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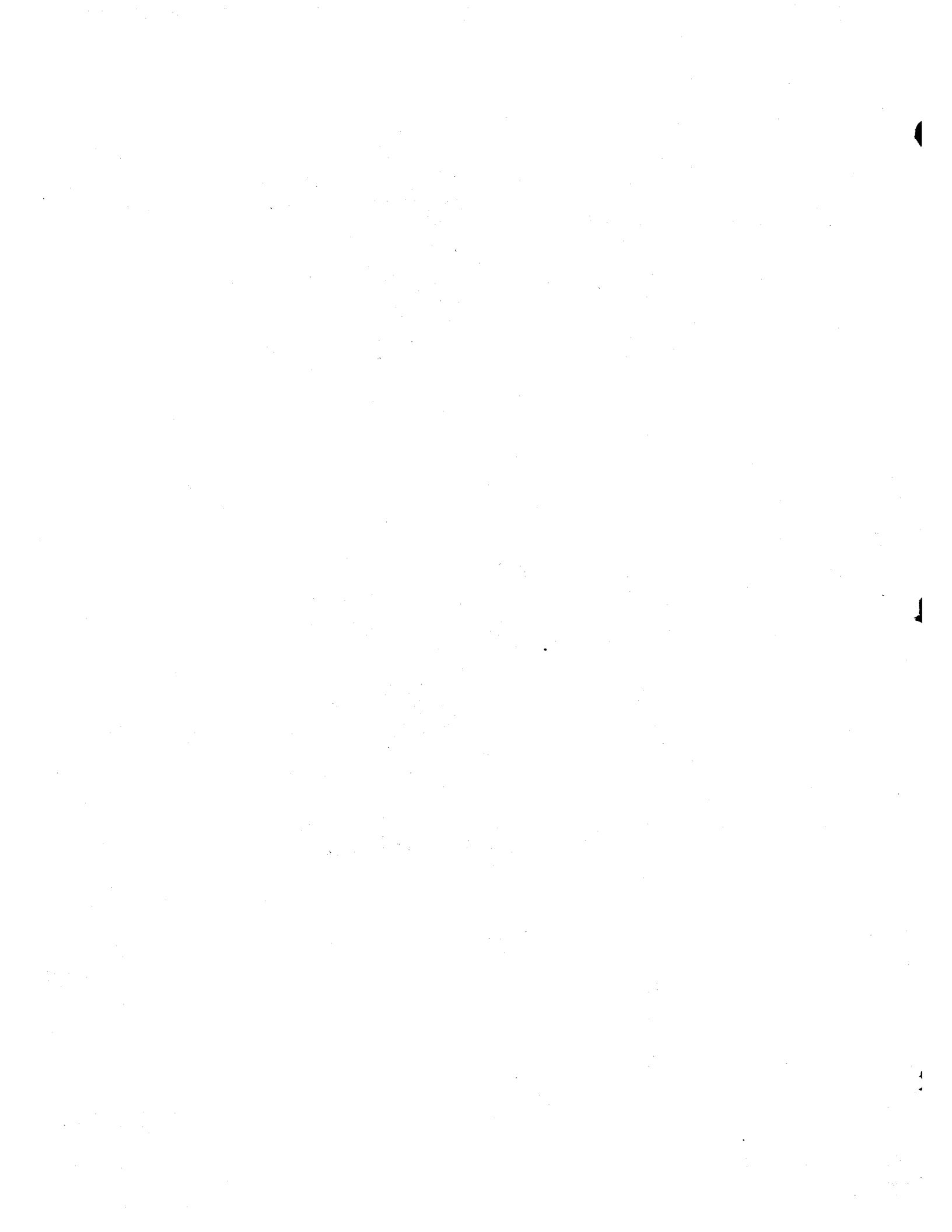
VOCATIONAL GUIDANCE
in
ELEMENTARY AND SECONDARY SCHOOLS
with
SPECIAL REFERENCE TO CANADA

