of specific endowments and the necessary perseverance to bring their potentialities to the stage of efficient development.

FORESTRY.

Aptitudes for mathematics, the sciences and a keen love of outdoor life are essential minima for those who would embark upon a career in forestry. Those who are interested in the operational and administrative fields of forestry would do well to specialize on the engineering phases of the profession. Students who intend to accomplish research in the field of forestry and concentrate upon the subjects of Forest Entomology and Forest Pathology would obviously undertake a course emphasizing the biological aspects.

Many opportunities abound for those looking forward to a career in forestry in the Dominion although at present, there are few universities that provide adequate training for the profession.

Other subjects that are often offered in schools of forestry include, Dendrology, Soils and Forest Soils, Silviculture, Anatomy of Wood, Identification of Woods, Economics of Forestry, Research in Forest Products, Forest Finance, Forest Management, Tropical Forestry and Forest Policy.

THE GRADUATE COLLEGE.

The culminating point towards which all knowledge focuses is the graduate school or college. In this institution, we find a general meeting place of academic activity around which centres a great diversity of subjects for specialization. It is at this level that research finds a prominent place and the mere taking of courses is incidental to the principal function of the school which stresses the all-importance of originality and quality of accomplishment.

Among American and Canadian universities, qualifica-

tions recognized and demanded for satisfying various standards at this stage of educational advancement, vary considerably. Some institutions provide instruction and facilities for advanced achievement in nearly all subjects. Others restrict their efforts to special fields of endeavour.

Intellectual ability above average and a strong interest in a definite type of activity are two of the chief requirements for post-graduate work. Students who possess at least these traits should be further diagnosed to determine the degree and extent of their aptitude for studies of graduate standing. The diversity and heterogeneity of the curricula of the graduate college of the modern university can fully cater to the potentialities of its versatile clientele.

A P H I L O S O P H Y O F G U I D A N C E

CHAPTER V

THE PHILOSOPHY OF JOHN DEWEY

Introducation. At first sight it may seem strange that the educational philosophy of John Dewey should appear under discussion in a thesis such as one entitled as this present one- and especially even more perplexing when it is projected into a chapter of a dissertation that is written from the Catholic standpoint. It will be realized, however, that this exponent of worldly pragmatism has now for many years dictated the philosophy underlying the educational policies of the public school system of America. His influence has extended to the provincial school systems of Canada. An almost unholy worship of the man has captivated the minds and imaginations of many professors of non-sectarian universities such as Columbia, Toronto and others of equal repute and status.

The Evil Effects of his Potent Influence upon Education. A mere perusal of the philosophical bases of John Dewey's theory of moral instruction results in a convincing indication of his pragmatic concept of morality. Unquestionably, Dewey offers a hopeless groundwork for an efficient system of moral education. His social theory of education is so wildly exaggerated that with all his vaunted practicality of system, one wonders at times if he is merely resorting to hyperbolic symbolism. His naturalistic philosophy of life and experimentalist view of knowledge have had far-reaching consequences for education.

Considering the point that Dewey offers an inadequate

foundation for a workable system of moral education, it is only necessary to read "~~The~~ ^{The} School and the Child" and "Democracy and Education" in order to realize that the Deity is completely ignored. The Creator is considered non-existent as far as this philosopher is concerned. Some moderns attempt the refutation of the existence of God and try to construct a system of philosophy from that point. Dewey does not bother to do that. For him, for all intents and purposes, educationally at least, Christ is not worthy of a place in his thinking. Yet, some who have attended his classes at Columbia will tell you that John Dewey is a most religious man. In his writings the philosopher does not show this. Perhaps he has become imbued with the typical American tradition of putting religion and education in their respective grooves. This writer may believe that religion and education should not be mentioned in the same breath. It is difficult to believe, however, that Dewey has so categorized his thoughts that his views on religion do not influence his ideas on education for "as a man thinketh in his heart, so he is," and thus the futility of trying to pigeon-hole these two subjects seems evident. Dewey and many of his satellites believe that religion is something apart from education: that education is self-sufficient and quite capable by means of its own inherent powers to satisfy man with the ultimate result of producing a better world.

The word "democracy" is the pivot upon which the philosopher whirls. His writings imply let us have democracy, more democracy and with this seasonable sesame, a new world is in store for the American nation. But how is all this ac-

accomplished? Is it by the application of Christian principles? Not at all. The old manner of education that stressed character and culture and which had room in its tenets for a realization of the nature and characteristics of human nature must now be made appropriate for the mob. This is effected by professing a new educational doctrine known as the freedom of the child. The child has been given to understand that his will should be allowed free play with no restrictions. It is easily understandable then, that when the child runs counter to law and order, he often considers them unnecessary. When he meets with the law of the land, it is frequently disregarded. Why should he regard as sacrosanct and inviolable during his manhood that which he was permitted and often encouraged to disregard in time of youth? This unsound principle giving an exaggerated sense of importance to the freedom of the child underlies much of the philosophy of education of Dewey. The travesty of the entire situation is made the more absurd and pitiful when educationists accept such a doctrine and naively boast of educational progress fully realizing the rapid rise in delinquency throughout the nation.

An unusual tide of delinquency must have a cause or causes. While it may not be certain that the educational philosophy of Dewey is a major cause and the only cause, it has played no small part in setting the scene for the production of a Godless educational system. A man's philosophy determines what type of man that he is. A nation's philosophy will determine the calibre of its citizens. By the educational philosophy of a country will be decided what shall be taught and to some extent what shall be believed. Without

doubt, certain basic principles of the moral code are stressed in the public school system, but why are they emphasized? Is it because of their immutability before God or is it because of their utility to the state? Dewey does not believe that the moral laws are, or should be unchangeable. This is one respect in which he fails to offer a satisfying and practical solution to many educational problems of an ethical nature. The American philosopher teaches that society should strive to progress to higher material levels and even moral regulations that proved to be practical in one generation might presumably become outmoded in a future age. In the entire set-up of the Dewey, educational super-structure, no place is reserved for the Divinity of Christ; God is abandoned; He is not even refuted; He is completely ignored.

While the freedom in education which is advocated by Dewey is harmful when it detracts from the true nature of the child and the real nature of education, it has been a contributing factor in diminishing the "fear element" in education. In this respect it is good. Fear has been in the past and can still be a deterrent to learning. Where fear is strong, it sets up emotional inhibitions that interfere with the educative process. Dewey, by the influence of his educational writings, has helped to minimize the effect of fear by urging a freedom of activity for the child. This centering of activity in the pupil is worthwhile in itself. Where it fails is in permitting free rein with many of the child's inclinations with no curbing for moral safeguards.

In some respects, Dewey has given us a more meaningful and more complete conception of democracy. He is to be

commended for his application of democratic principles to American education, yet he fails to be sound in that he not only divorces religion from the rest of the process of education, but considers real religion unnecessary for the adequate development of the child.

His Influence on Guidance. In stressing the importance of the child and relegating the curriculum to a place of lesser significance in comparison, Dewey emphasizes a point of major consequence. The child requires good guidance in learning. His nature must be considered first when he faces the problem of formal schooling. Dewey states that many people, and that includes particularly teachers, think that there are fundamental divergences between the child and the curriculum. Actually there is no difference in kind (as distinct from degree) between the child and subject matter. Those who are accustomed to consider the simplicity of child life and the "infinitely extended world of space and time;" "the unity of child life and the specializations and divisions of the curriculum;" "an abstract principle of logical classification and arrangement and the emotional bonds of child life;" as divergent courses which must be brought together and reconciled take a wrong view of method. Dewey considers method as an essential ingredient of a whole activity which might be isolated ~~for~~ study, but nevertheless is part and parcel of the child life. He claims that it is inherent in a single process which identifies the biological inheritance on the one hand and the sociological on the other. As has been expressed by this philosopher, "it is a trinity within a unity" - a whole activity culminating in a complete act of thought.

Dewey has helped to bring about the identification of the teaching process with the learning process. This aids in fostering better teaching. Realizing that the ~~essential~~ Characteristics of method are identical with the essential characteristics of clear thinking is a guide to the stimulation of pupil problem solving. There has been a tendency in the past to do much of this latter work - too much in fact - for the pupil. We not only deprive him of the keen satisfaction of accomplishment, but stifle his independence - making him lean more upon the knowledge and skill of the mature of the race - instead of permitting him to win his own battles.

The growth of the individual is an important factor in Dewey's conception of the function of educational guidance. Growth in the social sense is his principal interpretation of the word. He believes that an educational programme must have unanimity in its proposed schemes for a maximum self-expression and self-realization of the individual. There must be equity of opportunity for the individual to utilize all his instinctive tendencies and special inherent ability towards the attainment of a continuity of growth. Dewey contends, generally speaking, that individual variation in a democracy brought to fruition by means of growth will insure a self-sufficient society, having at its disposal its own perpetuation with the consequent transmission of an enriched social inheritance.

While Dewey attaches undue importance to social phases in suggesting the solution of many educational problems by social means without consideration of their true ethical aspects, the philosopher is thoroughly cognizant of human variability and

its educational implications. Individuals differ among themselves in every type of ability. A comprehensive educational policy will make adequate provision for this individual variation in the way of special classes for the gifted and mentally retarded, and also in making due preparation for the specially talented in other respects. In a democratic society - or for that matter in any type of society - all have not an equal chance to attain distinction, but all should have an equal right to a certain amount of happiness. It would be well to note particularly the mode of expression - a certain amount of happiness - for some modern, educational theories distort the ethical significance of happiness by attempting to furnish a full measure of bliss on earth the chief reason and goal of man's existence. Dewey teaches that the race experience that is best suited to his instinctive capacities and native ability should be placed at the disposal of the individual. However, the philosopher believes that nothing of the race experience is fixed in nature but that universal change is the order of the day for all that has to do with the physical and spiritual.

The Philosophy of Instrumentalism. The instrumentalism of John Dewey will not admit that man is a moral being who is responsible to his Creator. In a democratic society, representatives are eventually responsible to the people who elect them. While the instrumentalists are willing to concede the latter, there is to them no such entity as eternal truth. Right as opposed to wrong is a matter of social usefulness to followers of Dewey. Human society to them is not bound by any moral principles - moral principles strictly so-called. Man's rights against those of society scarcely exist at all. The individual

is made definitely subordinate to the common good. This is merely reverting to the pagan theory that the individual exists for the State and not the State for the individual.

The Catholic Stand Contrasted. Man is endowed with intellect and free will. Being a moral being, responsible to God, his ultimate destiny is eternal. There is an eternal law of right and wrong by which we mean everything that God decrees necessarily from eternity. Man is subject to this law and can obey it or not at will. The natural law is that part of the eternal law which reason reveals and is not susceptible of change, that is, an act which is ethically wrong by its nature cannot become morally correct. In preparation for his eternal destiny, man is assisted by the Grace of God, which, again his free will permits him to accept or refuse. Being by nature a social being, man lives in the society of his fellow beings and this group helps to further him on his eternal journey. Measured by time, the end of society must be of lesser importance than the end of the individual, which is eternal.

A P H I L O S O P H Y O F G U I D A N C E

CHAPTER VI

MODERN CONCEPTS OF GUIDANCE

The Growth of Guidance. Guidance now is not merely educational but industrial in scope. The expansion of many a large firm, particularly of the manufacturing type, has necessitated the consideration of the scientific aspects of correct appraisal of personnel comprising the entire plant. Not only seeing that an individual is put into an occupation, but also ensuring that he is rightly placed is a major concern of the progressive industry. Closer association and co-operation between the school and the factory are means of furthering this end. The functions of the guidance department of the school can be operating both during the placement and the follow-up of the person seeking adjustment in the new environment of actual working conditions. If the novice be not industrially orientated after a reasonable length of time, it is incumbent upon the director of personnel to have a change made to another position either in the organization itself or outside the group to another position, taking into account the talents, self-realization and contentment of the person. Further diagnosis, testing, and estimation with another try-out on the job itself will frequently effect a satisfactory adjustment. As each individual differs from another in numerous ways, so will each require single treatment and attention in placement. Recent research in guidance and its allied branches suggests that the majority of people can perform creditably in more than

one occupation. However, it is also true that some are outstanding in one or more lines of endeavour. The most scientific approach to the problem is the complete searching of the whole personality of the worker including intelligence, schooling, special talents and capacities, achievements and experience and the moral, physical and cultural attributes characteristic of him. The co-ordination of the principal, personal qualities to an occupational, general field is the next step in the process of wise judgment. The narrowing down of the general field to a specific division that will synchronize with certain important capacities and attainment of the individual will constitute the third movement. Modern guidance has grown to include in its methods the inevitable plan of a constant follow-up.

It goes beyond even this logical procedure. The physical comforts of the workers are given attention in most industries. Healthy employees are made certain by the best medical care, hygienic and preventive knowledge available. A generous number of recreational facilities is generally provided.

The Establishment of a Personnel Department in Industry. In order to indicate the extent and the nature of a modern personnel department in an industrial organization, a hypothetical problem suggested in the Business Executive's Course of Training of the Alexander Hamilton Institute of New York, is worked out by the author of the thesis.

The problem with the use of fictitious names is somewhat similar to this:

A new management has been given charge of the Camden

Manufacturing Company. The firm has just been re-organized. It is intended to make numerous alterations in manufacturing methods, product design, plan of paying wages, and financial and marketing policies. Among the new plans is the establishment of a personnel department which would have responsibility for the factory force and office staff in all their activities.

Founded between 1890 and 1900, the company has progressed into a fair-sized, sound, prosperous business. It is situated in a city of approximately 35,000 population. It is within a metropolitan area - about 100 miles distant. About 1500 persons are in the employ of the company. This includes an executive and office staff of 100. A little more than \$2,000,000. represents the annual payroll. At this time, all prospects for business are very good. There is great national demand for their products which are small machines and tools.

There are many skilled crafts among the workers in the shop. There are many phases of shopwork. A machine shop, foundry, pattern department, pressed steel section, assembly plant, buying department, maintenance shop, office staff and stores division, constitute the wide variety of industrial activity. The modernization of all manufacturing methods is mooted.

There is a dire need of a modern programme of educational and industrial guidance. Previously, the hiring and "firing" has been at the discretion of each department head. Applicants for positions were interviewed in a general manner and asked to fill out an application form. Meagre data were required and these consisted chiefly of name and address, last

employer, how long employed, with some scanty statistical information regarding family history. No scientific appraisal of such forms was ever made. They were generally filed and forgotten. Not even a health examination was insisted upon, although the State required a system of compensation for the workers, which was mainly a protection against accidents with provision therefor.

The allotment for the new personnel department is \$50,000.00. An additional amount is also available to equip a section of the office building for its special needs. The yearly allotment will continue to be at least \$50,000. A special amount of money is to be set aside for adequate provision for retirement pensions which are to be handled through an insurance company.

The problem consists in mapping out the particular kind of personnel department and programme that it would be advisable to initiate at the Camden Manufacturing Company, bearing in mind the yearly operating expenditure of \$50,000. The functions and activities of each member of the department are also to be listed.

The second part of the problem involves the best democratic procedure to be followed in instituting a feasible system of employee representation and the method to be employed in selecting the personnel of the committee representing the employees. An important work of this committee would be the principal matters that would be ordinarily assigned to it for special investigation, research, round-table conference and suggestions to be followed to fruition.

Solution of Problem by the Author of Thesis.

In view of the increasing help and service that an efficient personnel department can render to industry, the wisdom of the management of the Camden Manufacturing Company in laying plans for the establishment of a "human relations" branch of their organization is in keeping with modern trends in order to be reasonably certain that "round pegs are in round holes" and that there exists a healthy spirit of co-operation between employers and employees. Scientific selection and placement of personnel will undoubtedly remain a major function of this comparatively new educational branch, which has been incorporated into modern business.

Since the management has instructed its personnel manager to keep within an appropriation of \$50,000. annual operating expenditure, it is essential for the executive head of the proposed department to have such knowledge of statistics, including their preparation, analysis and interpretation,- in order to ensure among other important matters- proper bugetary control.

In harmony with the policy of well conducted personnel departments, particularly those organized along functional and centralized lines, the following Expense Budget System would be advisable to adopt for the Camden Manufacturing Company:-

EXPENSE BUDGET SYSTEM

Annual Pay Roll.....\$2,000,000.

Total Number of Employees.....1,500.

<u>ITEM.</u>	<u>PER CENT OF PAY ROLL</u>	<u>AMOUNT</u>
Salaries.....	1.0	\$20,000.
Supplies.....	0.1	2,000.
Company Service..... (Rent. service, heat etc)	0.2	4,000.

<u>ITEM.</u>	<u>PER CENT OF PAYROLL.</u>	<u>AMOUNT.</u>
FORWARD:.....	1.3	\$26,000.
Miscellaneous..... (Travel, Repairs, etc)	0.1	2,000.
Benefit Payments.....	<u>0.8</u>	<u>16,000.</u>
	Total - - 2.2	Total \$44,000.

ANNUAL COST PER EMPLOYEE\$29.33

Since retirement pensions are to be handled through an insurance company by means of a special appropriation, the matter of pensions is deleted from the aforementioned table. The annual cost per employee - \$29.33 - is a reasonable amount in comparison with studies made of similar budgets of other companies.

The number of employees in the newly organized personnel group will probably be about twelve - with a leeway of two - making from ten to fourteen, according to local needs and conditions, since in such departments the number runs somewhat less than one per cent of the total number of employees, in this case - 1500.

This personnel programme of the Camden Manufacturing Company will be best organized along functional lines. Inasmuch as its work, being a function, lies outside the domain of direct productive operations, it should be considered a staff function and not a line activity.

New ideas, plans, etc., which result from such functional responsibility of the personnel officials, can be best put into effect after consultations and conferences with supervisory employees. Not merely a scientific outlook, but a friendly co-operation with all departments, will bring about

a smooth and even running of all matters affecting the management and the men.

A centralized plan of personnel organization - not too rigid in its operation- would be ideal. For instance, in the matter of employment, the programme should be sufficiently flexible - so as not to have a newly employed person imposed upon a supervisor against such an executive's will. However, the old method in vogue in the company, that is each foreman hiring and discharging at his own discretion, should be abolished. It is wasteful because it is unscientific and open to the whims and prejudices of foremen ruled by their emotions.

Under the centralized plan, employment would come under the direct surveillance of the personnel manager, thus permitting refined technique and selection procedures in the matter of employment. Also, under such a plan the personnel department would assume major responsibility for not only employment, but the training of new employees, employee representation, health and medical services, benefits and pensions, thrift, and many minor miscellaneous activities. The problem of wages and working conditions, however, would be a major subject of the operating executives, with the personnel department contributing suggestions and perhaps possible research.

A good, workable set-up for the personnel department itself could be as follows:

EXECUTIVE HEAD..... PERSONNEL MANAGER

With these Sub-Executives -

- (1) Employment Manager
- (2) Educational Director
- (3) Service Director
- (4) Director of Employee Relations.

(5) Director of Research

The Personnel Manager should have direct control over and be able to co-ordinate and integrate all the various personnel services among themselves in addition to co-ordinating his work with the different branches of the industry at large. He should be an expert in the utilization of scientific method and be thoroughly familiar with the tools of research. A knowledge of good methods of tabulation, scatter diagrams, the coefficient of correlation and other statistical devices will be invaluable to him. His Employment Manager, Educational Director and Director of Research should be equally competent in these respects.

The Employment Manager will have as his particular work:

- (1) Supplying workers in quantity and quality to fill the existing needs.
- (2) Noticing the effect of new machines on the labour supply-demand index.
- (3) Making studies of labour turnover.
- (4) Keeping in touch with sources of supply for new workers, such as, schools, colleges, etc.
- (5) Consulting with the Personnel Manager over promotion policy
- (6) Working co-operatively with the job analyst and receiving complete reports on job specifications.
- (7) Dealing with applications and interviews - especially to see that the interviewing member of the employment division be well suited by nature and nurture for this difficult task.