Thesis Submitted to McMaster University

by

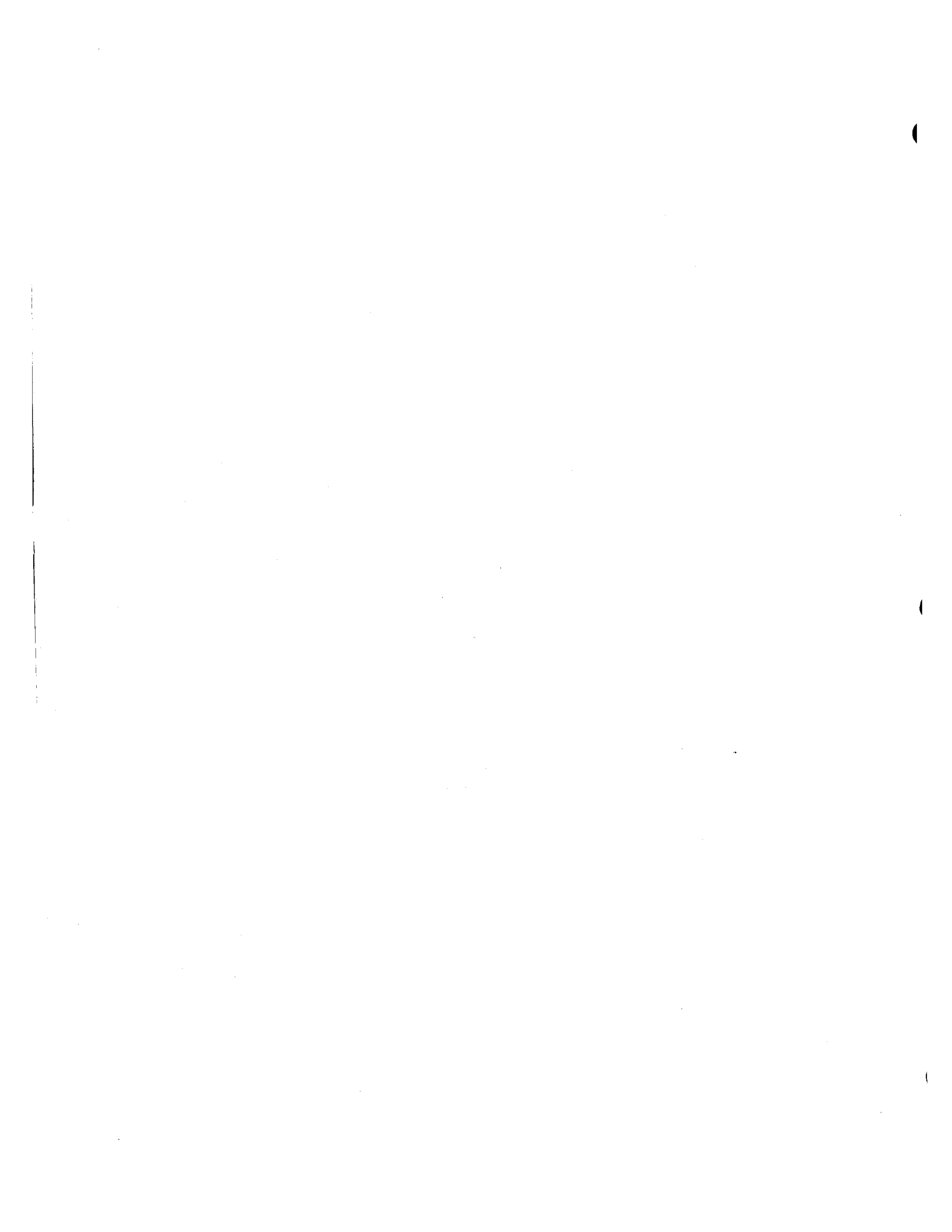
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Chapter 1.

HISTORICAL BACKGROUND TO VOCATIONAL GUIDANCE.

The guidance idea is as old as man. Isaac felt that the strong, athletic, though uncouth, Esau would be the most suitable person to succeed to the tribal authority; his wife, Rebekah saw in the cunning and sagacity of Jacob the proper qualities for that leadership. Among the primitive North American Indians, certain members of the male population were chosen to be warriors, and certain others who did not possess the qualities that make a great leader or fighter, were destined to stay among the women and cultivate the domestic arts. Ancient Sparta gave what would correspond to a medical examination to newly-born children, with the idea that those who were fit for the vigorous life of the warrior would be allowed to live, and those who were not so fitted would be consigned to the mercy of the elements on the mountain side. Plato, in his 'Republic', suggested that society should be divided into four classes, the artisan, the trader, the soldier, and the ruler, and that each individual should choose that occupation for which 'he was naturally fitted,' (1) and should be educated accordingly.

In the Middle Ages, few persons of import would embark upon a career or mission without first consulting the stars, through the medium of the alchemists and astrologers. Scott tells us in 'Kenilworth' that the Earl of Leicester, chief adviser to good Queen Bess, had secretly hidden in his castle

1. Plato: Republic, Book II., The Individual, the State, and Education.

a diviner who read the edict of the gods in the smokey incense that wafted heavenward from the crucible of the chemist, and passed on to Leicester his prophecy before the cautious but superstitious nobleman would cause the affairs of state to move in new channels.

At the beginning of the nineteenth century, guidance took on a new and somewhat more scientific turn when the pseudo-science of Phrenology was founded by a certain Dr. Gall of Vienna. He professed to see in the shape of the head and face dependable indications of the particular trend of the mind within. It is based on the now obsolete faculty psychology which consigned to certain sections of the brain definite functions.....abstract thought, memory, motor reaction, sight, speech, etc., a theory that has now given way to the thesis that, even though there may be certain sections of the brain whose nerve cells may have definite functions, yet when the mind acts it acts as a unit, a large part of the brain being involved in any one kind of thought process. But the phrenologist presumed, and still presumes, to study the cranial bumps and recesses of man, and to deduce his character and aptitudes. Closely allied to this is the practice of reading character from handwriting, based on the assumption that a man's character and occupational trend will evidence itself in the formation of the letters which he makes. More remote, but still along the same line, is the analysis of character and the telling of "fortunes" from the lines of the hand. Others have studied criminals and have professed to find in the shape of the head, face, hands, and other physical

expressions, definite indications of the criminal type. Modern science has found, however, little to support any of these theories, and they have been relegated, except in the minds of those who are still sufficiently gullible and superstitious to part with their ducats in return for a few somewhat doubtful and platitudinous remarks concerning those phases of their character that are outstanding, to the limbo of lost causes. Only in one particular does modern science admit a grain of truth, namely that very frequently the person of low mentality has certain physical defects, such as split palate, a deformed nose, adenoids, abnormalities of the eye, irregularities of the teeth, etc. (1) But the shoe does not fit the other foot, as the presence of any of these physical defects, either singly or in groups, cannot be taken as an indication of mental defectiveness.