(8) Keeping up-to-date in applied psychology and knowing how to use valid rating and test methods.

(9) Overseeing the work of an expert test technician who is capable of developing, constructing, validating, administering and interpreting industrial tests.

(10) The Employment Manager should be able to interpret the results of tests, be able to evaluate them properly and know their place in the whole picture of personnel work.

(11) Placement and a follow-up of progress to discover the strong and weak points in the employment methods is an important function of the employment division.

(12) Permanent records of all employees should be kept.

The Educational Director.

The Educational Director of the Personnel Department should have a well-organized training division. He will have supervision over all classes of training. Training for skill will be an important part of his work. Training on the job itself would be the best method to employ for the development of skill and this could be accomplished at a very low cost. Group educational meetings, co-operation with outside educational agencies and courses offered by various types of technical schools would help in making the labours of the Educational Director productive of excellent results.

Foremanship training will always be a function of this

Branch, because the foreman is in control of the worker and really responsible for actual production. Foremen's clubs and the operation of the Conference Plan will aid immeasurably in this educational work.

The development of executives will come under the scope of the Educational Director. An inventory of potential talent and ability should be made and a sound promotion policy put in force. Of course, authority and responsibility for executive training should ordinarily be with the line executives. The training division of the Personnel Department can be very helpful to the line executives in conducting courses and in demonstrating efficient methods of instruction.

Other ways in which this aspect of educational work can be given impetus are by advising, and putting in reach of potential executives, libraries, business courses, and offerings of educational institutions, and finally making it feasible for those who are able, to profit by university post-graduate study.

The Service Director.

This executive has direction of Health and Medical Services. Training in first aid, the arranging for periodic physical examinations, the supervision of industrial health programmes with professional medical service and its administration will come under the tutelage of his efforts. All this work could however, be placed into a separate department in charge of a physician.

The Service Director will oversee mutual benefit organizations, check with actuaries at stated intervals the stability of the pension plan, in fine, look after all interests, involving

the protection of employees.

The encouragement of thrift will help to provide employees against future emergencies. Methods of permanent savings, an auxiliary savings plan and appropriate life insurance plans should be made available to all employees. The truly capable Service Director will give every employed member of the Camden Manufacturing Company a real sense of security.

Under miscellaneous personnel activities coming under the control of the Service Director may be mentioned employees' magazines, company libraries, company lunchroom service, recreational activities, the housing problem and vacations. The extent to which the foregoing can be included in a personnel programme will depend primarily upon local conditions, allotted budget and the distinctive needs of the Company.

The Director of Employee Relations.

This Director will deal with all matters relating to employee representation, working conditions and employee morale. These questions can be largely controlled by an effective scheme of consultation and conference between the executives and workers.

The Director of Research.

While not recommending an elaborate organization for a division of research, the Company under discussion can ill afford to neglect the possibilities of this feature of personnel. A Director of Research can be appointed without going beyond the stipulated budget. Since human behaviour is so complex, and human relationships are entangled in all plant activities, it would be wise to utilize scientific methods in the

study and solution of the many problems that will constantly arise - even in the best ordered plant.

The Director of Research will require to be thoroughly trained, to be able to know projects that are urgent, understand and be able to apply the principles of psychology, be an expert in statistical procedures and trained in the social sciences and scientific method. A knowledge of foreign languages as an added qualification will enable him to learn quickly and at first hand the worthwhile research of other countries.

The Second Part of the Problem.

A strong esprit de corps among the workers of this company can be achieved by an effective design of employee representation, which, if it be made to operate properly, can continue to maintain a splendid morale throughout the entire assembly. Such a purpose of deliberation will result in wise decisions, giving each employee the opportunity to develop his maximum ability. Consultation and conference have frequently succeeded, where a dictatorial attitude on the part of an executive has too often failed to elicit cooperation.

Without elaborating upon the many advantages of a democratic rule of employee representation, it would be well to outline the mode of determining and selecting the personnel of this kind of committee, a group that helps to interpret the policies of management to the workers and also to have the employees' attitude and views brought to the attention of the executives.

A joint conference with committees comprising representatives of employees and management will be the main set-up of such co-operative effort. Each skilled craft of the Camden Manufacturing Company, the office staff and other divisions should

have representation according to actual numbers. One representative from each craft and one for every fifty employees in departments with a number of fifty or more would work out satisfactorily. The Employee Representative Committee of the Company would have approximately thirty members. The exact number from each type of work would depend upon the size and condition of the district kind of vocational group.

The major subjects that should be assigned to the Employee Representative Committee for investigation, discussion and recommendation, are wages, hours of work and working conditions - including safety devices, ventilation, temperature, lighting and allied subjects.

The joint conference itself should have its own definite laws governing its operation such as qualifications to vote, to hold office, and outlined procedures in nominations and elections with election by secret ballot. The term of office should also be stated.

In the selection of representatives of the management, it is wise policy to have a number less than the numbers of workers' representatives. One representative of the management on the committee - a man at least two levels above first line supervision would permit of important decisions being made without having access to higher authority.

Other suggestions to assist the smooth operation of the joint conference committee are annotated below:

- (1) Regular scheduled meetings.
- (2) Subjects of employee representation should be given first consideration.
- (3) Careful records of all meetings should be kept.

- (4) The first line of supervision should be notified at all times of committee actions and decisions.

A sound philosophy of personnel management and industrial guidance will not cease to include a system of representatives from the general forces to meet with the management. Since equality of treatment of different workers by the head frequently causes discontent, an assembly where all meet on common ground in order to discuss mutual interests, holds great promise for the future success of guiding that most difficult of ingangible qualities - the human element in personality.

Interests in Vocational Adjustments. Vocational adjustment in the industrial field or other avenue of life implies conditions whereby an individual has ample outlet for all his talents, abilities, distinctive characteristics of disposition, and interests. A person must feel that he is successful in his work, compares favourably with his competitors, and possesses a modicum of economic prosperity. Above all he should be interested in what he is doing. If the worker merely tolerates conditions, even though his output be good and his remuneration be satisfactory or bountiful, he is not happily adjusted. Certain positions integrate with certain personalities rendering positive satisfaction. What might be welcome to a mechanic, might spell boredom to a business man. What are rich rewards to the research worker, could quite conceivably be an unsatisfactory return to a social worker. It is true that many are able to adapt themselves to a wide range of endeavour according to the variation in their capacities,

abilities, temperament, and desires. Yet, there are often activities not only in which they excel, but which they prefer to others. While there is no ideal adjustment, no perfect niche, no Utopian vocational haven, there is an occupation somewhere that will bring a maximum of self-realization to its follower. Perhaps the job seeker can do equally well in two or more lines of work. The vocational counsellor, the psychologist, the personnel director, can frequently prevent serious mal-adjustment by a careful diagnosis of the specific interests of the person guided.

It is sometimes argued that the interests of adolescents are very changeable. No doubt they are not of as lasting a quality as those of more mature people. However, they are by no means fickle. The American psychologist, Thorndike, has found the chief interests of educated Americans between the ages of ten and fourteen, compared with those interests when they were twenty-one, to be represented by a co-efficient of correlation as high as $+0.6$ or $+0.7$. We cannot infer that the interests of youth are direct signs of vocational aims. The young stamp-collector does not necessarily have to become an adult philatelist or follow the profession of entomology if he collected butterflies during his youth. We must be wary of implying also, if a subject be disinterested in his work, he is necessarily a misfit. The dissatisfaction may be the result of some emotional problem. Some hidden frustration may account for the antipathy towards the work. Thus, the author recalls a young man who did clerical work for a number of years and labeled it "a most uninteresting job." Still he appeared suited to the occupation and performed his duties with promptness and pre-

cision. Upon being questioned, he indicated that he had always wished to receive some extra money sufficient to buy a home. His present position with its low salary prevented him from doing it. A suggestion how he could accomplish his desire by working elsewhere after hours at the same work and also prepare for a better position along the same lines, helped to eliminate the frustration and assist the young man in realizing his ambitions. This was not a case of vocational maladjustment but of inhibition and frustration.

If we make a study of the interests of children from an early age until the time of adolescence, it will be noticed that preferences fall in one or more of three groups. For purposes of classification these can be called, the intellectual the practical, and the social. There is generally a strong inclination towards one of these three divisions.

Those who centre their interest mainly in the first group will be usually absorbed with ideas, books, writing and more or less abstract symbols, being more inclined to the theoretical than the practical. Some of the practical group will be interested in constructing things and manipulating them, if boys, making model airplanes. Their hands will be first engaged with blocks, mechanical sets, etc. and then the interest will shift to handicrafts of various sorts with a widening and often a versatile occupation with photography, radio, wireless and model-making. Others of this group will spend their time principally with athletics and games of different kinds. Work that often involves effort and exertion such as playing ball, skating, climbing, running, etc. are their chief pursuits. They like to be physically active and

find it difficult to be occupied with abstract things. The social group, as the name implies, is chiefly concerned with social activities, entertainments, clubs and parties. Intellectual and practical pursuits are not as important to them as social contacts.

While a child generally inclines to one of the groups, there is the type of youth whose personality partakes of something of each of the three groups. Another "Genus" is intellectual and social. Another type infuses some of the elements of the intellectual and the practical. The combination of the practical and the social, features other personalities. On the whole, however, there is a definite, specific leaning to one of the three groups.

The question of the relationship of the three groups to future occupations is an important one. For example, a child who maintains his interests in intellectual pursuits as he reaches maturity, granted that he has the ability, would find his adult interests in occupations making use of written facts, figures and ideas, and abstract thinking generally. Positions and professions requiring such interests and abilities would be the natural hunting ground for vocational adjustment. The intellectually interested person might find great satisfaction in the work of an auditor, an accountant, a research worker, a banker a statistician, an editor, or an insurance underwriter. Constructional and manipulative interests of children frequently turn to adult forms in building, making, repairing and in the investigation of concrete things. If the subject have an adequate mentality, it could turn to surveying, engineering, dentistry, chemistry or surgery. Those

whose interests centred around the second phase of the practical group would probably find their greatest realization in an occupation like physical education, police work, forestry and other outdoor activities. The social group would find their finest satisfaction in the persuasive careers occupations largely involving the managing, teaching and supervising of other people. In this category we find journalism, the practice of medicine, the army, navy and air force, teaching and salesmanship. In all three groups of occupational interests, we may find broad indications of future careers. Coupled with a knowledge of ability and temperament, placement can become more certain. A minute, detailed diagnosis of the entire human individual from every possible angle, will help to make vocational adjustment reasonably sure and of a permanent nature.

The vocational psychologist must be careful to make an accurate interpretation of adolescent interests. Such interests might be generally described as a numerous activities which constantly attract and engage the attention of a person, which are followed as chance presents itself and which are extended on account of the gratification they produce. An example of a person interested in art may be cited. The interest may have developed because of a talent - a series of special artistic capacities in that direction - and an inherent artistic sense. The interest may be explained by the fact of belonging to an artistic family, and although the individual may have meagre talent, yet the strong artistic environment and parental influence may be responsible for the interests along aesthetic lines. There may be another explanation. Perhaps the person

is not very clever, physically strong or socially active, and realizing that an appreciation of art can be cultivated to a certain extent without the possessor being endowed with superior intelligence, he automatically directs the attention to art intermittently, hoping thereby to counter-balance the insufficiency in other spheres of activity. To summarize then, interests may be the indications of talent. They may be the results of the influence of surroundings. In a final analysis, they may be caused by some emotional restraint.

In order to show a real vocational slant, interests must be supported by adequate talent and good prospects of sufficient ability. There is only a moderate positive correlation between interest and proficiency as indicated by the experiments of *Fryer. A study of each individual will enable the counsellor to know when he must discourage interests and when such indications are to be regarded as pertinent to the diagnosis at hand.

Occupational Inclinations of Girls. Modern trends indicate an increasing interest by girls and young women in careers and the occupational world in general. The occupational attitudes of girls who are about to choose a career are frequently different from boys of similar economic status. This is due in large measure to differences in opportunity, in orientation and different interests. In the special study of the occupational wishes of one hundred girls and young women,

*Douglas Fryer, "Predicting Abilities from Interests." Journal of Applied Psychology, Vol.xi, 1927, pp 212-225.

*Edith O. Mercer found that thirty-three selected mainly feminine occupations, three chiefly masculine occupations, namely, farming and veterinary surgery, fifty-two desired occupations which were open to both men and women, while twelve stated no preference. The study was made in England and was not representative of the community as a whole. The group comprised those from high schools, county secondary schools, well-known boarding schools and private schools. Since elementary schools were not generally included and since the research was executed in England, it could scarcely represent a true picture of attitudes in this country. Still, the study is interesting. A more detailed classification of the occupations that were considered the most fascinating by the one hundred girls deliberating their future careers is mentioned here. Seventeen wanted clerical occupations including literary endeavour, e.g., librarianship, writing, secretarial work, clerical work in the Civil Service and in Local Government; six wished social occupations with clerical or literary trend, such as, dramatic art, journalism; thirty believed that they would be most satisfied with the mainly social occupations, e.g., nursery nursing, regular nursing, medicine, teaching of school subjects; eleven desired social occupations that required practical skills, such as hairdressing, beauty culture, domestic science teaching, electrical housecraft demonstration; twenty-one were anxious to follow practical and artistic careers including manipulative and physical skills, e.g., commercial art, photography, horticultural.

*Edith O. Mercer, "Some Occupational Attitudes of Girls." Occupational Psychology, Volume xiv, Number I, January, 1940.

ture, radiography, executive music, cookery; only three were interested in the practical and clerical occupations that included scientific research, as bacteriology and dietetics, while twelve completed the one hundred by having no choice.

While fully recognizing the deficiency of an insufficient sample upon which to base wide conclusions, certain facts appear significant as probable indications of preferences. Even though about a third of the one hundred selected principally feminine occupations and about one-half of the hundred, occupations open to both men and women, little can be concluded regarding common elements in the work of two sexes.

An important consideration in the counselling of women for specific occupations is the fact that marriage in many cases terminates their professional efforts. A desire to enter some occupation is prevalent among girls but those below the age of sixteen must be guarded against reaching immature decisions.

Some Difficulties in Vocational Guidance. A difficult person to counsel vocationally is the boy of average or below average ability, who comes from an able family of good social standing. There are exceptions to the rule but it appears that many a successful parent, successful in the professional, social or financial sense, or in all three ways, wishes to foist upon the son a career to which he is ill-suited, - an occupation in keeping with the family tradition. Frequently, such a boy is emotionally stable but the high aspirations of the parents are far beyond what he is capable of attaining. The author was once asked to tutor the boy of a

university professor, a child who was considerably below average mentality, - a fine chap in every way, - yet lacking in the very capacities required for academic training, the very direction in which the father wished him to follow. The father was an able specialist in his own profession, but it was difficult to explain to him the necessity of the son possessing the minimum of intelligence to attain the academic results which the parent hoped that he would accomplish. The father's constant attempts to make the lad a classical scholar proved futile. The acceptance of guidance in this instance would have saved the boy much unhappiness and time to devote to pursuits within the range of his capabilities. Many a fond parent finds it "a hard saying" to believe that one of the offspring is incapable of qualifying for one of the professions. Some consider it a mark of misfortune against their own name. It is a disappointment to be unable to show off their progeny at social gatherings. It is unfortunate that certain children have not the talents to follow the family tradition and step into a well-established practice. It is more of a tragedy to attempt the impossible and make oneself miserable.

There is the vocational situation of a student with all the necessary pre-requisites for a successful career,-the right talents, the required abilities, the correct temperament, and ambitions directed along the proper channels,- but, who comes from poor parents and accordingly lacks the essential funds for needed training. Generally, a problem of this type is assured of a satisfactory solution. If special grants from government agencies are not forthcoming through want of adequate provision, then, societies, clubs or individuals will often be

willing to supply directly or on loan to permit a means of education to the needy scholar. An urgent educational necessity today is a series of scholarships for the mentally gifted.

One finds at the present time, as always, those preparing for vocational adjustment frequently over-emphasize the matter of security. Naturally, security must be among the list of desirable attributes of a position being considered more or less a permanent feature accompanying the life of an individual. It is often the parents who place a high premium on security. There is the parent who has been a Civil Servant all his life and prizes the pension privileges of his position. To inflict a similar position upon his son who is unsuited both by temperament and ability, for no other reason than that of security, is both unjust and illogical. Particularly would this be vocationally disastrous, if the boy were individualistic, creative in talent and adventuresome by temperament.

The fact of overcrowding in a trade or profession is not in itself a legitimate reason for neglecting to investigate the vocational potentialities. The inherent traits of the individual may be sufficiently above average to compensate for any degree of "overcrowdedness". The latter term is interpreted in so many ways. To some, "overcrowdedness" means the inability of a young man of twenty-five, with four or five years experience, to earn a salary of \$5,000. If it be meant that a person can enter a field paying such a salary, without keen competition for the place, then the majority of positions are overcrowded. Qualified practitioners for most of the pro-

fessions have average prospects at least for a start.

Emotional disturbances may account for difficulties in vocational orientation. Mr. J. G. W. Davies of the National Institute of Industrial Psychology, classifies into two categories those who find it hard to react normally to problems in life. The first react with "can't" the second type with "shan't." The immature and the over-dependent constitute the former, while the rebel and the "escapist" comprise the latter.

Mr. Davies cites an example of the immature type: "B, aged 16 and 1/2, was^a a public schoolboy, undistinguished at both work and games. His house-master described him as "amazingly unobtrusive" and defined his most noticeable characteristics as slowness, good nature and want of initiative. He was the youngest of a not very able, but very alert and hard-working family of the professional class. No doubt his dependence had its roots in their impatience of his sluggish mental and physical reactions. In exasperation they assisted and advised him in most of his activities.

Testing suggested that his intelligence was at least up to the average, his paper work averagely accurate and his practical, manual and mechanical aptitudes poor. He pursued few genuine interests. Like many such boys, he was inclined to be aimless in holiday time. He was a competent musician, but his talent was not of the order which might yield a living. Otherwise, he fitted in with what the rest did. As in every other phase of his life, he was waiting for someone else to solve the vocational problem for him.

Everything pointed to a steady office post in a well-

established concern, where he would have security, a very gradual rise to responsibility and no really formidable examination hurdles to clear. Yet could one be certain that with correct stimulation he might not gain tremendously in independence and self-confidence? Intellectually late developers are not so common as hopeful parents could wish. Temperamentally late developers are no rarity. The vocational adviser is not quite certain sometimes whether to take a boy at his face value or to bank on greater self-reliance and energy within a year or two."

Immaturity among adolescents and post-adolescents, immaturity that should have long since been shed, is frequently fostered and sometimes increased by parents who delay too long in permitting the child to develop adult interests. It is remarked that one should not put "old heads on young shoulders." This is ordinarily a sensible maxim, but, it is not against its rule, but opposed to its extreme interpretation, issue must be made. There are other instances where children are content in their non-adult atmosphere and wish to continue in their protected sphere.

The over-dependent child is produced by similar influences that encourage immaturity. The over-anxious parent is not always the least of causes. Some mothers strive to over-protect their children. This is detrimental to the growing minds because it hinders the development of self-reliance, so essential for the happy adjustment to many vocational pursuits. The individual constantly "en rapport" with an over-protected environment hesitates to make new acquaintances, and what is of still greater consequence, often fails to meet squarely normal life situations. It is possible that a com-

promise with reality made by the child may react unfavourably to him. It is obvious that immature and over-dependent children cannot be expected to adapt themselves to situations where a high or even a moderate degree of self-reliance is demanded unless they are taught to meet the demands of such work by adapting their personality to it. Fortunately, certain traits of personality can be acquired and self-reliance is among the group. When the vocational adviser meets with cases of immaturity and over-dependence, he must weigh relative factors carefully in order to decide how long such hindrances will remain and with what promptness they can be dispatched. Upon such decisions depend with what degree of assurance the vocational guidance counsellor can suggest posts requiring various degrees of self-reliance. It has been truly said that "vocational guidance is an art and not a science."

There is a similarity between the psychological drives that urge the rebel and those that influence the "escapist." Restraint of all kinds is abhorrent to the rebel since he wants to be "master of his own fate," and have his own ideas and do his own thinking. His own estimates of his abilities are not always clear. He will sometimes "rush in where angels fear to tread." For this reason, he needs guidance with respect to his own capabilities and a knowledge of the limitations of his surroundings. The "escapist" adopts a negative attitude towards an occupation. For example, a remark of his might be "I shall like an adventurous occupation because I shan't be tied to routine." He could be shown that routine is not bad and may be even desirable, depending upon whether it is inimical to, or suits his particular temperament and ability. Even his "escape" suggestions could be followed, provided they were in harmony

with important phases of his personality.

Emotional cases, undoubtedly, are among the most difficult that the guidance counsellor has to solve. Attempting to unearth the reason or reasons responsible for an emotional disturbance is at best a trying task. Few cases of this nature are self-evident. They require probing of the first order. Both keen insight and persistence will usually win the day for the adviser. Numerous causes might be mentioned as reasons for rebellion and escapism but the most usual can be traced to either a very lenient or over-strict home environment, friction between father and mother, real or imaginary injustices at home or at school, attempts to compensate for inferiority complexes, or a feeling of guilt for the committment of offences.

The Work of the Teacher in Vocational Guidance.

Some authorities on vocational counselling adopt the view that teachers should gather all possible available data regarding the talents, temperament and circumstances of the individual to be guided, but when it is a question of making vocational recommendations or placements in employment, it then comes under the scope of the employment officer. Others find no fault and even recommend that teachers perform all functions relating to the work of vocational guidance. Others again would permit the teacher only definite specific duties in the work of counselling, reserving to the specialist the right of advising, finding employment and placement in the field. Those schools which have the services of a highly trained vocational adviser doing full-time work in his chosen career are in a favourable position

to allow the major portion of responsibility to fall where it rightly belongs. Schools less favoured must rely on the services and the willingness of regular teachers to undertake the work. It would be rather arbitrary to restrict the guidance activities of a teacher rendering good service in the various phases of vocational guidance, unless it be in a system where the administration of the subject was highly organized with an elaborate technique for counselling, placement and follow-up, with each member of the guidance department being assigned definite work to do. It appears reasonable to assume that those teachers who take up the work seriously, having genuine aptitude for it, should ordinarily be given a wide margin in the performance of guidance and its subsidiary functions.

It would be a natural work of the teacher to provide ample opportunity to her charges for obtaining up-to-date information about current occupations, their requirements for entering, the trends of supply and demand, and the status both locally and abroad. This could be effectively accomplished by supplying appropriate literature, films, lectures, and discussions on topics by the pupils themselves. Visits to places of employment interest can scarcely fail to awaken a line of vocational thinking. Many students will derive considerable satisfaction in correspondence resulting in free or inexpensive vocational material. The accumulation of data about boys and girls needing vocational guidance, including reliable and valid tests of general intelligence, circumstances, temperament, and special aptitudes, not forgetting an interpretation of all these in conjunction with job requirements and standards, can be readily done by a teacher actively engrossed in the subject.

Teachers can instruct pupils in the proper methods of applying for positions with emphasis upon psychological approaches of recognized worth. Much effort productive of good results can also be achieved by teachers in the final phases of placement and follow-up.

The National Institute of Industrial Psychology has found it profitable to make use of a seven-point plan in the matter of compilation of data for a record card of a student to be subsequently guided vocationally. Teachers could profitably utilize this arrangement as a basis for information about pupils, altering those items in the list which do not prove adaptable to local circumstances. The National Institute summarizes under the following seven headings information concerning each person who is counselled:

- " (1) his circumstances (financial, social, geographical, etc.);
- (2) his physical characteristics (especially disabilities of occupational significance, and such semi-physical characteristics as smartness of bearing, attractiveness of appearance, neatness of dress and pleasantness of voice);
- (3) his attainments (particularly in work, games and other leisure activities);
- (4) his general intelligence;
- (5) his special aptitudes (such as mechanical aptitude, manual dexterity, and aptitudes for drawing and music);
- (6) his interests (especially in intellectual activities, practical activities and social activities), and
- (7) his disposition (particularly as shown in his attitude towards himself, towards others and towards his work)."

Teachers can use the foregoing plan as a model, adding to and subtracting from, as the exigencies of the occa-

sion require. With constant practice a certain amount of facility in synchronizing the plan with the occupational world can be acquired. At first, the numerous jobs and positions may seem to present an insurmountable obstacle, but with each successful guidance will come an added degree of competence. In his first approach to an occupation, the teacher should study the kind of work performed, the total expenses involved in preparing the training for the position, the amount of time needed for apprenticeship, the minimum age of admittance, the average earnings, degree and extent of competition and the prospects of promotion. It is not to be expected that the regular teacher will have at command the extent of technique in diagnosing cases or the large amount of occupational knowledge, that the expert technical adviser possesses. Nevertheless, the quality of effort rendered in this capacity by the classroom instructor if not outstanding, will be at least very worthwhile.

Attitudes Towards the Subject of Vocational Guidance.

It is frequently heard in educational circles today that the methods of vocational psychologists are in the experimental stage. Now, it all depends what is meant by such a statement. If it is to be interpreted that the means now employed in vocational guidance are capable of being improved, then it is a commonplace remark, since most scientific methods are in the experimental stage and are far from perfection. However, if it implies that methods at present in vogue have little value, then it is definitely incorrect. In certain centres, indifference to guidance is characteristic of teachers generally. Some

are skeptical; more are disinterested. Yet, there is an awakening of public interest and concern for this aspect of education. If we compare the public consciousness now and a quarter of a century ago, there is a vast difference. Even since the war there has been more realization of both the needs and possibilities of vocational education, particularly its bearing upon material success in adult life. There have been no sweeping changes but rather a gradual evolution that recognizes the place of guidance in the total scheme of the educational structure.

Trends of the Day. To the worldly-minded guidance expert in the vocational field, the discovery of an appropriate calling and the satisfactory adjustment of the individual thereto, represent the ultimate justification for the existence of his position. His philosophy of guidance would not necessarily preclude the incorporation of good citizenship among its tenets, but there would be undoubtedly an over-emphasis on the economic phases of life. Materialism permeates the very centre of career-finding, as it does so many other modern activities. An economic age dictates that the goal must be the assurance of an easy manner of living. The stress is on immediate needs and material usefulness. To obtain a good easy job is often the aim of the "moderns." We fail today not on our deficiencies of scientific contributions to the espousal of the cause for bodily welfare and comfort, but in losing sight of the more distant aims,- those deeper, richer, spiritual values,- which alone can fully satisfy the human ego and bring it to a complete understanding of its ultimate destination.

A P H I L O S O P H Y O F G U I D A N C E

CHAPTER VI

THE USE AND INTERPRETATION OF TESTS

At the present time there are two common negative attitudes towards the value of tests. The first emanates from the non-educationist or the person not associated in any way with the teaching process. This individual believes that tests are quite useless, a waste of money, and their coming into existence the result of some university professor's lapse of memory or mental meandering. To this group, the tests are the subject of indifference, the lack of interest in them being due to influences generally received from reading pseudo-scientific articles in popular magazines or listening to tirades against them by ill-informed persons.

On the other hand, we have the educational diletante and sometimes the capable, sincere teacher of the old school, who unthinkingly condemn all manner of modern testing, or ridicule those who use them. Even among those, some of whom are engaged in the work of vocational guidance, there is an avoidance of tests, which might suggest a dire need for a thorough training in this important development in the art of counselling. The scoffers of testing among the teaching profession are generally those who have a haphazard knowledge of the testing movement and will not take the time to study the background of construction and methodology. The author knew one highly respected teacher of long standing who read a test containing an apparently absurd question, and ~~ex~~facto, denounced every standardized

test that was ever constructed.

Among the very positive, settled modes of thinking concerning tests, there is the attitude of certain professionals who regard them as a universal remedy for all vocational problems. Certain groups of non-teachers revere them as a sort of abracadabra capable of producing vocational miracles. Others, while recognizing their worth, claim that they are based upon a fatalistic hypothesis.

Between such extremes of ideas, rests the true value of the testing movement. While admitting that much remains to be accomplished, we cannot deny a progressive forward step, particularly in the production of measures of special aptitudes. In the domain of standardized achievement testing, the examination of pupil knowledge of many a subject is being made much more scientific, and is further placed on a widely comparable basis. Some would like, no doubt, to place an aureole of certainty around the crown of all tests or already imagine that such a halo exists. Testing is not the matter-of-fact operation that some people think it to be or would like it to be. It should be admitted freely that guidance must not be given merely on the basis, ~~or entirely~~ on the foundation of tests. But that tests - particularly tests of intelligence, of capacities, and special aptitudes - are of enormous assistance to vocational advisers, can scarcely be disputed.

A sound piece of advice to all those who are using, or who intend to give tests could very well be - "Handle with Care." Some are inclined to believe that anyone is capable of using them. The correct giving of these aids to guidance

require a considerable degree of training and experience. While many, with a sufficient amount of practice, can acquire the necessary technique, in promoting the best conditions of the test environment, the more difficult art of interpretation is not so readily gained. In the complicated work of guidance, where one has talents and abilities on the one hand, and the wide range of occupations on the other to consider, it is important that test implications be carefully weighed and no erroneous conclusions be drawn. An urgent requirement in the giving of a test is to see that each one is making an honest effort to attain the maximum personal results. This is more difficult to effect in group measurement than in individual testing. When testing numbers of thirty or more, any slackness or lack of effort of one or more members of the group, cannot fail to render the scores less dependable. Even with any number of members of a group, this is true. When testing one person, attention can be concentrated on that one person. With a group extra resourcefulness is needed to ensure that everyone is working at the maximum level of efficiency. If this degree of "rapport" be not achieved, then the scores might just as well be discarded.

Test Nomenclature. Test terms are most varied and run the gamut of all subjects from kindergarten to university. We read of composition scales, achievement tests, basic skills, proficiency tests, language error tests, readiness tests, classification tests, diagnostic, prognostic, and remedial tests, occupational ratings and aptitudes, placement examinations, personality inventories, comprehension, and ability tests, subjective and objective tests, individual, group and self-administer-

ing tests, appreciation and judgment tests, capacity tests, recognition ratings, information tests, minimum essentials examinations, practice tests, problem-solving tests, attainment batteries, - in fine, measures purporting to rate all the human aspects of both nature and nurture.

Kinds of Tests. More than three thousand tests have been classified by *Hildreth in her "Bibliography of Mental Tests and Rating Scales" with many more added by **Buros in the publication entitled "Educational, Psychological and Personality Tests of 1933, 1934, and 1935." At the present time the number of tests is well over the four thousand mark. Comparatively few of these could submit to the rigid criteria by which tests are now judged.

Among the thousands of tests listed, the majority have little value for the vocational counsellor. It is not intended here to draw the line between those which are valuable and the ones that are worthless or of small practical use. This would involve research of great proportions during many years. What is suggested is a list of representative tests that may be confidently employed by guidance advisers. It is not implied that these are the only good tests. Nevertheless, they are excellent accompaniment to the work of all who would seek to guide.

The tests are numbered and classified according to type:

INTELLIGENCE TESTS

1. The Stanford Revision of the Binet-Simon.

This is a very reliable, individual intelli-

gence test but requires very careful training

*Gertrude H. Hildreth. Published by Psychological Corporation, N.Y.

**Oscar K. Buros. School of Educ. Rutgers Univ. New Brunswick, N.J.

for its administration and interpretation. Two new forms are now available, L and M, (the revised 1937 edition), and these cover mental ages from two years to very superior adult. Those who intend to use this measure should be thoroughly conversant with "The Measurement of Intelligence" by Lewis M. Terman. With this test, considerable practice is necessary before any assurance can be placed upon the scores obtained. The test measures what it purports to measure.

2. The Herring Revision of the Binet-Simon.

While not as widely used as the Stanford Revision, this measure of mental ability is an effective individual test. The mental ages obtained thereon are similarly comparable to those made on the Stanford Revision of the Binet-Simon.

3. Terman-McNemar Test of Mental Ability.

The Terman-McNemar Test is an excellent group test of intelligence for pupils lying within the grade range of seven to twelve. It is a revision of the former Terman Group Test of Mental Ability for many years one of the most valid and reliable mental measures on the market. This test is now superseded by the more recent measure in the new forms of "C" and "D". A particular feature of the revised edition is its improved ease and administration of scoring. It has been restandardized on a national basis possessing norms procured from the test data of more than two hundred thousand children in two hundred

communities in thirty-four states. Seven subtests comprise the improved edition, viz., Information, Synonyms, Logical Selection, Classification, Analogies, Opposites, and Best Answer. With a fair amount of practice in administering, scoring and interpretation, this test can be used with assurance of consistent results.

4. National Intelligence Tests.

Prepared under the auspices of the National Research Council of America, these tests are thoroughly standardized and easy to administer. They are used for pupils in grades from three to eight. There are three equivalent forms in each of the scales "A" and "B". Either scale can be given in approximately twenty minutes. For a quick appraisal of intelligence of elementary pupils of the above mentioned grades, they are quite reliable.

5. Pintner-Cunningham Primary Mental Test.

This splendid measure has now been revised and is incorporated in the "Pintner General Ability Tests: Verbal Series." It is now called the "Pintner-Cunningham Primary Test." Representing the first of four batteries of the General Ability Tests it has been specially revised and restandardized for kindergarten, grade one, and the first half of grade two. There are two forms, "A" and "B" and the time for administering is about twenty five minutes.

6. Otis Self-Administering Tests of Mental Ability.

There are two tests, "The Intermediate Examination

to be used in grades four to nine, and "The Higher Examination" designed for grades nine to twelve and for college. Four equivalent forms are available for each examination. These are designated A,B,C, and D. They are very easy to score. They represent a distinct advance in the method of testing mental ability by possessing features such as self-administration, a variety of material comprehensive in scope, and a simplified system of obtaining Intelligence Quotients.

The examination of the mental ability of adults has not met with the same success which characterizes the testing of intelligence of children and adolescents. Few adult tests of this type are consistent in their appraisal of adult mental acumen. As far as mental tests for adults are concerned, this is a good test. The Higher Examination is reputed to have a reliability co-efficient of .92.

7. The Illinois General Intelligence Scale.

Two forms are available - Form 1 and Form 2. They are suitable for use in grades three to eight. One splendid feature of the test is that the actual working time is only sixteen minutes. The ability to get along in school is measured by this examination. Seven subtests comprise the scale, namely, Analogies, Arithmetic Problems, Sentence Vocabulary, Substitution, Verbal Ingenuity, Arithmetical Ingenuity, and Synonym-Antonym. The co-efficient of reliability ranges from .90 to .92. This Scale by B.R.Buckingham has been revised by Guy M.Whipple and Helen D.Whipple.

The measure is effective for a quick survey of mentality in classes above grade two in the elementary school.

8. The Rhode Island Intelligence Test.

This measure which is constructed for children from three to six years of age is one of the few practical tests designed for this age group. The examination can be given in fifteen minutes. Those of average intelligence and above find the test interesting. This is probably owing to the fact that the "game" (a useful term to encourage the attention of children) is entirely arranged in picture form.

The complete test is composed of Form A and Form B. The co-efficient of reliability for the test is given as .92. The correlation of Form A with the Stanford-Binet Test is reported to be .91. Only fifty cases were considered in the calculation of this co-efficient.

Yet the test appears to be a safe measure for its age range. It rates observation and comprehension by testing:

- "1. The properties and qualities of common objects.
2. The recognition of the omission of parts.
3. The recognition of family relations.
4. The understanding of common activities.
5. The recognition of social group activities.
6. The distinguishing of contrast, similarity, and number in groups of geometric and other forms."

This has all the qualities of a good test for the ages stated including ease and administration of scoring. The test was designed by Grace E. Bird and Clara E. Craig.

9. Iowa Tests for Young Children.

These measures are an attempt to rate the mental ability of young children from birth to the age of three. Involving a period of research of more than twelve years at the University of Iowa, they represent a successful effort in the measurement of the intelligence of infants and the chronologically very young. A selected list of individual tests have been garnered with their approximate mental ages. Thus, sitting on the lap unsupported earns a mental age of 4.2 months; accepting a second cube, 4.5 months; attempting to stand, 4.6 months; reacting to image in a mirror, 4.7 months; and examining an object, 5.3 months. Forty-nine of these measures constitute the group of items, ranging from 4.2 months to 23.4 months.

The test materials for administration are numerous and skill is necessary in giving. Apparently, the present norms for mental ages are not valid for the general population. A further widening of the unselectivity of the tests would enhance its validity considerably.

I.E.R.Intelligence Scale C A V D

This test was constructed by the Institute of Educational Research under the supervision of Professor E.L.Thorn-dike. The initials C A V D represent Completion of Sentence, Arithmetic Problems, Vocabulary, Direction Consciensness (the ability to read or follow directions.) The Scale comprises a battery of tests for each of seventeen levels of degrees of difficulty. These are lettered from A to Q, increasing along the range of difficulty at a constant rate. Level A contains items of which normally intelligent three-year old children are able to answer correctly about fifty per cent. The Scale

comes bound in separate booklets for levels A to E, F to H, (elementary school), G to K (junior high school), I to M, (senior high school), and M to Q (college and graduate level.) There is only one form with the exception for levels M. to Q. The Scale may be given either individually or to a group except when using the first levels from A to E. The latter levels can be administered only individually. The method employed is similar to the Stanford-Binet technique.

As a measurement of abstract intelligence, the Scale is well constructed. It requires expertness in administration. While age and grade norms are available, the population sampling upon which they are based is not extensive. It is rather as a Scale of equal units that the measurement will render its greatest usefulness.

TESTS OF SPECIAL APTITUDES

ART JUDGMENT TESTS

1. The Meier Art Tests: (1) Art Judgment.

The Art Judgment Test of Norman C. Meier supersedes the Meier-Seashore Art Judgment Test for many years considered a top ranking measure of artistic capacity. The more recent test, which like its predecessor has been developed in the Iowa laboratories, is entitled Part I, Art Judgment. There are two other parts in the series - Part II which is devoted to Creative Imagination, and Part III, covering the field of Aesthetic Perception and its concomitant and related traits. Parts II and III are scheduled to appear at a later date.

From many studies of research on the composition of the art talent complex, the analysis shows that artistic aptitude is

chiefly composed of six fundamental factors. Meier has named these essentials aspects as follows:

1. Manual Skill
2. Energy - Perseveration
3. Aesthetic Intelligence
4. Perceptual Facility
5. Creative Imagination
6. Aesthetic Judgment

In the general way, the first three may be classified as being primarily associated with heredity. The latter three are chiefly regarded as having reference to development. All in all the six artistic qualities intertwine to form the basic elements of the artist-personality.

Part.1. Art Judgment, is a test that measures a capacity that was present in all the old masters of art. A high rating on this test alone is a trustworthy sign that the individual will probably be successful in at least one phase of art. Some people, - and age, whether young or old, is no apparent barrier, - have an innate talent for perceiving aesthetic quality in the various aspects of art, possessing this trait apart from any formal instruction or training in the subject. The nature of art judgment has been fittingly described as "a response-disposition which enables one to sense good organization in a work of art; as to sense good proportion in a vase, to detect sequence in an arrangement of values, to feel the rhythm in an arrangement of lines, colors, forms of values, or to comprehend the total unity of a composition by awareness of all contributing factors."