Down through the years, also, much has been written respecting vocational guidance, which is really a phase of the larger subject of general guidance. Plato, in his remarks on education in 'The Republic of Plato', was very careful to indicate the kinds of studies that should be undertaken to fashion the right kind of artisan, trader, soldier, and ruler. Particularly did he favour the expurgation of the poets in order that the gods would not be presented to the youth of his day in an unfavorable light, and in this respect he was a forerunner of that phase of our guidance programme known as 'Moral Guidance'.

Edgeworth in his book, 'Essays on Professional Education', dwells in detail upon the kind of education that should be

1. Payne: "Organization of Vocational Guidance", p. 376.

accorded to the person intended for the ministry, for the army or navy, for medicine, for law, for politics, for the court, and for the life of a country gentleman. These essays are illuminating not because of what they say, although they contain much practical wisdom, but because of what they omit to say. Their assumption is that all the sons of the people who were in a position to seek education at that time, (about the beginning of the nineteenth century) should be placed in one of the professions named, making no allowances for the differences of ability, or aptitude among the persons concerned, an assumption that has not been entirely lost with the passing of the years.

With the beginning of the twentieth century, however, guidance took on a new phase. This really was the result of two trends of thought and life. First, the new psychology, instead of endeavoring to analyze the mind and its functioning from within, as was the case with the old subjective psychological studies, began observing the activities of individuals objectively with a view to arriving at definite scientific principles of human conduct in response to given situations. This gave rise to the theory that mind, which heretofore had been mainly the subject of conjecture based on the responses of the investigator or writer himself, could be measured scientifically by objective measurements or tests. Although many men contributed to this end, the honour of really concocting workable tests apparently goes to Binet, a French physician, who worked on the assumption that if one could get enough tests, no matter how small, and standardize them by trying them out on large number of people of various ages,

one could finally arrive at a series of tests that would measure normal general intelligence at the various stages of mental development up to the adult. These tests have been revised and standardized in America by Dr. Terman of Leland Stanford, and have become known as the Stanford Revision of the Binet tests. Since that time well-standardized tests of attention, perception, description, memory, invention, and of achievement in the various school subjects have been worked^{out}/by armies of investigators all over the world. This movement was given a great impetus during the war. When the United States entered the conflict, it organized its forces with the same care, and greater, than it had used in promoting the industries of peace. It was realized that under a system of conscription, men with widely varying abilities would be brought together in the army. The problem was to allocate these men to the positions where there would be the least waste of ability. Hence in every camp was stationed an officer capable of directing the testing of all the men in that particular camp, by means of the famous Army Alpha and Army Beta tests. The men were graded according to the following scale: A, very superior intelligence; B, superior; C plus, high average; C, average; C-, low average; D, inferior; D- and E, very inferior intelligence. Those in A, were capable of superior work in college or university, those in D- and E, scarcely capable of completing the third or fourth class in public school, the remainder being graded between these two extremes. On this basis a preliminary division could be made among officers, non-commissioned officers, and the rank and file of the army. In addition, in

order to get men who were capable of doing certain things, trade tests were evolved, a certain test for carpenters, another for plumbers, another for masons, etc., in all eighty-four, which were used in sorting out the men suited to different types of work in the army. This procedure not only gave the army an allocation of recruits with the least possible waste of talent, but it gave a tremendous impetus to the use of tests, and a huge quantity of information for those interested in studying the question of the scientific measurement of intelligence and aptitudes.

The other movement found its inception in the increasing complexity of industry, resulting in the young man or young woman finding himself confronted with a labyrinthic maze of industrial opportunity when he or she embarked upon the voyage of life upon leaving the school. Almost simultaneously in several countries, movements were launched to prevent the misfits and the waste resulting from young people moving into industry in an unguided fashion by providing information about the great world of business in handy form for use by teachers, parents, and children, and by training teachers to become guidance counsellors whose business it would be to help children make the most of their opportunities. This movement was initiated in America about 1908, by Dr. Frank Parsons, who organized the 'Vocation Bureau', in Boston, Massachusetts. This Bureau was asked in the following year to assist in the formation of a vocational guidance programme in the public schools of that city. Since that time the movement has grown rapidly, until now in the United States it has spread to all the larger cities.

So widespread has this movement become in the United States that in 1910 a national conference was held on the subject in Boston, and since that time periodical conferences have been called, except during the years of the war, conferences which now include representatives from some of the Canadian provinces. This conference sponsors the Vocational Guidance Magazine, a publication devoted to this subject entirely, and published at the present time under the supervision of the Vocation Bureau of Harvard University.

Harvard University in 1911 offered for the first time a course of summer school lectures in the subject, and since that time has developed a regular course in guidance instruction, their example having been followed at later dates by other Universities throughout the United States. Up to the present time no such movement has been introduced into Canadian Universities.

In Canada it has made less progress, but its status for this country will be reviewed in a later chapter.