The test requires the subject taking the measure to

select the better of two pictures in a series of one hundred pairs. These pictures are bound in a booklet. They have been designed by a process similar to etching. In making a picture to compare with an original some important art principle was altered or reconstructed. This compels from the testee a display or lack of aesthetic judgment according as talent dictates. Recent research has indicated that such talent is a capacity inherent in itself and not dependent upon training for its existence.

The individual test items were selected according to their conformance to three validity criteria, namely:

- (a) reputability of the work,
- (b) exemplification of some aesthetic quality or principle,
- (c) suitability for manipulation for test purposes.

The test as a whole has given evidence of high validity. Results show that:

- (1) It is not a measure of learning or maturation.
- (2) A twelve-year-old child without instruction may score as high as an adult with the benefit of the finest training.
- (3) Aesthetic judgment is found in children as young as five years old.
- (4) Aesthetic judgment is not positively correlated with general intelligence.
- (5) Artistic talent can generally be traced to a line of artistic ancestors.

The reliability co-efficients of correlation determined

for the Meier Art Judgment Test range from .70 to .84. These were obtained from Junior and Senior High School students, College Undergraduates, student professional and professional artists. The groups tested contained numbers from seventy to one hundred and fifty.

For the most part, the test is self-administering. It is important that the testee be comfortable, with the test booklet directly in front. For the best results, it is suggested that the pictures be uniformly lighted and perpendicular to the subject's line of vision. The time limit of the test is very flexible and is really at the pleasure of the examinee. In the directions for giving the test, it is stated that the majority of subjects are able to complete the measurement in about forty or forty-five minutes, although sufficient time should be permitted the slow ones to finish without hurry. A number of people require about an hour. The method of scoring is quite simple with the use of three matrices placed vertically on the Record Sheet.

The statistical tables have been arranged in percentile ranks which makes the interpretation of the results of the test a comparatively simple matter. For further simplification, the percentile rank norms are divided into four quarters enabling a general interpretation to be given for each section.

Those coming within range of the First Quarter, that is between Percentiles 100 and 76, are almost certain, with certain reservations of course, to be successful if they select to follow art as a vocation. If, in addition, a person has manual skill of a high degree, has an ancestry talented in art, has above average intelligence, keen observation and creative imag-

ination, and a fair share of energy, determination and endurance, success would almost be assured.

Interpretation for each of the remaining three quarters is given in the Examiner's Manual of the Art Judgment Test. The implications are sufficiently significant for every vocational counsellor to study them carefully.

A careful perusal of the test and a reasonable amount of experience in the technique of administration will convince anyone of its worth as a useful tool in the art of vocational guidance.

2. The McAdory Art Test.

In this test there are seventy-two plates. A single subject is pictured on each plate in four different ways. These designs are ordinary, everyday objects such as furniture, domestic utensils, and fabrics of various sorts besides buildings of different architecture and paintings.

The plates are named A,B,C, and D. The designs on each differ with regard to at least one important art principle. Each of the sets of illustrations were ranked by a group of outstanding artists. Artistic judgment is determined by approximation of agreement with the rankings of the experts.

The administration of the measure is a simple matter. The test can be given individually or to a group of as many as thirty. There are no time limits. The majority complete the test within ninety minutes.

Scoring is readily carried out by counting one point for each correct placement. There is a revised scoring key which omits the plates numbered 12, 36, 66, and 71.

A score above average on the test would suggest pos-

sible talent for occupations such as interior decorator, architect, painters, and designers of all kinds.

MEASURES OF MUSICAL TALENT

1. The Seashore Measures of Musical Talent. (First Edition).

While these tests have been superseded by the Revised Edition, the former measures are so well constructed and have for so long been recognized as superior examinations of certain aspects of latent musical talent, that they deserve more than mere passing notice.

Some consideration of each measure comprising the battery will be made and a later comparison with the comparable, revised edition of the same test.

The original measurements of fundamental capacities are described and discussed in order:

1. SENSE OF PITCH.

An analysis of musical talent has demonstrated the fact that this species of aptitude is not just one talent, but a series of many independent capacities each of a different kind. Sense of pitch is one capacity that helps to make up composite musical talent.

The nature of pitch must be understood in order to appreciate its vocational significance. When any sound is produced, whether it be musical or not, it is a composite integration of four requisites - pitch, intensity, time and timbre. To elaborate, it has a definite vibration number; it possesses a certain degree of loudness; its rate of time of production can be measured in seconds or fractions thereof; and finally it has

a quality all its own.

In the measurement of sense of pitch, it was necessary to isolate the factor of pitch in the sound, in order to gauge pitch and only this characteristic of sound. Sounds had first to be analysed into their constituent elements. By the use of tuning forks of various vibration number, it became possible to arrange a series of pitch comparisons from very easy to extremely difficult. Thus, the first standardized pitch test had comparisons varying from thirty vibrations difference to a very close approximation of only one-half vibration difference.

The test was graded from very easy to almost impossible- at least for most people. In fact, the latter was one of the reasons why there was a clamor for revision of this particular measurement. The question was raised that there were few occasions, if any, where a performer would be required to have a discriminating pitch capacity of one-half vibration for the majority of musical situations. While the test has been revised to reduce the extreme difficulty at one end, the original test still remains a monumental measure of keen pitch discrimination.

2. SENSE OF INTENSITY.

Sensitivity to various shades of softness and loudness forms an important part of musical talent. In this first test, the degree of difficulty was determined by units of loudness on the audiometer. Like the Sense of Pitch measurement, one hundred responses were required. The answers involved a discriminating capacity ranging from five units to one unit of loudness. Again for valid measurement the factor of intensity had to be isolated

3. SENSE OF TIME

One hundred responses characterized this test. In determining the degree of difficulty, time between two intervals was rated in terms of hundredths of a second. The elimination of all other elements but time was a first step in assuring the validity of the measure. As in others of the series, the test material is contained on a double-disc record. One disadvantage of the "Sense of Time" measure, in the administration of the test, is the necessity of altering the timing of the phonograph instrument from seventy-eight revolutions per minute to sixty or sixty-five.

4. SENSE OF CONSONANCE

This was the least effective of the original battery of tests. The major criticism was the requirement of a three-fold judgment on blending, smoothness and fusion, in the comparison of two combinations of two tones each. The listener recorded the letter "B" if the second combination were better; "W" if worse. The Test has been eliminated in the revised battery and a measure of quality substituted in its place. Research has indicated that sense of consonance or sense of harmony is an essential phase of musical talent and it is to be hoped that a new, improved measurement of this capacity will soon be forthcoming from some educational research bureau.

5. TONAL MEMORY

This measure is an effective means of rating memory for sound. The manner of measurement involves the consideration of the tonal memory span. People vary in their capacity to hold sounds in memory. Some have a small amount of talent of this type; others possess a considerable amount. While one person may be able to hold only two sounds in mind, a talented

individual might be able to retain six or more.

In giving the test, a series of notes is played twice and in the second playing one note is changed. The listener counts mentally each time in order to identify the number in the series which was altered. The norms are determined from fifty responses in each test-blank.

6. RHYTHM

The method of rating sense of rhythm employs a series of dual rhythmic patterns which are either identical or not. For this test fifty responses are required. Rhythm is one of the more important fundamental capacities essential in the majority of musical situations. It is innate in character and is not acquired with practice.

THE REVISED SEASHORE BATTERY.

Without doubt, the Revised Seashore Battery represents one of the greatest contributions in the entire field of measurement. The original tests have been shortened considerably without impairing their reliability. The new test of Timbre is the result of painstaking and effective research. While the degree of difficulty of the Pitch Test has been slightly lessened (the smallest difference was increased from one-half to one vibration) the introduction of the B Series has made it a more refined measuring instrument.

There are two series in the Seashore Battery - Series A and Series B. The individual measures are the same for each series, viz. Pitch, Loudness, Time, Timbre, Rhythm and Tonal Memory.

Series A is used for an unselected group such as a

class. Where considerable selectivity is desired or each candidate is to be tested individually, Series B should be employed.

Each series is equally comparable with the other in the number of trials. Fifty responses each are required of Pitch, Loudness, Time and Timbre. There are thirty trials in Rhythm and the same number in Tonal Memory. In Series A, norms are provided for Grades 5 and 6, Grades 7 and 8, and Adult. Only Adult norms are given for Series B, but children who are old enough to take the tests may be rated on these standards. The reasons for Adult norms in each Series are not that children are inferior and less gifted than older people in these innate capacities, but they lack the same amount of attention and concentration which their elders possess and due allowance must be made for them. The three sets of norms provided may be converted into ranking order for Series A; the single set of norms for Series B may be similarly changed.

Thus, for each capacity rated we can cite the rankings and their relative interpretations:

<u>RANK</u>		<u>INTERPRETATION</u>
1	-	Superior
2	-	Excellent
3 & 4	-	Good
5 & 6	-	Average
7 & 8	-	Low Average
9 & 10	-	Poor

Rank 1 corresponds to the scores made by the highest ten per cent of a normal unselected population. Rank 2 represents the next highest ten per cent, while Rank 3 includes the scores attained by the third highest ten per cent. At the lowest end of the scale, a Rank of 10 represents the marks made by

the lowest decile group.

With individual testing using the B series, a more precise method of interpretation may be set forth. Specific quantitative terms to designate individual differences may be employed for Pitch, Loudness, Time and Timbre. For example, a person's talent for discrimination of pitch may be stated as the capacity to distinguish a difference of three vibrations, two and one half vibrations, one and one-third vibrations, etc.

It must be remembered that the Seashore Battery does not measure training or accomplishment in music; neither does it rate the degree of intelligence nor the will to learn and make progress. These and other elements in the human personality must be appraised by other means. Even many phases of the musical mind are not gauged by the Revised Battery. Musical imagination, musical feeling and certain emotional traits intricately associated with specific musical capacities do not come under the scope of the six tests comprising the Battery. Sense of acuity is not rated; harmonic capacity is not included in the Revised Tests. However, the fundamental capacities commonly required in the majority of musical activities are scientifically gauged and offer a solution to certain educational and vocational selection problems.

The uses to which the tests may be put are numerous. The following are a few ways in which they may be employed:

- (1) for surveys of musical talent.
- (2) for surveys of Specific capacities used in other occupations, e.g. telegraphy.
- (3) as material for conducting class experiments in the subject of psychology.

- (4) as a guidance tool to aid in advising music students who look forward to a career.
- (5) for educational surveys conducted by group or individual testing.
- (6) for the selection of a group to take part in a chorus, band, orchestra, choir, etc.
- (7) for admission to music schools, conservatories, and degree courses in universities.
- (8) for comparisons of students in practical and theoretical music courses.
- (9) for diagnosing specific talents that are useful in a variety of situations.
- (10) for studies on the inheritance of talent.
- (11) for diagnosing certain types of auditory and speech disorders.
- (12) for discovering technical auditory skills.
- (13) for the study of innate capacities inherent in different races.
- (14) for analysing various kinds of achievement.
- (15) as measuring instruments of research in the fields of general psychology, psychology of music, phonetics, music education and acoustics.

The author has employed the Seashore Measures in many of the aforementioned ways and has found them excellent diagnostic devices. When accompanied with other types of tests of capacities and aptitudes, they represent a scientific array of guidance tools that possess both diagnostic and prognostic value.

In the consideration of the ranks obtained from these measures, it should be born in mind that they do not represent a single index of composite musical ability. Unlike the scores made on the individual factors comprising an intelligence test, the ranks lose their significance by being averaged. The ranks are not pooled to obtain ultimately a musical I.Q. Each Capacity is a single item in a profile giving a somewhat restricted panorama of the total musical personality. As this view is enlarged to include additional traits, training and accomplishment in music, the guidance picture becomes more complete. Yet, a musical talent profile chart alone has worthwhile meaning in the hands of a competent adviser.

It is not to be inferred that these measures cannot be administered incorrectly. The tests are scientifically accurate, but they should be used in a skilful manner with a proper appreciation of the ideal atmosphere for testing. Correct interpretation is by no means the least of the requirements of the technique of their management.

Two basic laws of scientific gauging contribute to the validity of these measures. As expressed by Professor Carl E. Seashore, "the factor under observation must be isolated in order that we may know what we are measuring. This factor is varied under control while all other factors are kept constant. Thus, in measuring the sense of time, we vary duration only, keep all other factors constant, and avoid complex situations. The second principle maintains that the conclusion to be drawn must be limited specifically to the implications of the factor which has been measured under control. Thus if we measure the sense of rhythm and find a very superior performance, the conclusion is not that the subject is musical; it is merely that

the individual has a very superior sense of rhythm." The recent advances during the past few years in phonograph reproduction make the measures of fundamental capacities scientifically accurate. With adequate administration, consistent results are bound to ensue.

THE K-D TESTS.

These tests have been the subject of use and experimentation for more than a decade. Of the ten tests six are comparable with the Revised Seashore Battery. Those measures which rate similar aspects of musical talent are:

<u>K-D Battery</u>		<u>Seashore Revised Battery</u>
Tonal Memory	-	Tonal Memory
Quality Discrimination		Timbre
Intensity Discrimination		Loudness
Time Discrimination		Time
Rhythm Discrimination		Rhythm
Pitch Discrimination		Pitch

The criteria underlying the K-D Tests are different from the principles of construction of the Seashore Battery. The builders of the former measures (Jacob Kwalwasser and Peter W. Dykema), contend that in the measurement of a musical talent the actual musical situation must be taken into consideration. Thus, if the factor of pitch is to be gauged, since musical tones are employed in music then such sounds should be used in the construction of a test for the measurement of sense of pitch. The upholders of the other school of thought claim that if sense of pitch is to be rated, the factor of pitch must be isolated for rating, otherwise both pitch and timbre are being measured. While

the K-D Battery measures traits that are indicative of musical talent and achievement, the Seashore Tests rate musical talent with a higher degree of certainty.

The author of this thesis believes that the cleavage arising from the difference of opinion of the two schools of thought is due in no small measure to the attitudes on the relative matters of musical talent and musical achievement. For the purpose of scientific measurement these latter are different entities and should be kept apart.

Four of the K-D measures depend to a large degree upon training for adequate scores. The Tests- Feeling for Tonal Movement, Melodic Taste, Pitch Imagery and Rhythm Imagery, measure musical accomplishment to a considerable degree. Certainly, scores on these measurements can be improved with practice. For this reason the tests could be better classified.

THE DRAKE MUSICAL MEMORY TEST.

Dr. Drake claims that this measure is a "test of musicality" a rating of "musical talent in a broad sense," in fine a measurement "in the way that talent is recognized when it is observed in action in any form." The author of the test contends that the measure rates capacity for musical accomplishment in much the same manner that intelligence tests discover capacity for learning or abstract thinking.

There are two forms - A and B. Either form may be administered in approximately twenty-five minutes. Both forms can be given without haste within three-quarters of an hour. A piano is required and the person playing the instrument may also give the test.

There seems no question but that it measures musical

memory but that it "measures musical talent in a broad sense" is seriously open to debate. It undoubtedly gauges the capacity for retaining sounds in memory and takes cognizance to a certain extent of time, rhythm and relative pitch but the degree to which it does the latter traits, is uncertain. The Test takes little or no account of Pitch Discrimination, Sense of Timbre, Loudness and Duration Discrimination - all of which are elements that function in practically all musical activities.

The Drake Musical Memory Test may be given to an individual or to a group. Lack of musical training is no bar to the successful taking of the measure, although the co-efficient of reliability for musical groups was found to be $\pm .93$ whereas with nonmusical individuals it was $\pm .85$. It is stated in the Manual of Directions for administering the test that normal eight-year-old children easily understand what is required to be done. This is true for musical persons. However, from the experience gained in the administration and interpretation of the measure, the author of the thesis feels that further practice exercises on the factor of Key Change would be desirable.

For the best results, the test should be given very definitely. Whoever plays the test on the piano must be thoroughly familiar with it in order to ensure a correct rendition of the exercises that comprise it. Care must be taken not to over-emphasize a note and dynamics are omitted.

After a preliminary statement read verbatim from the directions which arouses attention and interest, the following is stressed:

- "1. There are twelve trials of entirely different melodies.

2. Listen carefully to the first melody in each trial and remember it.
3. Listen to what is played next and compare it with the first melody to determine:-
 - a. if it is exactly the same as the first melody, -
if so record S.
 - b. if it is the same melody played in a different key,
if so record K.
 - c. if the time has been changed
if so record T.
 - d. if any notes have been changed,
if so record N.

S exactly the SAME melody.
K change of Key
T change of Time
N change of one or more Notes."

An explanation and demonstration of the various changes as enumerated above are then given. There are two practice exercises. After these have been completed, seven further explanations are stated with a final admonition to remember the significance of S, K, T, and N.

Norms for the test may be obtained by reference to percentile graphs for each Form individually and for the two Forms together. The percentiles are for ages seven to twenty-three. There are two score columns, one for boys and one for girls. This was made necessary by approximately three score points in favour of girls.

The test is sufficiently valid and reliable to give information regarding a person's memory for sound, particularly the

retaining of musical phrases. The guidance counsellor can scarcely use it as an all-round measure of musicality.

TESTS OF MUSICAL ACHIEVEMENT

1. Kwalwasser Test of Music Information and Appreciation.

This is an excellent test of musical accomplishment adaptable to high school and college level. It is particularly suitable for classes in music appreciation. This test does not examine any of the psycho-physical senses such as capacity for pitch, time, etc., but tests information derived from musical training and study. Scores earned on the examination can be readily converted into percentile ranks.

A student's knowledge of Musical History and Biography, Instrumentation and Musical Form is tested by nine separate divisions comprising the entire examination. The names of the tests which cover a wide area of musical information are listed below:

HISTORY AND BIOGRAPHY

Classification of Artists

Nationality of Composers

Composers of Famous Compositions

Classification of Composers by Types of Compositions

INSTRUMENTATION

Production of Tones on Orchestral Instruments

Classification of Orchestral Instruments

General Knowledge of Instrumentation

MUSICAL FORM

General Knowledge of Music Structure and Form

This examination, entirely objective in nature, takes exactly forty minutes. The directions for administering it are simple. On the whole, for both the musical subject stated and for the school levels indicated, it is a splendid measure of musical achievement.

2. Kwalwasser-Ruch Test of Musical Accomplishment.

This Test was designed for use in Grades IV to XII inclusive. It was standardized with the assistance of certain members of the National Research Council of America. Children numbering 4,177 took the Test. These pupils represented five outstanding American school systems well known for their excellent work in music. The examination rates principally the essentially elementary phases of rudiments of music and the recognition of familiar melodies from notation. The ten subtests comprising the Kwalwasser-Ruch Test of Musical Accomplishment are listed below:

1. Recognition of Musical Symbols and Terms
2. Recognition of Syllable Names
3. Detection of Pitch Errors in a Familiar Melody.
4. Detection of Time Errors in a Familiar Melody
5. Recognition of Pitch Names.
6. Knowledge of Time Signatures.
7. Knowledge of Key Signatures.
8. Knowledge of Note Values.
9. Knowledge of Rest Values.
10. Recognition of Familiar Melodies from Notation.

The status of music knowledge in the grades and high school is a concern chiefly from the standpoint of educational

guidance. Since the ability to read at sight is a major objective of all education in music, it is necessary to provide the groundwork in elementary musical theory. One of the best standardized measures of such knowledge is the test of musical achievement under discussion.

THE DETROIT MECHANICAL APTITUDES EXAMINATION. FORM A.