During recent months there has been a very decided influence at work among those interested in the subject in America, to change the name of the movement from 'Vocational Guidance' to merely 'Guidance'. It was felt that the former term gave the impression that the work of the movement was merely to offer guidance to those entering the so-called vocations, and that the movement was concerned only with placement, and that in the lower levels of occupations only. The movement is interested, however, in guidance of a much wider meaning than that. It is felt that true Guidance includes the planning of courses, the analysis of individual ability,



the compilation of information regarding industrial and educational opportunity, moral and health instruction, counselling of students, and placement of students in the various vocations and professions of life, for the elementary, secondary and higher educational institutions of the country. It is very probable that in the near future the term 'vocational guidance' will give place to that of 'guidance' to designate the functions to be described hereunder. It may be added that 'the term vocational applies to all gainful occupations, as listed in the United States Census of Occupations, and home-making' (1)

1. Report of the Committee of the Vocational Guidance Association, on the Revision of the Principles of Vocational Guidance, Vocational Guidance Magazine, February, 1930, p. 227.



Chapter 11.

THE NEED FOR VOCATIONAL GUIDANCE

The following lines of thought are suggested as indicating the need for some definite guidance plan for young people entering one of the many employment avenues open to modern youth.

a. Changed Industrial and Social Conditions:

Up to the beginning of the industrial revolution, the choice of a vocation was a comparatively simple matter. Most of the industries were carried on in the home, and therefore their nature and possibilities could be reviewed by inspection, and were, no doubt, the subject of daily observation on the part of both parent and child. If a parent wished his son to become a shoemaker it was a comparatively easy matter to find out just what income he would earn, what his surroundings would be, what his companions would be like, and what work he would be required to do. On the other hand, the number of apprentices taken on by any master workman in one year was not large, and, as most of the applicants were from families long known to the workman himself, he would have little difficulty in choosing the ones who by upbringing and natural bent, would be most likely to make a success at that particular trade. The arrangement was based on a close personal relationship between master and apprentice, each with a splendid opportunity to know and measure the other with the least possible waste of time, and minimum possibility of both or either making an

error in choice.

In addition, there were certain well-defined but limited vocational choices open to the sons of the upper classes. The eldest, of course, fell heir to whatever title the family harcourted as part of its heirloom, and the other sons were destined for one of a very few professions: the army, the church, law, politics, medicine. (1)

The discovery of an increasing number of machines, prefacing the industrial revolution, changed the above to a great extent. Machines, to be of any advantage, must be power driven, and the economical use of power demands that these machines be congregated in one place. Hence, the factory system gradually evolved, taking industry from the home with several notable effects. First, it resulted in certain industries developing in certain places to great size and strength with the result that no longer did any one man become skilled in making the whole of one article. Even in Adam Smith's day, the making of such a small article as a pin had become divided into distinct operations each one being done by a separate workman, thus multiplying total production many times. This specialization of labour, with its breaking down of the process of manufacture into its constituent parts, makes it necessary that the workman being employed on any one operation be fitted to do that particular thing with the greatest skill, and with the

1. Edgeworth: "Essays on Professional Education".



least waste of other talents. In small industrial concerns the relationship of the manager and the owner to his workmen is almost on a par with the relationship of the master workman with the apprentice in the old home industry, but as the business develops, as specialization becomes more minute, the offices of owner and manager become divorced. No longer is the manager in direct contact with his workmen, but he governs through subordinates, -- superintendents and foremen, who usually choose their own men. The owner of the business, under modern corporation methods of financing may know nothing about its operation, and may be interested only in dividends. The manager is often so far removed from the actual working man that he takes little interest in the kind of man employed, or the conditions under which he works or lives. The superintendent or foreman is usually a hireling who is only interested in getting men who will keep production at a sufficiently increasing scale of efficiency to please the management. In other words the personal element is taken out of industry. Whether a worker is doing the kind of work for which he is particularly suited, whether his talents are being developed or smothered is not the concern of the management. They are, as a rule, interested in profits, not people. There lies the opportunity of vocational guidance, to suit the man to the work.

Development in other lines has paralleled the stupendous progress of industry. Transportation has taken on speedier and more efficient forms, resulting in great companies being formed for the operation of steamships, railroads, and air-lines, as well as motor lines. The industries rendering what are

called 'services' have made immense advances. Radio, electrical services, the telephone, the telegraph, wireless, all have become highly organized, requiring experts and specialized workmen to carry on their work. To meet the needs of the great corporations resulting from the ever growing and minute organization of business, banking institutions have grown beyond all dreams, requiring all kinds of clerical help from the messenger and ledger keeper to the financial and credit expert. Governments have followed suit, departing from the antiquated idea that the business of Government is to collect enough money to conduct the wars of the country, to the extent of rendering business leadership, based on scientific collection and interpretation of business facts, witness the recent survey of economic conditions in the United States, by a committee headed by President Hoover himself. (1). Medicine has left the regime of the family doctor far behind, and is now divided into innumerable smaller specialties. Education, not to be outdone, has gradually met the demands of industry by recognizing that there are other means of informing and training the mind than by the mastery of Greek and Latin grammatical mysteries. No longer is one man called upon to run the whole gamut of human knowledge in the class room, but he specializes in one particular subject or perhaps only one branch of that subject. Here there is room also, not only for the teacher, but for the administrator, the psychologist, the statistician, the personnel worker. There are teachers of abnormally brilliant children, teachers who

1. 'Informed Leadership' Report of President's Committee on Unemployment.