This new edition which was first published in the year 1939, is designed for use with boys and girls in the junior and senior high schools. The norms are based on 10,000 cases, chiefly unselected groupings from graders eight and nine. The norms have also been supplemented by measuring of small groups of higher and lower grades in addition to special classes.

The examination is easily administered and readily scored. The working time of the test is exactly thirty-one minutes. The reliability co-efficient is reputed to be .898 with a probable error of .01 which is an indication of satisfactory reliability. The statistical calculations covering the validity of items comprising the test were scientifically evaluated.

The following sub-tests are included in the examination; they appear in the order stated:

1. Tool Recognition
2. Motor Speed and Precision.
3. Mechanical Sizes.
4. Simple Arithmetic.
5. Visual Imagery
6. Mechanical Information
7. Imagery for Direction and Speed of Pulleys

8. Rate of Accuracy in Classification.

Age norms are provided which makes possible the conversion into mechanical aptitude quotients. The interpretation is further simplified by the provision of age norms for each of the sub-tests and for groups of test divisions. An overall view of mechanical aptitude is given in addition to detailed perspective from scores converted into age norms on the sub-tests. The latter are very useful for diagnosing strong and weak points.

An additional aid to adequate interpretation of the examination is a Table of Letter Ratings for Mechanical Aptitude which enables one to change scores to permit of interpretation of letter symbols in the following manner:

<u>RATING</u>	<u>INTERPRETATION</u>
A	Very Superior
B	Superior
C+	Good
C	Fair
C-	Poor
D	Inferior
E	Very Inferior

As a final indication of the uses of the results of the test of mechanical aptitudes, a summation of occupations with their relative requirements of mental and mechanical ability representing the consolidated opinions of about two hundred Detroit guidance counsellors and teachers is included at the end of the Manual of Directions.

From this chart it can be seen at a glance the level

of mechanical aptitude and general intelligence that would be essential for success in the occupations stated. For example, an author would require superior mental talent, but might possess only a low degree of mechanical aptitude. A civil engineer should be superior in both qualities. An auto repairman should have superior mechanical ability, but might have average or slightly lower than average intelligence. A person of superior mental ability and average mechanical talents, taking other factors into consideration could succeed as a chemist or a general physician.

The co-efficient of correlation between The Detroit Advanced Intelligence Test and the New Detroit Mechanical Aptitudes Examination, based on 188 pupils of grade twelve was .636. This suggests a considerable degree of similarity between the traits measured.

On the whole the Mechanical Aptitudes Examination is a good test and an invaluable aid to the counsellor. However, it should never be employed as the only measurement but always used in conjunction with other tests and information concerning the individual to be guided.

TESTS OF CLERICAL APTITUDES.

1. Minnesota Vocational Test for Clerical Workers.

This measure is made up of a series of paired numbers and a series of paired names. The person taking the test is required to notice if the numbers are the same or different; also if the names are spelled exactly alike or are dissimilar. Those pairs of names, or numbers as the case may be which are identical are indicated in the blank space by the testee with a check

mark. No mark is made when the pairs are exactly the same.

There are two Forms to the Test, known as the Long Form and the Short Form the former Form being the complete measure, while the latter is an abbreviated arrangement. The actual working time of the Short Form is fifteen minutes; of the Long Form twenty-eight minutes. Although the Short Form has a satisfactory reliability, the Long Form can be used with more certainty.

In the calculation of the norms for the test, it was found that women were superior to men in both the number-comparison and the word-comparison lists. Particularly did the women excel in the checking of names. Accordingly, this sex difference necessitated the establishment of two sets of norms for each kind of checking. The inclusion of standard scores, centile ranks, and letter grades enables the results of the test to be quickly interpreted. The measure is thoroughly objective - a decided advantage in this type of examination. It is also easily administered and scored.

That the Test is valid may be demonstrated from the fact that stenographers, typists, bookkeepers and other various kinds of office workers make very good scores and do considerably better than the average of the general population. It not only differentiates those within the field of clerking from others outside the pale, but also discriminates generally between different classes of clerical workers.

2. The Turse Shorthand Aptitude Test.

Fundamental traits that are essential for success in stenography are measured by this diagnostic examination. The segregation of the fit from the unfit can be accomplished with

considerable predictive value.

The co-efficient of reliability for the entire test is reputed to be .98 while for the sub-tests the r's range from .86 to .95. The test may be administered in forty-five minutes and its scoring is quick and simple.

The sub-tests rate these shorthand abilities:

1. Stroking.
2. Spelling.
3. Phonetic Association.
4. Symbol Transcription.
5. Word Discrimination.
6. Dictation.
7. Word Sense.

TESTS OF SCIENTIFIC APTITUDE.

1. Science Talent Search.

This comprehensive measurement which is conducted by the Science Service of Washington, D.C. is an excellent test of aptitude for science. Science Service is a well-endowed, non-profit institution, organized for the promotion and popularization of this subject. Many of its services are supplied to schools without cost.

The Science Talent Search consists of a Personal Data Blank and a Science Aptitude Examination. There are three Parts to the Personal Data Blank. Part I is filled in by the student who furnishes the usually requested information such as, Name, Address, Date of Birth, etc. and an account of participation in school activities, social and special recognitions received and

a list of hobbies.

Part II is entitled "Recommendation" and under this caption the member of the school faculty who is best fitted to judge the pupil gives specific examples of his interests, talents, personality, and work habits on the following qualities essential for the success in scientific endeavour:

1. Attitude - Purpose - Ambition
2. Scientific Attitude
3. Work Habits
4. Resourcefulness
5. Social Skills
6. Cooperativeness
7. Initiative
8. Responsibility
9. Mechanical Ability
10. Special Abilities
11. Other Relevant Information

In all scientific work the pupil should have a definite end in view and a programme outlined for the attainment of that purpose. The plan of attack must be in harmony with his interests, talents, and previous experience. Perseverance in the face of difficulties is a particularly valuable asset.

The manner in which the pupil reacts to a situation is important. Are there emotional responses or are problems reviewed from an objective and impersonal position? Logical reasoning should take the place of "jumping to conclusions." The science student must have the capacity for analysis and be able to adjust ideas and materials to changing circumstances. Social competence and ability to work well with confreres are necessary in scienti-

fic research. A high premium is put on originality in the field of science while the ability to accept responsibility is equally rewarded in many scientific posts. Being mechanically minded is a capability required by many occupations of a scientific nature. The knack of glass blowing, the construction of original apparatus, and the invention of ingenious devices are all worthwhile evidence in seeking scientific talents.

Part III of the Personal Data Blank includes the Secondary School Record which is filled in by the Principal of the School. The Name of Study, the Year Course was Taken, the Number of Weeks Pursued, the Number of Periods per Week, and the Grade Earned are tabulated for the following subjects:

ENGLISH

1st year
2nd year
3rd year
4th year

LATIN

1st year
2nd year
3rd year
4th year

FRENCH

1st year
2nd year
3rd year
4th year

GERMAN

1st year
2nd year
3rd year
4th year

SPANISH

1st year, 2nd year, 3rd year, 4th year.

HISTORY

Civil Government
World History
Modern History

American History
Ancient and Medieval
Community Civics

Problems of Democracy

MATHEMATICS

Algebra, through Quads
Geometry, Plane

Algebra, beyond quads.
Geometry, Solid

Plane Trigonometry

SCIENCES

Physics	Chemistry
Physical Geography	Botany
Physiology	Zoology
Agriculture	Biology
General Science	

REGULAR ADDITIONAL SUBJECTS

Vocational Agriculture	Manual Training - Wood Shop
Art	Shopwork - Metal Shop
Mechanical Drawing	Domestic Science
Music	Bookkeeping
Stenography	Typewriting
Commercial Arithmetic	Commercial Law
Commercial Geography	Economics
Sociology	Filing

The marking used for the foregoing is frequently used, e.g., A is excellent; B is superior, etc. Sufficient space is left for the inclusion of other subjects. It can be readily seen that there are many aspects of subjectivity in this type of school record but its comprehensiveness, and remaining part of the entire examination with its strong objectivity more than compensate for this deficiency - if it really can be so-called.

The Science Aptitude Examination is divided into two parts. Each section contains considerable variety of material. Part I measures mathematics usually required in solving scientific problems; knowledge of scientific terminology; various phases of mechanics; visual imagery; acquaintance with numerous shapes and designs; physics; and general knowledge of mechanical objects.

Part II covers aptitude for the application of knowledge (provided in initial paragraphs of the test) in the subjects of botany, zoology, acoustics, physics, chemistry, and mechanics.

If norms be determined and standardization be effected over the wide area from which results are obtained, the very nature of the scope and extent of the Science Aptitude Examination will make it one of the best science aptitude tests available. The fact

that the Science Talent Search is an annual event should aid in the process of the selection of examination material. Although three hours are permitted at present to take the Aptitude Examination, the majority of students are able to complete it within two hours and a half.

2. The Ruch-Popenoe General Science Test.

This educational measure which has been standardized with norms based on two thousand cases was designed to rate achievement in elementary science at the junior high school level. Percentile norms are provided for the two equivalent forms - Form A and Form B. The reliability coefficient is reputed to be .83 while the administration time is about forty minutes.

This test is an effective aid to the educational adviser in Grades Seven, Eight and Nine.

TEACHING ABILITY

The Coxe-Orleans Prognosis Test of Teaching Ability.

This objective test rates the ability of students to acquire the professional knowledge usually encountered in normal schools and teaching-training courses. While the authors of the measurement frankly admit that the value of predictive tests in teaching "is greater if they deal directly with the student's ability to teach than with his ability to master the work of the teacher-training institution," the name of the measure states that it is a test of teaching ability. The teaching personality comprises many factors in addition to professional knowledge. It would have been more in keeping with the material of the measure, if the title had laid emphasis upon

pedagogic information. The Coxe-Orleans Prognosis Test of Pedagogic Knowledge or a similar name more aptly describes the test. The authors contend that pupils who do well in normal schools and like institutions are more likely to be successful in a teaching career than those who fail. At present data are being obtained on the test to determine its predictive value for actual teaching situations.

The Coxe-Orleans Test gives evidence of measuring professional knowledge. The coefficients of correlation between it and a comprehensive achievement test in normal school work (given to students entering teacher-training institutions in New York State) varied from .534 to .839. The tests were given to the students of ten normal schools at the end of their first year's work.

The Prognosis Test of Teaching Ability is divided as follows:

Part I - General Information (78 Items)

Part II -Professional Interest (100 true-false statements).

Part III-Lessons in Education (Eight short lessons in the fields of educational psychology, principles of teaching, educational measurements, etc.).

Part IV -Reading Comprehension (Seven paragraphs taken from textbooks on education and testing the pupil's understanding of each paragraph.

Part V -Problems in Education (Six problems termed with reason by the authors - problem situations - with questions to rate the pupil's reaction to each one.

The authors agree that there are several circumstances that have a bearing on standards required for entrance to teacher-training courses and institutions in addition to other considera-

tions for the classification of students already attending such schools.

The factors are listed as -

" (1) the students success in previous work in the high school,

(2) the students general mental ability,

(3) his work habits,

(4) his knowledge of teaching methods and practices as acquired from his observations as a student, and

(5) his ability to master professional material in the educational field."

Measures for each of these factors may be provided by -

(1) high school marks or standardized test scores,

(2) measurements of intelligence,

(3) rating scales for teachers or students teachers,

(4 and 5) The Coxe-Orleans Prognosis Test of Teaching Ability.

It is true that the items aforementioned overlap to a certain degree. Yet there is sufficient difference among them to warrant the rating of all factors. After all, the Prognosis Test of Teaching Ability has a fair correlation with the majority of group intelligence tests (at least $+0.5$), but it would be wrong to predict teaching success upon the results of the mental measurements alone. In fact, the inclusion of a great many personality items must be considered.

APTITUDE FOR LAW

Law Aptitude Examination.

The Law Aptitude Examination constructed by M.L.Ferson and G.D.Stoddard consists of Parts 1-a, 1-b, 2, 3, 4. Part 1-a is a hypothetical court case about which the student has four minutes to read. The knowledge of this is tested when the student completes Part 4. It is named Part 1-b and includes sixteen five-response multiple-choice questions upon detailed points of the court case. Presumably the interval of time is deliberately placed in order to rate the capacity to remember detail which is an essential talent for success in the law courts.

Part 2 of the Examination begins with a case which is tested by ten true-false questions in Part 2-a. Part 2-a presents a case by analogy and the student is required to mark the similar parts. Part 2-c lists ten facts and requests the noting of applicable and irrelevant factors of the hypothetical case.

In Part 3 follow twenty syllogisms, each to be answered True or False. In the final section, Part 4, there is an objective test on bilateral contracts. Seventeen responses are required.

On the whole the Law Aptitude Examination is quite comprehensive in scope. Norms are now being determined and when the test has been properly validated and standardized, it promises to be a superior predictive measure of success in the law school. The Examination now requires about sixty-five minutes to administer.

ACADEMIC APTITUDE

The Iowa Placement Examinations,

There are two sets of examinations, one measuring aptitude for particular subjects, the other rating training already possessed. They have been designed for use mainly at the college level. Two or more forms of approximately equal difficulty for a

series of eleven tests are available. The chances for subsequent success in a subject are determined by the aptitude series, while the training set measures learning and skills already acquired. No special training in the subject is needed to take the aptitude series. The various Placement Examinations are listed below.

ENGLISH APTITUDE

MATHEMATICS APTITUDE

CHEMISTRY APTITUDE

FOREIGN LANGUAGE APTITUDE

PHYSICS APTITUDE

ENGLISH TRAINING

MATHEMATICS TRAINING

CHEMISTRY TRAINING

FRENCH TRAINING

SPANISH TRAINING

PHYSICS TRAINING

Each Examination covers a wide range of subjects material. Percentiles are given for both aptitude and training series. On the whole the tests have been very well standardized. Coefficients of reliability for the measures with first year college students range from .87 to .94.

The results of the Examinations may be employed in a variety of ways, some of which are:

- " (1) To afford a basis for prediction of the character of the work that each student will do in college.
- (2) To aid in selecting and admitting students.
- (3) To serve as an entrance examination in lieu of

the more time-honored essay type content examination.

- (4) To section classes for instructional purposes on the basis of mental ability.
- (5) To assist in deciding how much work a student can carry.
- (6) To deal more effectively with students who are not well oriented in their college work; e.g., students who fail their work but possess adequate mental ability; students who work hard but do not succeed; students who lack interest in their work; students on probation for various delinquencies, etc.
- (7) To give scientific aid in vocational guidance and placement.
- (8) To enable comparative studies of intellectual levels as between classes, colleges, and college years.
- (9) To furnish a basis for the diagnosis of class weaknesses.
- (10) To enable high schools and preparatory schools to survey their seniors or graduates in order to determine probable fitness for collegiate studies."

The actual working time of some of the examinations is forty minutes, others forty-three minutes, and still others forty-five minutes. All the measures are objective and readily scored.

In order to predict scholastic success, a general intelligence test may be used along with the Placement Examinations

but this is not essential since it has been found that scores on a series of placement tests are more significant than the results of a group intelligence examination.

MANUAL APTITUDES

1. The Minnesota Manual Dexterity Test.

The Minnesota Manual Dexterity Test rates the total movement of the hand and arm in selecting objects and putting them into position. A type of work coming under this category would be that employed in the packing of cartons where quick motions of the hands and arms are required but not a great deal of skill is needed. The wrapping of parcels would also require the manual activity measured by this test. The work of bank tellers while not primarily manual has something in common that can be rated by the measure.

The test materials are a board $39\frac{1}{2}$ inches long, $10\frac{1}{4}$ inches wide, and nine-sixteenths of an inch thick; 58 round holes which are exactly $1\frac{1}{4}$ inches in diameter are bored through the wood; the arrangement of the holes being the first column three holes, followed by thirteen columns of four holes each with a final row possessing only three holes. The same number of round blocks each one and eleven-sixteenths inches in diameter and seven-eighths of an inch thick are made for insertion into these holes.

Upon the speed with which individuals pick up these cylindrical blocks and place them into the spaces provided, is determined the norms. This special aptitude matures early and norms are applicable to all those of both sexes who have passed the age of thirteen years. The test has special vocational significance for butter-packers, butter-wrappers, food-packers,

bank tellers, semi-skilled workers, skilled manual workers, stenographers, typists, and garage mechanics; although the latter two occupations require only an average manual aptitude of this kind.

2. Tweezer Dexterity Test.

A good example of this kind of measure is Johnson O'Connor's Worksample Number 17. This test rates the speed with which an individual is able to pick up small brass pins one at a time and put them in the holes of a metal plate. The necessity of using tweezers calls for a certain steadiness and eye-hand coordination. Those who possess a high degree of this ability will find it advantageous for work of a more or less delicate nature necessitating the employment of small tools and instruments. Occupations classified under this heading would be watch-making, watch-repairing, dentistry, surgery, jeweller, glass worker and laboratory worker.

The test which is administered individually requires like the Minnesota Manual Dexterity Test about eight minutes. The method of scoring is extremely simple.

TESTS OF PERSONALITY

Personality which is the sum total of all the capacities, talents, traits and qualities of the individual is more or less intangible insofar as many of its phases are concerned. Yet, certain aspects of these distinctive characteristics are capable of being appraised. It has been discovered that an individual possesses a certain set of emotional attitudes. Judged from one angle these have been classified as introvert, extrovert, and ambivert. The extent to which qualities of introversion in-

fluence a person in his occupational life is of definite vocational significance. In like manner, an extrovert on account of his emotional attitudes is adaptable to certain occupations and unfitted for others. In many types of work qualities of both introversion and extroversion are required for success. In other words an ambivert, other things being equal, would attain the greatest self-realization and happiness.

1. An Inventory of Personality.

One of the best measures of the three personality traits above mentioned has been designed by Dr. Donald A. Laird. From a great deal of research on the introvert type- this individual whose life and satisfactions are chiefly inside himself, and the extrovert whose ideas and attitudes centre outside himself,- not forgetting the larger group of people who steer a middle course in these respects, Dr. Laird has evolved forty-eight questions graded on a scale of ten units which indicate these **personality** leanings one way or the other.

A true introvert for example would prefer to blunder along attempting to fix some minor defect in his automobile rather than ask someone who perhaps could adjust the difficulty in a minute. Makers of fine tools and delicate instruments are usually introverts. They are people of ideas, planners and designers who resent any interference with their work. It is well known that those engaged in these occupations are often difficult to handle. Yet they possess the quality of self-reliance to a high degree. Thus, one of the forty-eight questions asked is "Do you usually work out things without asking help?" This

question is graded, e.g.,

- 1 Usually did not ask for help
- 2
- 3 hesitated to ask for aid
- 4
- 5 sometimes sought help
- 6
- 7 did not hesitate to seek aid
- 8
9. sought and obtained help in quite a few
- 10 cases

The person taking the test is required to read each question carefully and think back a few months before marking the answer. The first of the two numbers is marked if the testee be very strong on the answer; the second number is indicated if the trend be weak or moderate.

Another question will serve slightly to give further evidence of the nature of the inventory. The response to the question "What care have you taken of your property (books, watches, clothes, etc.)?" would be indicated by the correct marking of the following:

- 1 kept close watch of all
- 2
- 3 take reasonable care
- 4
- 5 care only for some
- 6
- 7 only necessary care

8
9
10 tendency to be neglectful

An individual who takes exceptionally good care of his personal property is probably an introvert. However, it must be remembered that this trait alone or any one of the forty-eight elements of personality described in the test is insufficient in itself to indicate introversion or modifications of this quality but the entire test has worthwhile predictive value.

The scoring for men is different from that of women. Fifteen or more crosses according to the scoring table make a man definitely an introvert; five or fewer crosses indicate an extrovert, while from six to fourteen crosses show ambiversion.

Granted adequate talent and other requirements an introvert would find satisfaction in such positions as:

Artist	Accountant	Instrument Maker
Proof-reader	Die-maker	Research Technician
Architect	Jeweller	Tool Maker

The extrovert would be happiest in one or more of the following occupations:

Hotel Clerk	Politician	Explorer
Organizer	Salesmanship	Demonstrator
Foreman	Hospital Attendant	Real Estate Agent

From the consideration of personality, the ambivert would be most successful in one of the following or other occupations requiring ambivert traits:

Clergyman	Teacher	Manager
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Office Clerk	General Mechanic	Chauffeur
Detective	Professor	Proprietor

On the average women are more introverted than men. Extroverts are more numerous among men probably owing to their wider occupational life. Accordingly, the scoring on the table is different for women. Twenty or more crosses are necessary to indicate introversion in women; ten or less show extroversion; and between eleven and nineteen are evidence of ambiversion.

2. The Personality Inventory.

Devised by R.G.Bernreuter and J.C.Flanagan, these measures have been widely used since 1931. Six tests comprise the Inventory which is one of the most comprehensive and reliable measurements of personality. There are six scoring keys that rate the following:

- Neurotic Tendency
- Self-Sufficiency
- Introversion-Extroversion
- Dominance-Submission
- Sociability
- Confidence

Any one of these traits may be taken and scored individually. The entire Inventory however, presents a more complete personality picture. Norms for both sexes have been established for high school, college, and adult ages. These standards have definite significance for the vocational counsellor.

3. Personality Rating Scale.

The above scale which has been devised by Leslie R.

Marston consists of twenty double items of contrasted traits of introversion and extroversion. One or more raters testify by marking on the scale the type and the degree of the traits. The scale is very subjective in the nature of its administration but qualified raters with even a minimum of psychological training can achieve accurate results. It would be well however, to check its findings with either the Laird or Bernreuter Inventory.

TESTS OF TEMPERAMENT

Few fields in the realm of psychological research have been as lightly tilled as that relating to human temperament. The reason is not difficult to discover. Those who have undertaken the analysis of human temperament have been confronted with a manifold task. Working hypotheses must first be established. A definite conception of temperament must be formulated before measurement can be attempted. The intricate nature of this part of the human personality makes it difficult to appraise adequately. A pioneering effort that deserves mention and which has at least some vocational application is the Test of Will-Temperament devised by June E. Downey

1. The Downey Individual Will-Temperament Test.

The time of the test is flexible. Some complete it in less than two hours; others require a much longer time. A number of the tests comprising the main test are performed as quickly as possible; the performance of other subtests is given unlimited time. Temperament is such that the time element is an important consideration.

The scoring is finally transferred to a Will-Proville Chart which shows at a glance a diagnostic rating for the indivi-

dual tested. The traits mentioned in order on the Chart are:

SPEED OF MOVEMENT
 FREEDOM FROM LOAD
 FLEXIBILITY
 SPEED OF DECISION
 MOTOR IMPULSION
 REACTION TO CONTRADICTION
 RESISTANCE TO OPPOSITION
 FINALITY OF JUDGMENT
 MOTOR INHIBITION
 INTEREST IN DETAIL
 COORDINATION OF IMPULSES
 VOLITIONAL PERSEVERATION

Each trait has a definite interpretation. Thus, Freedom from Load means the "tendency to work at one's highest speed without external pressure; little tendency to relax speed; quickness in warming up to a task;" Some profiles are regular and traits can be grouped for analysis. Where high scores are made on a combination of volitional perseveration, interest in detail, motor inhibition, and coordination of impulses, it is an indication of a deliberate, careful and well-controlled individual. Other combinations of qualities would denote a different type of temperament.

The norms have been derived wholly from adult subjects. While exception can be taken to the validity of certain test-items, the measure as a whole has worthwhile features.

2. Pressey X-O Tests for Investigating the Emotions.

Each test consists of one hundred and twenty-five words arranged in twenty-five lines of five words each. The subject is

asked to cross out all words that are unpleasant - all words that he dislikes. "Jokers" are inserted to take care of flip-pant or careless work. According to the reaction to various words which have shown significant association, a person is classified as paranoid, neurotic, shut-in personality, melancholic and hypochondriacal. Judgment and total emotionality are also rated.

The tests are mainly used for diagnosing emotional disorders as in psychiatric clinics, although they may be also employed for experimental material for classes in abnormal psychology. Adult and child forms with accompanying norms are available.

OTHER TESTS OF DIVERSE CHARACTER

Those entrusted with guidance and vocational placement may well consider the advisability of using one or more of the following tests to help solve certain personnel problems:

1. The Snellen Chart for measuring visual acuity.
2. Jensen's Chart for measuring astigmatism.
3. Tests for color blindness.

(a) Holmgren Test.

(b) Jensen Chart for diagnosing color Blindness.

(c) Ishihara Color Perception Test.

4. Emotional Maturity Scale. (R.L. Willoughby).
5. L.R. Frazier's Tests of Manual Versatility.
6. Whispered Speech Test (Andrews) for auditory acuity.
7. Minnesota Occupational Rating Scales.
8. The Earl Ward Pearce Tests of Vision.

TESTS OF VOCATIONAL INTEREST

No description of tests would be complete without reference to vocational interest inventories. Interest in an occupation does not necessarily presuppose ability for the desired preference, but it does suggest that if the pre-requisite aptitude be present in an individual, the hopes for successful work and happy adjustment are good. Predilection for any activity while not always essential for performance, is a consideration that should not be dismissed too readily.

One of the most useful aids to vocational counsellors is the Vocational Interest Blank which has been devised, developed and standardized by Professor E.K.Strong, Professor of Psychology at Stanford University. The inventory comprises four hundred items to which the person taking the test responds by indicating his liking, dislike, or indifference to each of the items. The revised 1938 Blank for men is known as Form M; a separate Blank is required for women and is called Form WA. The items of the test include a great variety of human activities and personal characteristics. Professor Strong has found that certain groups of responses to the inventory have shown definite interest patterns. While there is overlapping so some degree, preferences of those in many occupations are sufficiently representative to indicate definite patterns of likes and dislikes. These remain fairly constant between the ages of twenty-five and fifty-five. Even between the ages of twenty and twenty-five although there are changes in interests, they are slight and the test may be applied with considerable confidence. However, if adolescents are tested, particularly if they be under seventeen years of age, due allowance must be made for immaturity.

The following occupations can be scored from the new revised blank, Form M, but a different scoring scale must be used for each type of work:

Accountant,
Advertiser
Architect
Artist
Author-Journalist
Aviator
Banker
Carpenter
Certified Public Accountant
Chemist
City School Superintendent
Dentist
Engineer
Farmer
Forest Service
Lawyer
Life Insurance Salesman
Mathematician
Mathematics-Science Teacher
Minister
Musician
Office Worker
Personnel Manager
Physician
Physicist
Policeman

President of Manufacturing Company
Printer
Production Manager
Psychologist
Purchasing Agent
Real Estate Salesman
Sales Manager
Social Science Teacher
Y.M.C.A. Physical Director
Y.M.C.A. Secretary

A number of non-occupational interests are also included in the complete scoring:

Interest Maturity
Masculinity-Femininity
Occupational Level
Studiousness

The administration of the interest blank is simple. There are no right or wrong answers and no time limit is set. Best results are obtained if the person taking the test works rapidly. Some are able to fill in all items of the test within three-quarters of an hour; a few need as much as two hours.

The necessity of using a different scoring scale for each occupation is a disadvantage of the inventory, but the validity and reliability of the test more than compensates for this unfavourable point. About twenty minutes is required to score with a stencil which is specially designed for each occupation. With practice this time can be lessened by half.

Standard scores, percentiles, and letter ratings give scope for the correct interpretation. To ensure successful in-

terest, a person should make an A or B plus letter rating in any occupation which he desires to enter. A lower rating than B plus is a warning signal to scrutinize the occupation concerned before coming to a final decision.

The Kuder Preference Record.

This test is a good measure for rating the extent of preferences in nine composite fields of occupational activity. Those who have attained interest maturity can, by taking the Kuder Test according to the simple directions laid down, quite accurately gauge their interest for each of these types of endeavour:

1. Mechanical
2. Computational
3. Scientific
4. Persuasive
5. Artistic
6. Literary
7. Musical
8. Social Service
9. Clerical

General trends of interest are measured by this test and not specific ones. Thus, a person indicating a high degree of interest in mechanical matters would have to narrow down his choice to a particular occupation. For the Kuder Preference Record under the heading "Mechanical" comes civil engineer, marine engineer, mechanical engineer, surgeon, inventor, locksmith, armorer, etc. However, some occupations are grouped under more ~~than~~ one of the nine types of endeavour outlined in column previously. Architect is within the range of both "Mech-

anical" and "Artistic;" a bond salesman would be interested in both "Computational" and "Persuasive;" a science teacher would have interests common to the "Persuasive"; and "Scientific" and the "Social Service."

The coefficients of reliability for the various scales are reputed to range from .93 to .98. There is no set time limit for taking the test. The majority of persons can complete all test items in less than an hour. Scores obtained from the Preference Record are usually placed on a profile sheet which presents a clear picture of the interest patterns.

AN OBSERVATION OF CURRENT TESTS

While high or low scores made by individuals on many valid and reliable tests are truly significant in their vocational application, it is still necessary to discover in a majority of cases, what is the minimum amount needed and the maximum desirable of a particular quality for specific vocational success. Except in a few instances, **this** is virtually impossible at the present stage of test development. Perhaps future research will unveil the answer. In the meantime we must content ourselves with utilizing the best available test material in the most sensible manner, realizing all the while that the finest present measurements of human traits and capacities have limitations that are hindrances to the satisfactory solution of the complex and constantly changing occupational patterns of life.

A P H I L O S O P H Y O F G U I D A N C E

CHAPTER VIII

SELF-ANALYSIS BY STANDARDIZED MEASUREMENTS

The majority of studies on the measurement of human traits are generally devoted to one particular type of talent or ability. The research efforts are usually delimited within the precincts of one species of measurement. Although there be only one test there are many individuals rated. The reverse is true in the present thesis. There is only one individual but the person is rated by many tests.

This method has been employed on the assumption that vocational guidance should be individual in approach. The greater the extent of knowledge about an individual the more certain a satisfactory placement and adjustment will be made. No two individuals are exactly alike and guidance to be effective must take cognizance of a wide range of interests, traits, talents and abilities.

For guidance purposes the same measures need not necessarily be given to each individual but effective vocational guidance can scarcely be satisfied with one or two tests. Many outstanding talents are now lying dormant in many persons as a result of hasty and mere surface diagnosis.

For purposes of self-analysis in order to illustrate the application of the results of tests in an individual case, the author has taken one hundred and twenty-six measures. The finding of these are arranged in diagrams immediately following on the next page. The interpretation of some of the figures is self-evident; the significance of others is stated briefly below the diagram; a few are left for explanation later in the Chapter when the entire group of figures is treated "en masse."

General Intelligence

Otis I.Q.'s		Power Test
Form A	Form B	I.Q.
122	135	131

Fig. I Showing the I.Q.'s attained on the Otis Self-Administering Tests of Mental Ability (30 minutes) and on the Mental Power Test given below.

$$\begin{array}{r}
 \text{NUR} | \text{AYFLS} | \text{FFN} \\
 \hline
 \text{TCA} \\
 \hline
 \text{ASL} \\
 \hline
 \text{TCA} \\
 \hline
 \text{CFAS} \\
 \hline
 \text{CYTT} \\
 \hline
 \text{FYT}
 \end{array}$$

(The solution of the above Mental Power Test is reputed to rate the equivalent of an M.A. of at least 21 years.)

Assuming this to be true, the I.Q. is at least 131.2.

$$\begin{aligned}
 \frac{\text{M.A.}}{\text{C.A.}} \times 100 &= \frac{21}{16} \times 100 \\
 &= 131.2
 \end{aligned}$$

Art Judgment

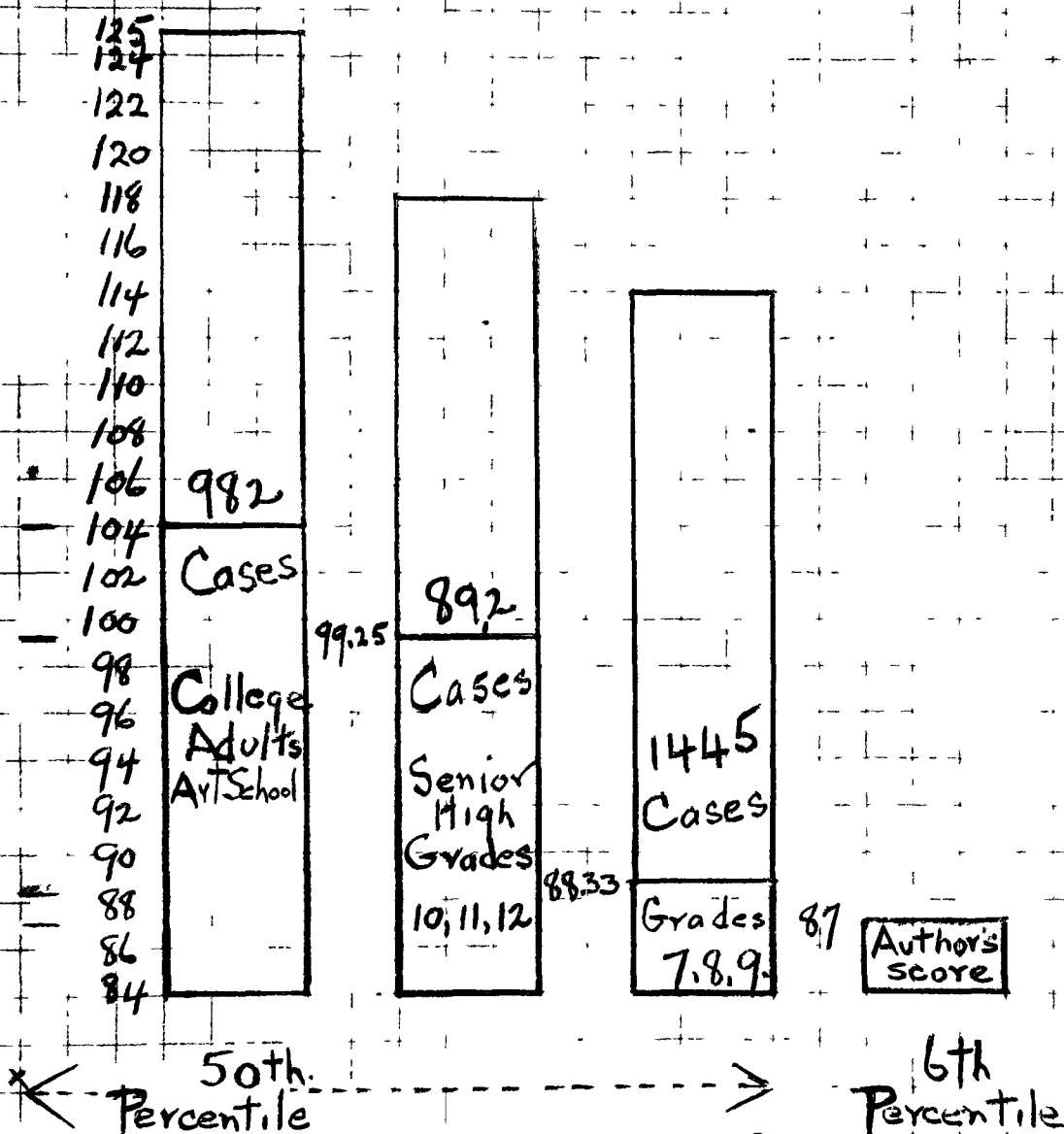


Fig. 2 The author's percentile compared with the 50th percentiles of three groups on the Meier Art-Judgment Test.

* Cf. - Examiners Manual Art-Judgment Test by N.C. Meier State University of Iowa.

Musical Talent

205

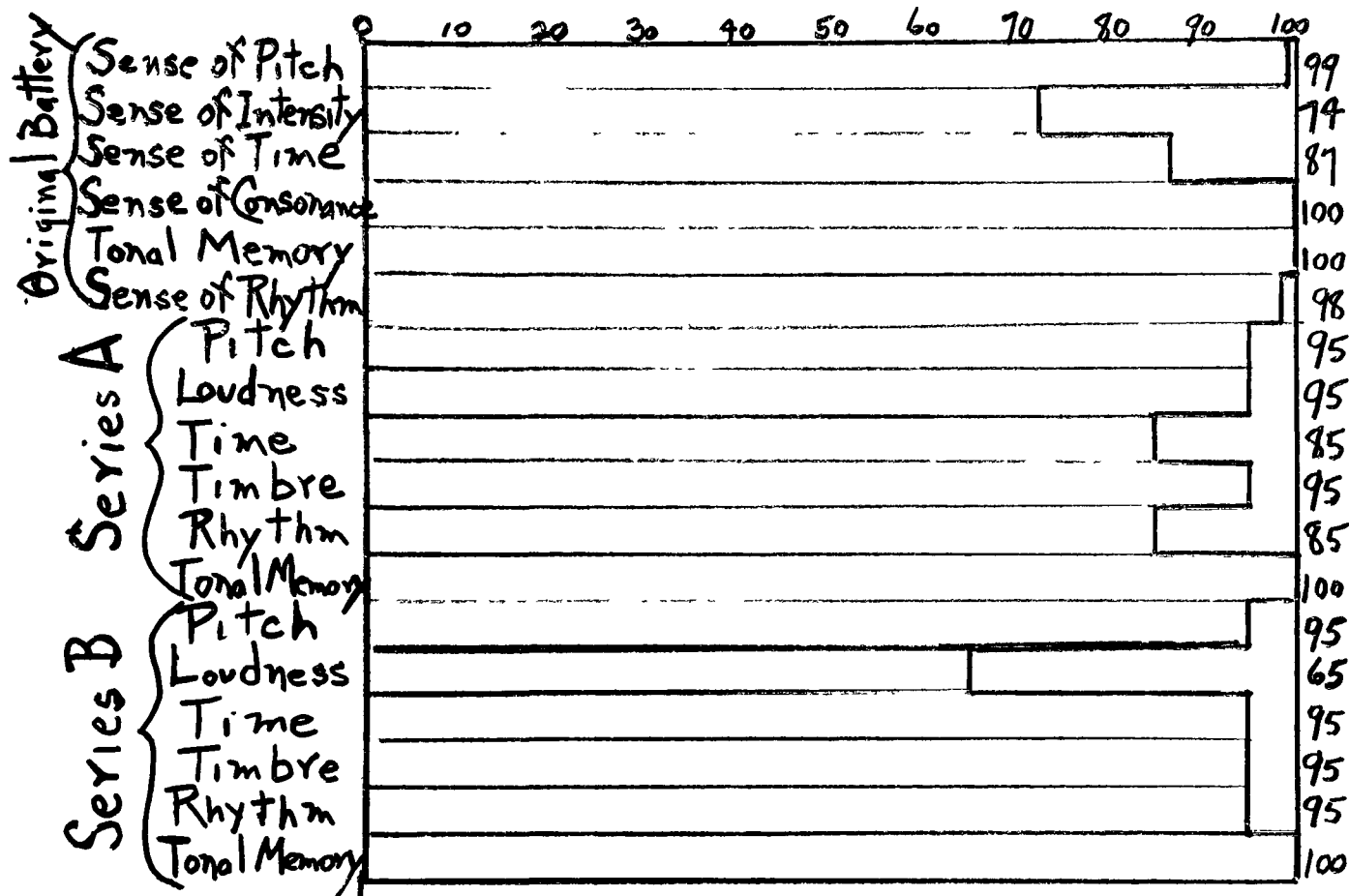


Fig. 3

→ Comparison of ranks attained on Seashore's Measures of Musical Talent. Ranks on Series A & B are in terms of mean percentages except Tonal Memory where all responses were correct.