do their best work with those who are abnormally dull, teachers of so-called academic subjects, and teachers of manual subjects. The Church has not been able to resist the movement to specialization, and hence we have the preacher, the religious educationist, the social worker. Finally, to add still more confusion, woman, whose sphere was formerly considered to be in the home only, has knocked so persistently at all the above doors that scarcely any of the branches of human activity have been able to refuse her admittance. With differing outlook, differing psychological reactions, with more highly sensitive but more delicate and more easily injured nervous systems, with differing capacities, differing sympathies, her advent into an important place in the organization of all the functions attendant upon our industrial life has created new problems for the person who would have every cog in the industrial wheel contribute the utmost of its capacity to the common weal.

b. Differences in People

That people differ in many ways is a commonplace that needs little elaboration. They differ in height, weight, strength, manual aptness, fleetness, and in other physical traits. Cameron gives (Psychology and the School) the following table to illustrate the difference in height of 1171 sixteen-year-old girls:

Height in Centimeters.	Number of Cases.	Per cent. of cases.
136-139	2	0.2
140-143	12	1.0
144-147	54	4.6
148-151	159	13.6
152-155	280	23.0
156-159	310	26.5
160-163	218	18.6
164-167	102	8.7
168-171	31	2.6
172-175	2	.2
176-179	1	.1

People differ also in their mental capacity. We have always recognized the difference between the person of very doubtful mentality, the idiot and the low moron, and the person of average or better than average intelligence, but it is only of late years that we have come to any adequate realization of the difference in degree of mental acumen.

Terman (1) gives the distribution of intelligence quotients for 905 unselected children between the ages of five and fourteen. .33 per cent. were between 56 and 65; 2.3 per cent. between 66 and 75; 8.6 per cent. 76 and 85; 20.1 per cent between 86 and 95; 33.9 per cent. between 96 and 105; 23.1 per cent. between 106 and 115; 9 per cent. between 116 and 125; 2.3 per cent. between 126 and 135; .55 per cent. between 136 and 145. The middle 50 per cent. of these children had I.Q.'s, ranging from 93 to 108; about 77 per cent. ranged from 86 to 115; about 11 per cent. were under 85, and about 12 per cent. were above 115. This study shows a range from a very low intelligence to a very high. In fact, so great is the range that Terman is led to classify

1. Measurement of Intelligence, p.66.

those who test above 140 as possessing genius or near-genius; those who test between 70 and 80 as feeble-minded, or nearly so; and those below 70 as being definitely feeble minded; the remainder possessing degrees of intelligence varying between these two extremes. There was very little difference between the intelligence of the boys and that of the girls. The study also reveals that nature has preserved a balance by creating about an equal number of sub-normal and supernormal people.

Starch (1) gave a series of tests to fifty University students to test, among other things, memory span, ability to memorize, to add, and to subtract, and found that the memory span of the best was twice as long as that of the poorest; that the best memorized four times as quickly as the poorest; that in addition the best was almost four times as efficient as the poorest and that the best was more than five times as efficient as the worst in subtraction. In testing the ability of University students to remember words, and in giving associations in response to a stimulus word, the same author found a similar variation. In a class of 36 eighth-grade pupils, tested for speed and comprehension in reading; for speed and quality of writing; for reasoning ability, adding, subtracting, multiplying and dividing ability in arithmetic; for ability in spelling, composition, grammar and history, he found, on the average in all these subjects, that the average variation showed a ratio of

1:7.6. A study made by W.J. Stevens and reported by Starch (2)

1. Educational Psychology, p.29.

2. Educational Psychology, p.45.

shows that the number of weeks required to complete each of the eight elementary schools grades for 1439 pupils studied, varied from 17 to 70, where the course was arranged to be covered in 40 weeks. Starch found also that there is a great deal of overlapping in ability in the various grades. He found, for instance, that some pupils in Grade 2 could read as well as some in Grade 8; that many Grade 4 pupils could write as well as Grade 8 pupils; that the same fact was true for spelling, for solving arithmetic problems, for adding and for using correct English. He averaged attainment in different subjects and found that the pupils in Grade 4 very definitely overlapped the pupils in Grade 8 with respect to their ability in school subjects in general. (1)

The investigations of Starch and others, is amply borne out by the results of the examinations in any school where are found in the one class pupils varying greatly in age and ability. At the Mid-year Examinations in the Oshawa Collegiate and Vocational Institute, Commercial Section, the highest average in all subjects attained by any student in the First Form was 83 per cent. and the lowest 37 per cent; for the Second Form, 74 per cent. and 33 per cent.; for the Third Form, 84 per cent. and 42 per cent.

Besides difference in physical traits and mental power, people also differ in other but equally important ways. Some are highly temperamental, quickly affected by their environment. To place such in a shop or office where the lighting conditions were poor would be disastrous to the individual. Some are nervous types, who would be unable

to work under conditions where noise was at all prevalent. Some are manually minded. They have aptitude for working with their hands. Others have the patience necessary to making skilled machinists whose work grows but slowly before them. Others have tact and insight that would be necessary to the social worker. Others have innate the gift of language. Some have imagination; others are matter of fact. Some are morose; others cheerful and optimistic. Some have literary gifts; others the gift of mathematical reasoning. Some can think only in the abstract; others only in the concrete. Some have artistic bent; others see not with the eye of the soul. Some are musical; others could not sing the National Anthem if their whole career depended on it.

Summing it all up, in the words of Ruediger, (1) 'we must not lose sight of the fact that this endowment is neither uniform nor unlimited'. This really presents the challenge to Vocational Guidance, to utilize every capacity and aptitude to the utmost in the vocational and avocational life of man.

1. Principles of Education.

c. Shrinkage in School Population from One Grade to Another

An examination of the school population for the Province of Ontario in any one year will yield some surprising information regarding our educational system. (1) Taking the enrolment in the Junior Third Class as the base, that is equivalent to 100 per cent., and combining the Public and Separate School enrolment, it was found for the year 1928, that the shrinkage from the Junior to the Senior Third was 9 per cent.; from the Junior Third to the Junior Fourth, 17 per cent.; from the Junior Third to the Senior Fourth 23.4 per cent.; from the Junior Third to the First form in High School, Continuation School or Vocational School, 44 per cent.; from the Junior Third to Second Form in High School, 71 per cent.; from the Junior Third to Third Form in High School, 82 per cent.; from the Junior Third to the Fourth Form in High School, 88 per cent.; from the Junior Third to the Fifth Form in High School, 94 per cent.

This means that out of 100 pupils in the Third Class in Public School, 9 drop out before reaching the Senior Third, 17 before reaching the Junior Fourth, 24 before reaching the Senior Fourth, 44 before reaching the First Form of a Secondary School, 71 before reaching Second Form; 82 before reaching Third Form; 88 before reaching Fourth Form, and 94 before reaching Fifth Form, leaving only 6 out of every 100 pupils who begin the Junior Third Classes in public school to graduate from High School.

(These figures are not quite exact since they represent percentages based on a school population in the Third Class that is relatively higher than the school population in the

higher classes, because of the natural increase in the population generally. The figures for the Fifth Form are not reliable since many of the pupils would be represented in the First Year of the various Universities).

The following table gives a summary for the year 1928, the last figures available.

Table I.

	<u>Enrolment</u> <u>each grade.</u>	<u>Decrease from</u> <u>Third Grade.</u>	<u>Percentage Decrease</u> <u>from Third Grade.</u>
Jr. 3rd	75,265		
Sr. 3rd	32,612	6,747	8.9
Jr. 4th	62,665	12,700	16.9
Sr. 4th	57,847	17,518	23.4
1st H.S.	42,128	33,177	<u>44.</u>
2nd	22,276	53,089	70.4
3rd	13,900	51,465	81.6
4th	9,317	66,048	87.6
5th	4,808	70,557	93.7

The shrinkage from the First Form in High Schools, Collegiate Institutes, Continuation Schools, and Vocational Schools in the province of Ontario for the year 1928, to the higher forms is illustrated in the following table:

Table II.

	<u>Enrolment</u> <u>Each Form.</u>	<u>Decrease from</u> <u>First Form.</u>	<u>Percentage Decrease</u> <u>from First Form.</u>
First.	42,128		
Second	22,276	19,912	47.1
Third.	13,900	28,228	67.0
Fourth	9,317	32,811	77.9
Fifth	4,808	37,320	88.6

The shrinkage from the First form in High Schools, Continuation School, and Collegiate Institutes, not including the Vocational Schools, in the Province of Ontario for 1928, to the higher forms is given in the following table.

Table III.

	Enrolment Each Form.	Decrease from First Form.	Percentage Decrease from First Form.
First	31,314		
Second	17,241	14,373	45.5
Third	11,366	20,248	64.
Fourth	8,210	23,404	74.
Fifth	4,808	26,806	84.8

The shrinkage from the First Form in Vocational Schools to the higher forms for the Province of Ontario, for 1938, is given in the following table.

Table IV.

	Enrolment Each Form	Decrease from First Form.	Percentage Decrease from First Form.
First	10,574		
Second	5,035	5,539	52.4
Third	2,534	8,040	76.1
Fourth	1,107	9,467	89.5

The shrinkage from the Junior Third grade to the Senior Fourth grade in Separate Schools for the Province of Ontario for 1938 is given below.

Table V.

	Enrolment Each Grade	Decrease from Jr. Third.	Percentage Decrease from Jr. Third.
Jr. Third	11,813		
Sr. Third	10,519	1,295	11.
Jr. Fourth	8,553	3,260	27.6
Sr. Fourth	7,702	4,111	34.8

The shrinkage from the Junior Third grade to the Senior Fourth grade in Public Schools for the Province of Ontario for 1938 is given below.

Table VI.

	Enrolment Each Grade	Decrease from Jr. Third	Percentage Decrease from Jr. Third.
Jr. Third	63,552		
Sr. Third	58,100	5,452	8.6
Jr. Fourth	54,112	9,440	14.9
Sr. Fourth	50,145	13,407	21.1

In addition, to the above facts, it is noted that the number of pupils in the Senior Fourth class exceeded the number of pupils in the First Year High School (including Vocational Schools) by 15, 659, a shrinkage from the Public School to the High School of 27.1 per cent., which, even allowing for the small number who failed to pass the entrance examination, and allowing also for a small number who attend private schools, is very large.

In order to throw some light on the reasons for the large intergrade shrinkages in Ontario schools, the following table was prepared to show the number of pupils retarded in 1928.

Table VII
R e t a r d a t i o n.