Ranks ← → 10 9 8 7 6 5 4 3 2 1
Poor Low Ave Ave Good Excel. Sup.

Series A	Pitch								X
	Loudness								X
	Time							X	
	Timbre								X
	Rhythm							X	
	Tonal Memory								X
Series B	Pitch								X
	Loudness					X			
	Time								X
	Timbre								X
	Rhythm								X
	Tonal Memory								X

Fig. 4

Ranks attained on Revised Series and tabled on Model Talent Chart suggested by Carl E. Seashore.

Musical Aptitudes

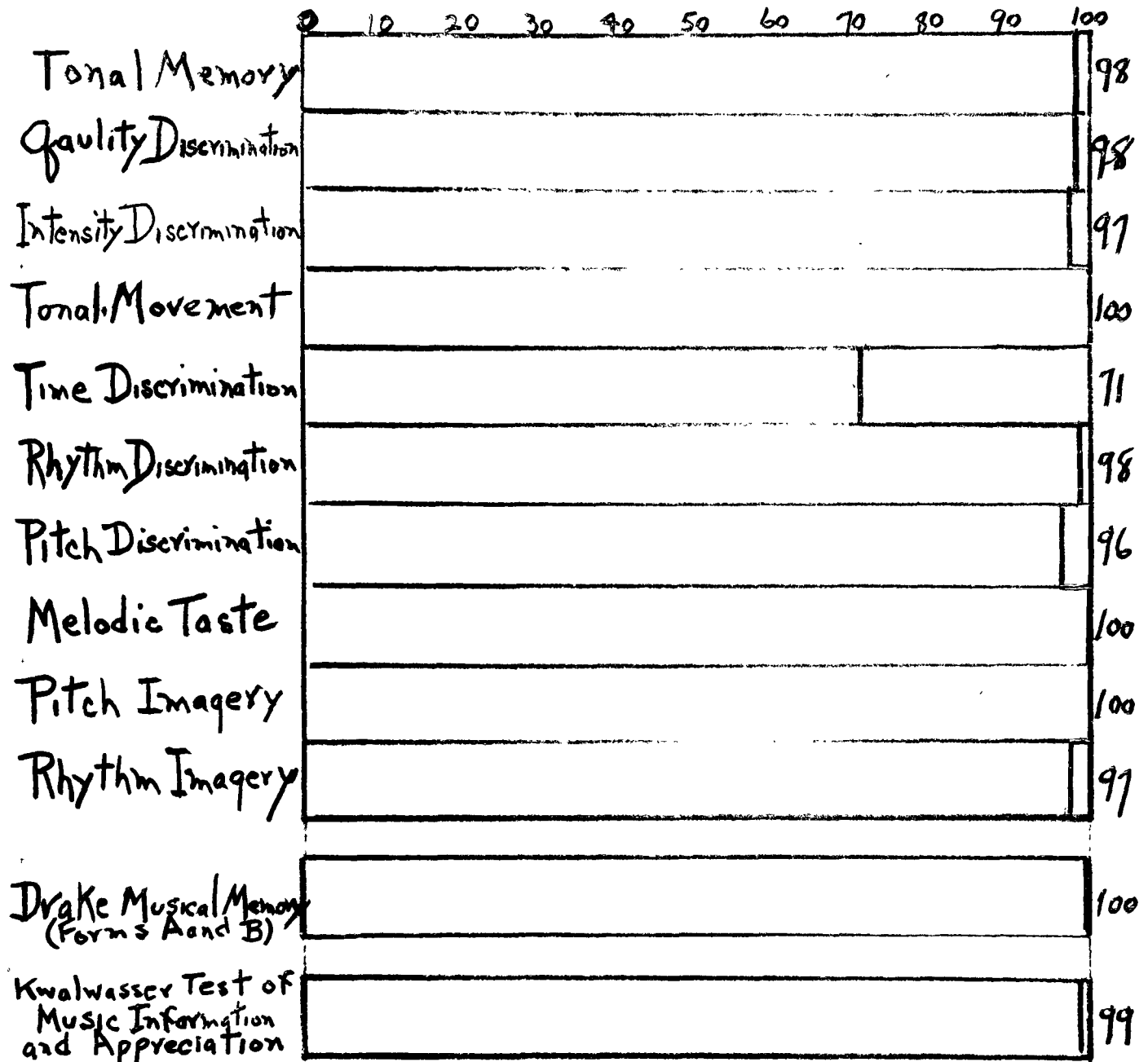


Fig. 5. Percentiles attained on the K-D Tests, the Drake Musical Memory Test and the Kwalwasser Test of Music Information and Appreciation.

Mechanical Aptitudes

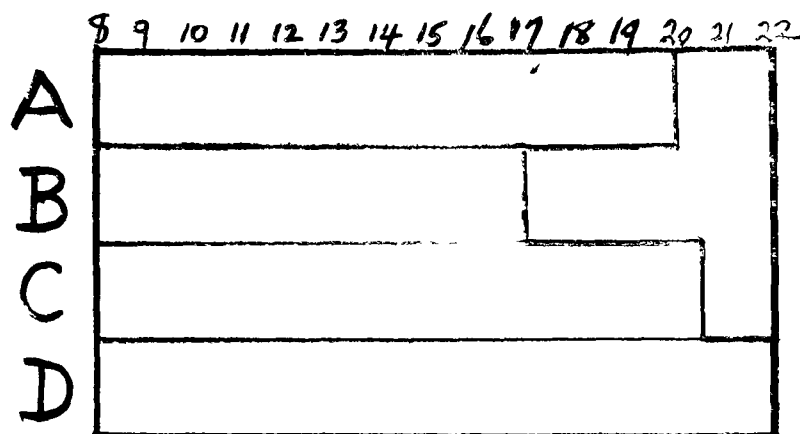


Fig. 6 Classification of the subtests of the Detroit Mechanical Aptitudes Examination, Form A, into Motor, Visual Imagery, Mechanical Information and Educational, Showing Mechanical Aptitude Ages attained.

	Score	Mech. Apt. Age
A - Motor ----->		20-0
Subtest 2. Circles	29	18-9
" 8. Classification	<u>34</u>	20-6
	63	
B - Visual Imagery ----->		16-8
3. Sizes	20	15-4
5 Disarranged Pictures	14	12-0
7 Pulleys	<u>48</u>	22-0
	82	
C - Mechanical Information ----->		20-4
1. Tool Recognition	33	19-0
6 Tool Information	<u>32</u>	21-6
	65	
D - Educational		
4 Arithmetic	<u>48</u>	22+
Total Score	258	Forentive Exam 19-8

Clerical Aptitude

Examination In Clerical Work: Form A (From Thurstone Employment Tests)

Error Score 18	Accuracy Rating B	Interpretation Superior
Total Time 44'	Speed Rating A	Interpretation Very Superior
Combined Error and Time Score 62	Combined Speed and Accuracy Rating A	Interpretation Very Superior
Percentile on the Turyse Shorthand Apt. Test = 99		

Fig. 1 Scores and ratings made by author on the Thurstone Employment Test in Clerical Work and Percentile attained on the Turyse Shorthand Aptitude Test.

Teaching Inventory.

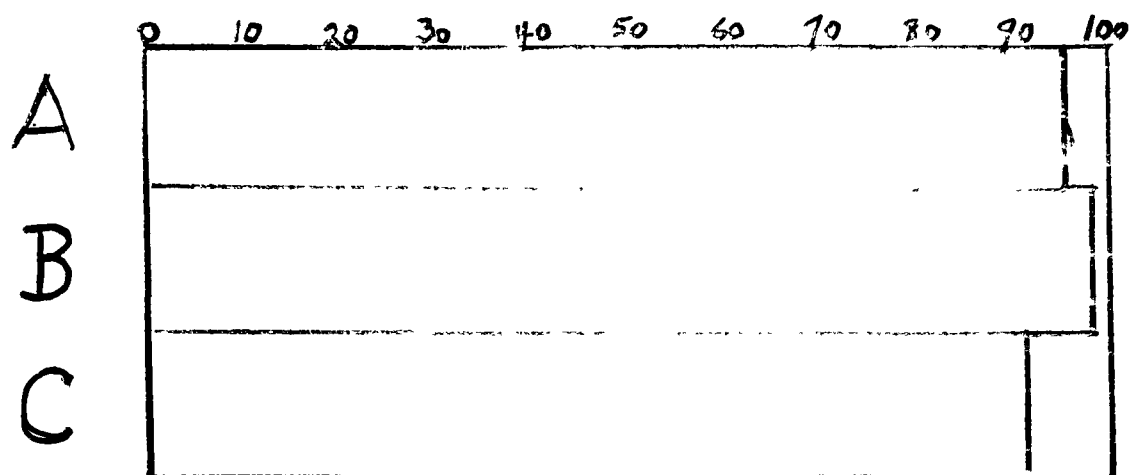


Fig. 8 Percentiles attained on the Coxe-Orleans Prognosis Test of Teaching Ability, the Tyler-Kimber Study Skills Test, and the Willoughby Emotional Maturity Scale.

Key

A = Teaching Ability
(As measured by the Coxe-Orleans Test.)

B = Study Skills
(As rated by the Test of H.T. Tyler and G.C. Kimber)

C = Emotional Maturity
(As determined by the Scale devised by Raymond R. Willoughby.)

Educational Aptitudes Test

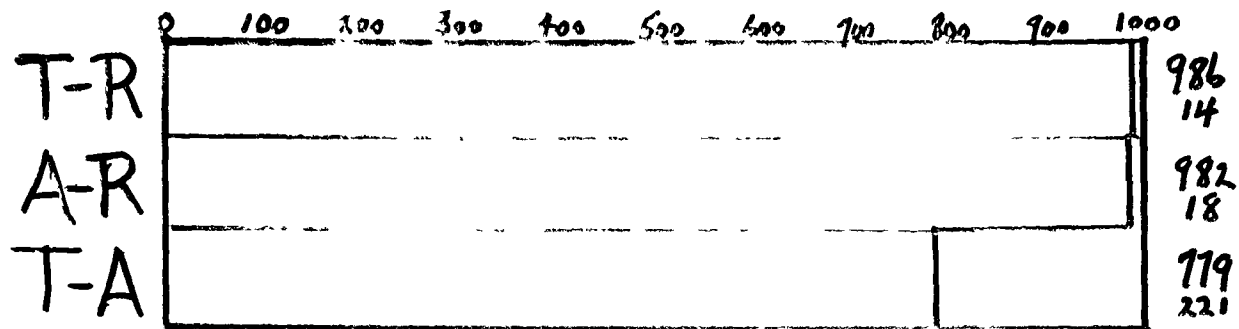


Fig 9 Showing the chances per 1000 that each score made on the Stanford Educational Aptitudes Test is significant for T-R (Teaching-Research), A-R (Administration-Research), and T-A (Teaching-Administration).

Interpretation

Scores made on Test.

$$\begin{aligned} T-R &= +65.9 \\ A-R &= +85.58 \\ T-A &= -21.61 \end{aligned}$$

A positive sign means more elements of teaching ability in the T-A comparison, of administrative ability in the A-R comparison, and of teaching ability in the T-A duo.

A negative sign shows a predominance of research ability in the T-R and A-R comparisons and of administrative ability in the T-A comparison.

Academic Tests

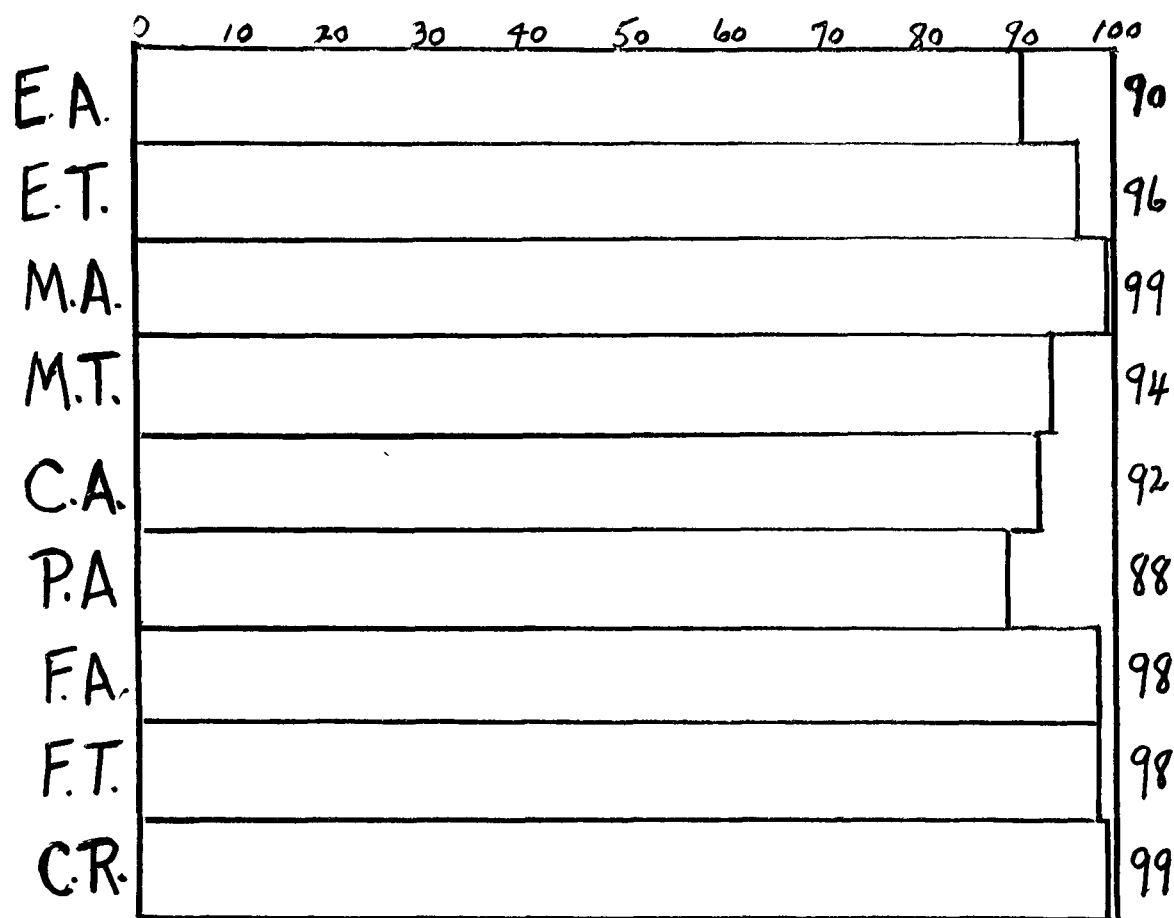


Fig. 10 The percentiles attained on the Iowa Placement Examinations, Series I, Revised Form A and Whipple's High School and College Test, Form A.

Key

E.A.- English Aptitude	CA.- Chemistry Aptitude
E.T.- English Training	P.A.- Physics Aptitude
M.A.- Mathematics Apt.	F.A.- Foreign Language Apt.
M.T.- Mathematics Tr.	F.T.- French Training.
C.R.- Whipple's H.S. and College Reading Test- Form A.	

Personality Inventory (a)

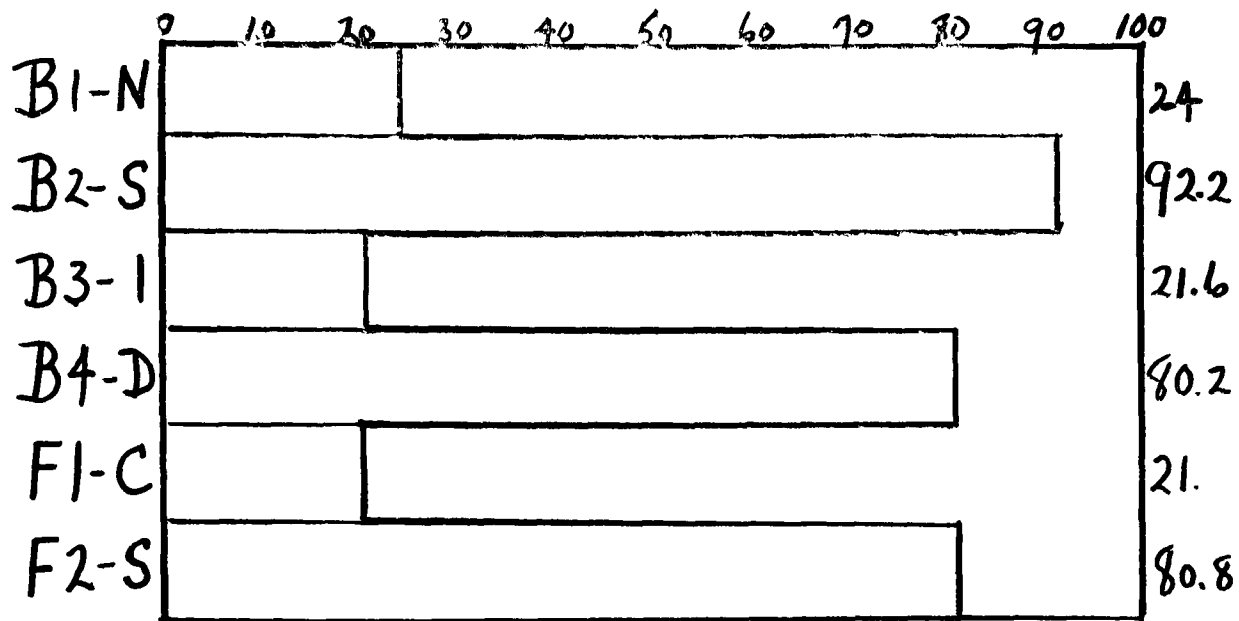


Fig. 11 Showing the percentiles attained on the six scales comprising the Personality Inventory of R. G. Bernreuter.

Interpretation

- B1-N.** Neurotic Tendency. High scores indicate unstable emotions while low scores show well balanced emotions.
- B2-S** Self-sufficiency. Persons who score high prefer to be alone and rarely seek sympathy or encouragement.
- B3-I** Introversion-Extroversion. Low scores indicate freedom from worry, few emotional upsets and little day dreaming.
- B4-D** Dominance-Submission. Those who score high tend to dominate others in face-to-face situations.
- F1-C** Confidence. Low scores indicate wholesome self-confidence; high scores feelings of inferiority.
- F2-S** Sociability. High scores indicate the non-social, solitary or independent. Persons who score low tend to be sociable and gregarious.

Personality Inventory (b)

Normal Ratings Author's Ratings	Rating on Laird's Scale of Introversion-Extroversion			13
	Rating on Marston's Personality Scale of Introversion-Extroversion			56
	Pressey's X-O Tests of the Emotions			
	Test I	Test II	Test III	
	40 - 97	15 - 65	36 - 90	
	30	27	43	

Fig. 12

Ratings made on Laird's Scale and Marston's Scale of Introversion-Extroversion; also scores attained on Pressey's X-O Tests of the emotions.

Interpretation

The rating on Laird's Scale indicates Ambiversion while Marston's score shows a slight tendency to Introversion.

Normal tendencies are indicated in the Pressey X-O Tests except in Test I where a tendency to fear is evident.