Grade.	Total Ave. Enrol-Age. Ment.	1 yr.	2 yrs.	3 yrs.	4 yrs.	5 yrs. or more.	Total	& Per cent.
Jr.3.	75365. 10.8	10494	5788	2883	1232	500	20897.	27
Sr.3.	68618 11.8	10493	5348	2472	873	168	19354	28
Jr.4.	62665 12.6	9268	4238	1481	189	36	15212	24
Sr.4.	57847 13.3	7958	2997	536	82	12	11573	20.
Fp.1	34833 13.9	7673	3487	1064	309	118	12651	36
2	22276 14.9	4306	1739	547	153	118	6863	31
3	13810 15.7	2340	949	299	121	61	3730	27
4	9307 16.7	1528	640	246	209	--	2623	28

This indicates that a considerable percentage of our pupils either find the present curriculum too hard for their ability, or are not interested enough in the content thereof to make an effort to master it. The result is seen in the series of tables given above, where the increasingly large numbers leaving school before finishing even the elementary school course bear testimony to the unsuitability of our present courses, for a section of our school population. Bloomfield (1) quotes a study of 622 children thruout the United States to

1. Youth School and Vocation, ch. 11.

find out their reasons for leaving school as follows:

- a. Two-thirds could have remained, as there was no economic pressure at home.
- b. Left of necessity, 30 per cent.
- c. Child's help desired but not necessary in the family, 27 per cent.
- d. Dissatisfied with school, 26 per cent.
- e. Preferred work, 8 per cent.
- f. Other causes, health, etc., 5.7 per cent.

In all but 36 per cent. of the 628 children, lack of interest was the real reason for their leaving school.

Bloomfield, in the same chapter, quotes a study of the stockyard district in Chicago, in which it was found that practically all the pupils drop out before going to High School, generally in the seventh grade, because they feel that there is no advantage to be gained by remaining longer, since no training in trades and other vocations is given. While this view may be short-sighted it does nevertheless show a lack of interest in the ordinary elementary school curriculum.

The large percentage of pupils who leave our elementary and secondary school classes before completing their courses also indicates the need for some sort of guidance in the making of their plans for the future, and in their choice of schools. The shrinkage in our vocational schools is not so serious, since in that case, they have had already at least a little occupational preparation, but even that indicates a lack of foresight on the part of the pupil, and, on the part of the school, a course improperly correlated to the abilities of the pupil. The average shrinkage from the First to the Second Forms in the Vocational Schools of the Province for the year 1928, as shown in table IV, was 52.4 per cent. This corresponds quite closely to local situations. During the school year

1928-1929, the shrinkage in the First Form of the Commercial Department of the Oshawa Collegiate Institute was about 58 per cent. About half of the number represented in the shrinkage dropped out during examinations. Practically all of those who dropped out during the term, as well as those who failed to pass the examinations, found the course too difficult for them. This indicates the need for the readjustment of the courses, and the need for guidance for the pupils themselves in taking the proper course.

More serious still is the shrinkage in the First Form of the Collegiate or Academic Course. On the average for 1928, according to Table III. about 45 out of every hundred dropped out during the first year. Where they went, or what they did is not known, but this one thing is certain, namely, that they had no vocational training of any sort that would fit them to do any particular work in our industrial system.

Whether they were taking courses that were too difficult for their ability, or were not sufficiently aware of the importance of their opportunity to use their time to the best advantage, or whether they should have taken a different course altogether, is something about which we can, as yet, only conjecture.

But it is in the public schools that we find the most serious situation. According to Table I, 23 out of every hundred pupils in the public schools stop school and go to work before finishing even the elementary grades. Here is the place where the great deflection from formal education begins, and here it is that vocational guidance should begin to do its work. Diversification of courses, requirements of occupations, infor-

mation about blind alley industries, individual measurements, studies of individual and economic background, and guidance leading the student to see the value of training, all have their place here. This is possibly the outstanding need of our system whose condition is revealed in the above statistics.

d. Waste involved in haphazard choice of occupation.

That our present system of allowing our youth to wander into their life work is costly both to individuals and society is so self-evident and commonplace an axiom as scarcely to need statistical support. 'Many a good farmer has been spoiled to make a poor preacher'. Forcing a child with a mechanical bent into a professional occupation, or allowing a child to leave school unnecessarily without adequate training to enter some ill-paid opening with no future, the utter futility of which the child is not experienced enough to see, constitute occurrences commonly brought under everyday observation. At the early age at which school children leave school they lack the background of experience that would give them the foresight to choose an occupation that would suit their capacities, and one that would, at the same time, provide a reasonably promising future. The manager of one of the larger printing houses in the city of Oshawa, tells of boys who leave his establishment where they are successfully learning the printing trade with prospects of becoming skilled in a well-paid occupation with practically no intervals of unemployment, to enter the automobile industry, attracted there by the higher and more immediate financial returns. The latter industry, while paying good wages to unskilled labour, is highly seasonal, with the result that the