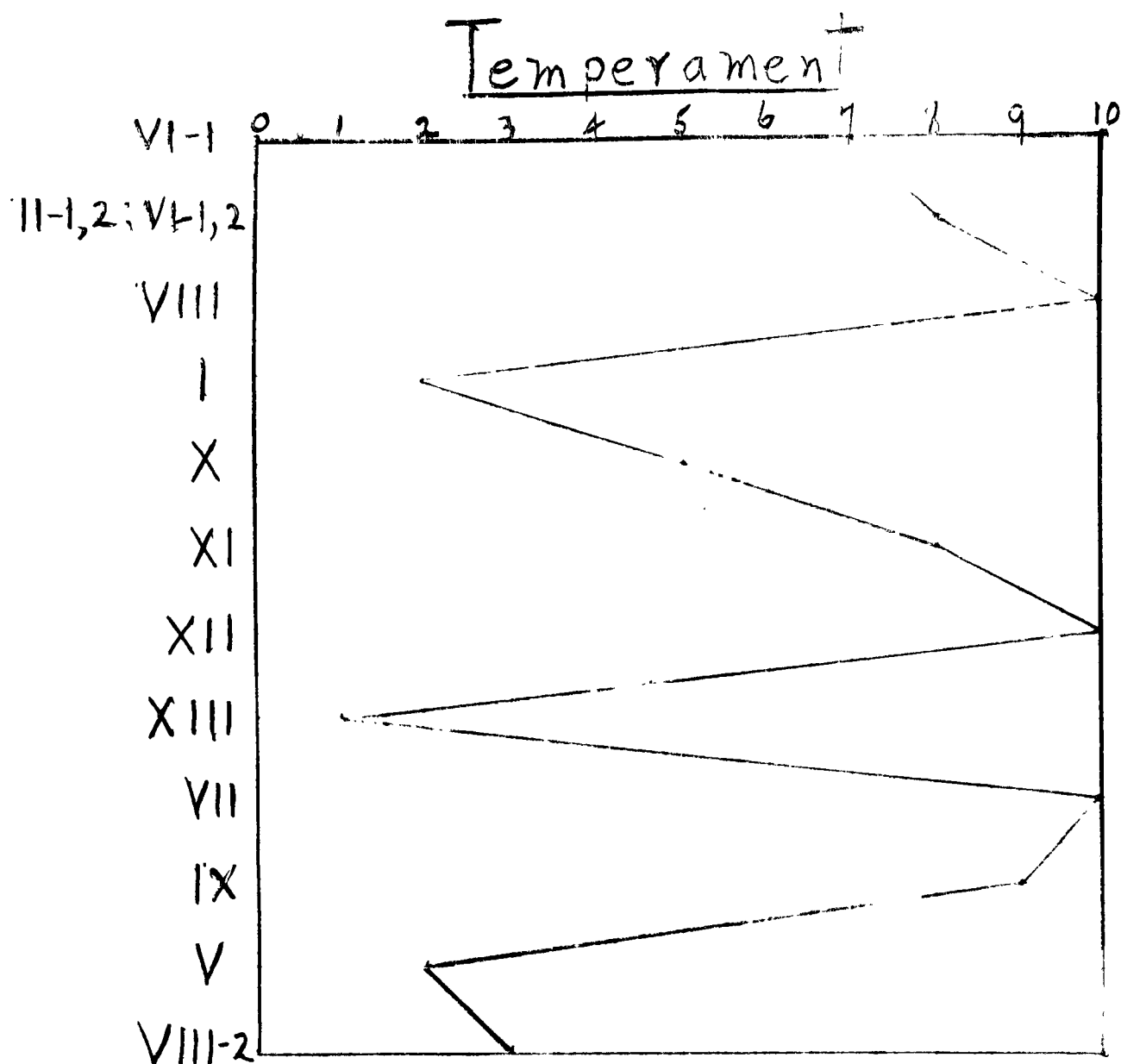


Fig. 13.

Profile showing scores attained on the Downey Individual Will-Temperament Test.

Key

Speed of Movement VI-1

Freedom from Load II-1,2; VI-1,2

Flexibility VIII

Speed of Decision I.

Motor Impulsion X

Reaction to Contradiction XI

Resistance to Opposition XII

Finality of Judgment XIII

Motor Inhibition VII

Interest in Detail IX

Coordination of Impulses V

Volitional Perseveration VIII-2

For Interpretation cf. pages 219 and 220.

Visual Acuity

25

	Without glasses	With glasses
Snellen Chart Test	Both Eyes $\frac{20}{70}$	Both Eyes $\frac{20}{30}$
	Right Eye $\frac{20}{200}$	Right Eye $\frac{20}{50}$
	Left Eye $\frac{20}{100}$	Left Eye $\frac{20}{40}$
Pearce Astigmatism Test	Without glasses	
	Both eyes — No's 1, 7.	} Counting from left
	Right eye — No's 2, 4, 5, 6, 7	
	Left eye — No's 1, 6, 7	
Pearce Near Vision Test	Without glasses	
	Both eyes — $\frac{18}{24}$	$\frac{3}{4}$
	Right eye — $\frac{18}{60}$	$\frac{3}{10}$
	Left eye — $\frac{18}{36}$	$\frac{1}{2}$
Pearce Distance Vision Test	Without glasses	
	Both eyes - At 50 feet distance - Nil.	
Pearce New Vision Eye Test	Both eyes - Group 3 - $\frac{2}{7}$ approximately	
Pearce Rod and Flame Test	Vertical Test	Horizontal Test
	Eyes well balanced and Co-ordinating properly	Slightly converging vision

Fig. 14

Interpretation. Ordinary vision is about $\frac{2}{7}$ normal, the left eye being stronger than the right eye. There is considerable astigmatism with the right eye. Eyes co-ordinate well b. t. a definite case of myopia. Near Vision is comparatively superior to far sight but not sufficiently acute for many occupations requiring Keen vision. A better pair of glasses would raise at least a little the $\frac{20}{30}$ rating on the Snellen Test.

Vocational Interest

216

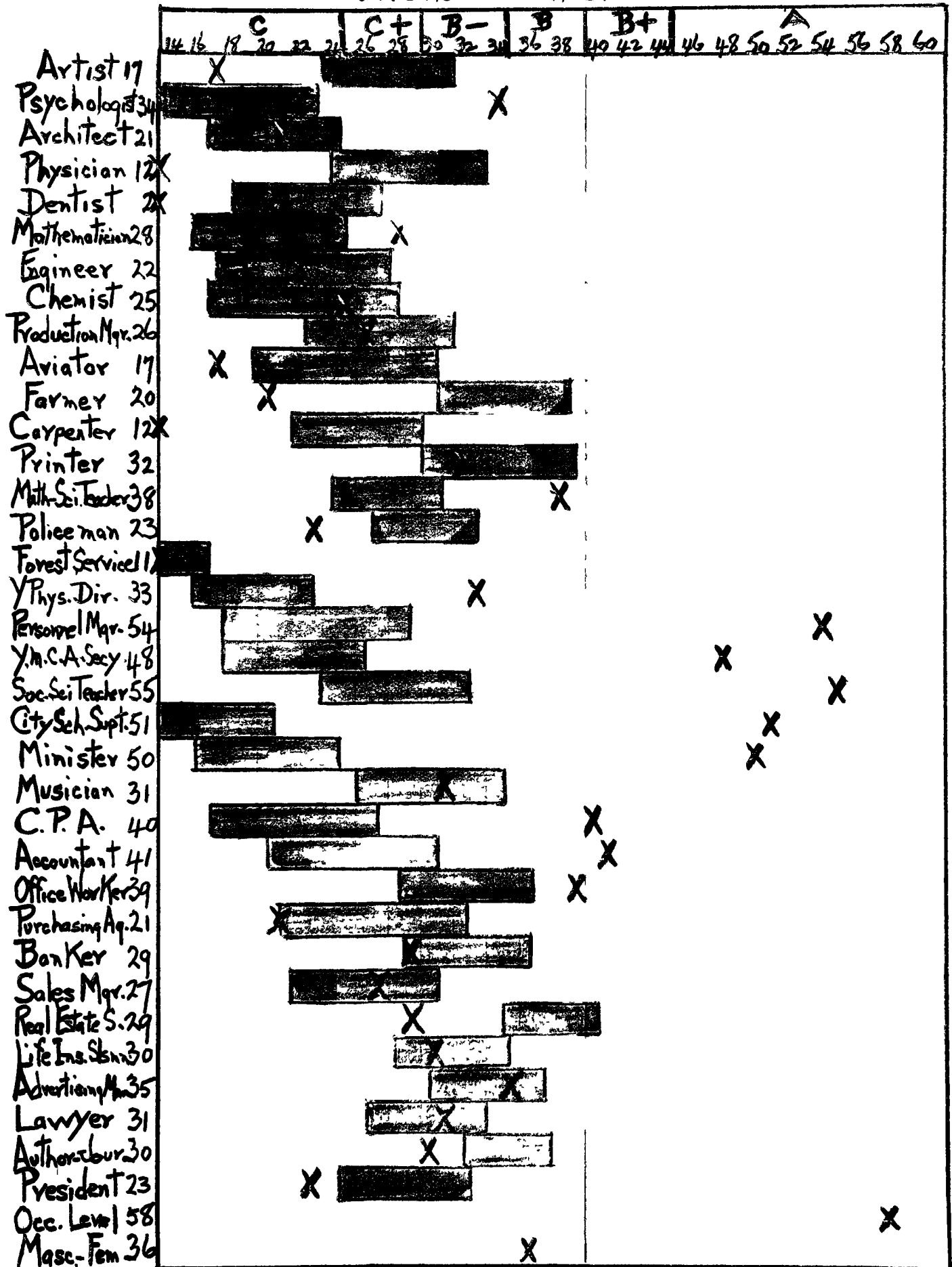


Fig. 15 Numbers = Standard Scores. Scored on Hollerith Machine.
For interpretation refer to pages 218 to 221.

Interest Profile

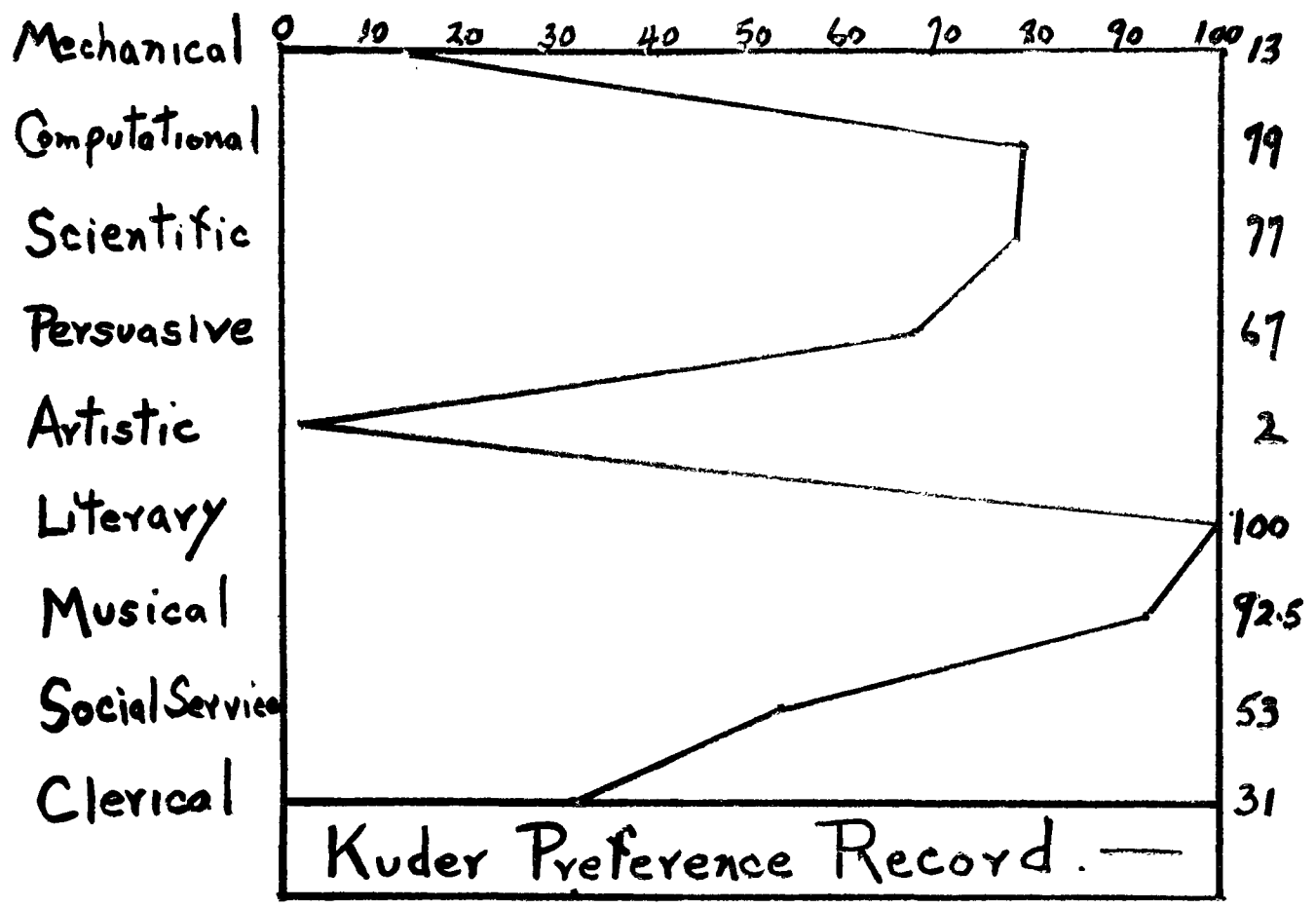


Fig. 16 Showing percentiles attained on the Kuder Preference in nine fields of interest.

Since it is generally conceded that one of the most vital determinants in occupational endeavour is the factor of interest, the first diagram for interpretation will be that of Vocational Interest (Fig.15). Professor E.K.Strong of Stanford University has found that men engaged in a particular type of work have a characteristic group of likes and dislikes which differentiate them from men in other pursuits. Taking other matters into consideration, such as talents, abilities, personalities, convictions, etc., a man will feel at home in the occupational environment where his confreres have similar likes and dislikes.

The Vocational Interest Blank illustrated in Figure 15 was scored on a Hollerith machine for thirty-seven occupations. Since "the higher a score to the right of the shaded area the greater the certainty that one has the interests of that occupation," it will be seen that the author has set likes and dislikes similar to those engaged in the work of social science teacher, personnel manager, city school superintendent, secretary, organization and social work (Minister), accountant, and Certified Public Accountant (or Chartered Accountant.)

Of lesser importance but still significant are the occupations of psychologist, mathematics-science teacher, office worker, and physical director. Scores falling within the shaded rectangular area are indeterminate and while helping to indicate the trend of one's interests, can be ignored. Scores to the extreme left (c) show little or no interest. Thus, the author has no interest in the profession of dentistry (2) although he would be keenly interested in diagnosing a person for this profession (Cf. Personnel Manager, 54). The author has neither the interest nor the talent for art (Cf. Figures 2 and 15).

For the profession of aviator both the interest and visual acuity (Cf. Fig.14) are far below even minimum standards required. While the author has talent for music (Cf. Figures 3, 4, and 5) and keenly interested in certain phases of the subject, he would not care to be a full time instrumentalist (Cf. Musician 31) in an orchestra or band.

A digression is made at this point to include an interpretation of the Key in Figure 13. The twelve measurements comprising temperament have the following significance:

"Speed of Movement:" Speed of movement relative to the person and age; whether a person moves quickly or slowly.

"Freedom^{from} Load:" Tendency to work at one's highest speed without external pressure; little tendency to relax speed; quickness in warming up to a task.

"Flexibility:" Ease and success in readjustment; capacity to modify one's routine reactions. A very high score probably indicates some finesse in the handling of personal relations or dramatic ability.

"Speed of Decision:" Quickness in reaching a decision or conclusion. A slow reaction may be due to caution or conservatism.

"Motor Impulsion:" Impetuosity and energy of reaction.

"Reaction to Contradiction:" The degree of confidence with which one maintains his opinion against contradiction.

"Resistance to Opposition:" The vigor with which one reacts to a blocking of one's purpose.

"Finality of Judgment:" Tendency to think a matter through and abide by one's decision.

"Motor Inhibition:" Capacity to keep in mind a set purpose and achieve it slowly. It involves power of motor control,

imperturbability and patience.

"Interest in Detail:" Attention to details.

"Coordination of Impulses:" Capacity to handle a complex situation successfully as in learning to drive an automobile when the clutch throttle, gear shift and brake must all receive attention.

"Volitional Perseveration:" Absorption in a task; willingness to keep "plugging away" at it because the examinee sets up a goal for himself."

To return to interest. A further diagnosis of preferences is illustrated on the Interest Profile-Figure 16. This diagram agrees well with Strong's Blank. Where apparent contradictions occur it is generally different types of interest that are rated. For example, the Strong Test indicated a B minus for "author-journalist" while Kuder shows "literary" one hundred percent. The pursuit of writing to the author is extremely absorbing yet certain types of journalism would be uninteresting (Cf. Figures 15 and 16.)

In order to illustrate more fully the application of the tests two widely divergent occupations will serve as examples. From the data at hand what are the possibilities of success as a dentist?

General Intelligence	-	Ample
Visual Imagery		
Disarranged Pictures	-	Far below average
Sizes	-	" " "
Visual Acuity	-	" " "
Interest	-	Almost nil.
Temperament (Cf.Fig.13)	-	Not suitable
Personality (Cf.Fig.12)	-	" "

It is evident that the following of dentistry as a car-

eer would in the majority of circumstances end in failure.

What are the chances of success as a personnel manager?

General Intelligence	-	Ample.
Academic (Cf. Fig.10)	-	"
Personality (Cf. Fig.11)	-	Adequate
Emotional Maturity (Cf. Fig.8)	-	"
Interest (Cf. Fig.15)	-	Very Keen
Occupational Level (Cf. Fig.15)	-	Very High

In the above occupation there would be every hope of accomplishment because most of the success ingredients are considerably above average.

As a final thought the author is listing by groups in order a few occupations in which from the view of talents, ability, temperament, personality and interest, there is greatest likelihood of success. The selection is based largely upon the results of the tests taken.

Group I. - Author, Personnel Manager, Teacher of Education and Psychology, City School Superintendent, Director of Educational Research, Director of Liturgical Music, Social Science Teacher, Secretary and Organizer.

Group II.- Statistician, Principal of School, Conductor of Symphony Orchestra, Teacher of Academic Subjects and Composer of Music.

Group III. Chartered Accountant, Certified Public Accountant, Office Manager, and Physical Director.

These are among the strongest inclinations culled from

a wide range of occupational possibilities. A Searching diagnosis of the Figures will reveal both professional potentialities and unsuitable adaptations.

A P H I L O S O P H Y O F G U I D A N C E

CHAPTER IX

A SAFE AND SOUND PHILOSOPHY OF GUIDANCE

The eschatological elements of life should be the basic principles upon which a safe and sound system of guidance is built. With the assurance of these fundamentals permeating the educational philosophy, an effective plan of guidance will then seek the discovery of all talents and aptitudes with which the Creator has endowed the human personality. From this point, the complete development of the individual in every possible manner - morally, mentally, physically, culturally, vocationally and avocationally - to enable self-realization and the maximum service to all fellow-men, should claim the attention of the teacher or counsellor imbued with the desire to guide. The harmonization of all the traits and qualities comprising the entire personality - with the spiritual factors predominating - will ensure a character well adjusted in this life and consonant with the eternal destiny.

As His Holiness Pope Pius XI in the Encyclical Letter on the Christian Education of Youth, so appropriately and succinctly states-

"The true Christian does not renounce the activities of this life, he does not stunt his natural faculties; but he develops and perfects them, by coordinating them with the supernatural. He thus ennobles what is merely natural in life and secures for it new strength in the material and temporal order, no less than in the spiritual and eternal."

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