boy begins to drift from one industry to another and ends up his industrial experience by becoming a floater, one of the great army of unskilled labour, an easy prey to the dangers of a rapidly fluctuating industrial condition. Instances of this could be multiplied in the history of boys and girls who begin their task of earning a livelihood, without adequate educational and training equipment, by becoming messenger boys, bell-hops, elevator boys, delivery boys, housemaids, sales-clerks in organizations such as Woolworth's where experience is not considered necessary, hired men on farms, routine office clerks, helpers on machines where the work is of a routine nature, and in other places where labour is of an unskilled type. The Royal Commission on Poor Laws and the Relief of Distress appointed in England in 1909 reported this very condition^s being one of the major weaknesses in the employment of boys and girls who left school before being fully equipped for life. Brewer reports (1) that out of the one million children that leave school annually at the age of fourteen in the United States it is probable that thirty percent enter factories, fifty percent enter some mercantile occupation, eight percent turn to the mechanical employments, almost six percent become messenger, about the same number enter offices, a little more than one percent become domestics, and seven percent enter workshops. The girls become factory helpers, bundle girls, salesgirls, and tailors' assistants. There are always some of these who through sheer tenacity and determination, added to whatever ability they possess, will work their way upwards to

1. The Vocational Guidance Movement, Its Problems and Possibilities, ch. 6.

better positions, but the larger percentage, while satisfied for a time with the financial return obtained, soon begin to find greater financial obligations bearing down upon them. The money they earn does not meet their needs when the time comes that they wish to marry, or assume other obligations, with the result that they move on to some other occupation with perhaps a little better pay, but no greater future. The ultimate fate of such workers is to become drifters, going where they obtain a slight advantage, with no set occupational purpose in life.

Bloomfield (1) reports the findings of the Royal Commission on the Poor Laws and the Relief of Distress, in the following language: 'In the Majority Report the Commissioners lay stress on the great prominence given to boy labor not only in the evidence which came before them, but also in the various reports of the special investigators; and the conviction is expressed that this is perhaps the most serious of unemployment/ Well-trained boys find it difficult enough to secure a foothold in the skilled trades; but if in addition to this there are the temptations to crowd the occupations which promise no skill, promise no outlook, no future, the fact is clear that such conditions in the British Empire are making directly for unemployment in the future. The Minority Report is even more emphatic. It points out the effects of entering "blind-alley" occupations, and states that perpetual recruitment of the unemployable by tens of thousands of boys is perhaps the gravest of all the grave facts which the Commissioners laid bare. "We cannot believe," the Commissioners say, "that the nation can long persist in ignoring the fact that the unemployed and particularly the underemployed and unemployable are thus being daily created under our eyes out of bright young lives, capable of better

things, for whose training we make no provision. It is, unfortunately, only too clear that the mass of unemployment is continually being recruited by a stream of young men from industries which rely upon unskilled boy labor, and turn it adrift at manhood without any general or special industrial qualification, and that it will never be diminished till this stream is arrested.".....An official report some years ago on boys leaving the London elementary schools shows that forty per cent become errand and chore boys, fourteen percent shop boys, eight percent went definitely into trades. There is a fairly satisfactory law in England governing employment in factories and work-shops. It is the unregulated drift from a vast variety of juvenile occupations into the low-skilled labor market that presents grave aspects. In his study of boy labor, Mr. Cyril Jackson points out that few boys ever pick up skill after a year or two spent on errand or similar work. The larger number fall into low-skilled and casual employments.'

The Employment Department of the Massey-Harris Company, Limited, reports the following: (1) 'From January 1st, 1922 to December, 1929, 1,499 boys under the age of twenty left our employ voluntarily or were discharged for causes. Only a small percentage of these boys were skilled or trained workers. The rest were engaged in various sorts of repetition work in our factory. Judging from those with whom I came in contact myself, I know that only a small percentage of these boys had passed the Junior Fourth book. The average length of service of these 1,500 boys was only nine weeks. During this period it was only a rare exception for us to take on a boy under sixteen. Of

1. Social Welfare, March 1930, p.126.

these 1,499 boys only 107 were with us for over six months;

115 were here only one day;
362 were here over one day and less than
one week;
368 were here over one week and less than
one month;
254 were here over one month and less
than two months;
130 over two months, and less than three
months;
163 over three months, and less than six
months.

Of these boys, 396 were discharged either because their conduct was not satisfactory or because they were unable to perform the job at which they were engaged'.

On the same page of the same magazine is a report from the Toronto Superintendent, Ontario Government Employment Office as follows:

- there
1. During the year/were 1,258 new registrations divided as to their qualifications: factory workers, 70 percent; office workers, 20 percent, and in various trades 10 percent.
 2. The proportion who have not passed their entrance is 60 percent.
 3. The proportion of boys who have passed their entrance, but have not gone to High School is 20 per cent.
 4. The proportion of boys who have received their Junior Matriculation is 3 per cent. Those who have received their Senior Matriculation would be about $\frac{1}{2}$ or 1 per cent.
 5. The proportion of boys who have trouble in the way of continuous employment is about 20 per cent; 15 per cent being those who have no further than a lower school education; 4 per cent having received High School education of from one to four years.

Myers (1) quotes a survey made by the United States Comm-

1. The Problem of Vocational Guidance, p.27.

ission on Industrial Relations covering 105 factories and mines, for the years 1912-14, to the effect that the percent of turnover varied from 200 per cent. to below 20 per cent., with only 24 firms having less than 60 per cent. turnover, and only 3 less than 20 per cent. Myers also quotes an investigation by Burdge to the effect that 'regardless of the size of the community about 23 per cent. of the boys had had one job; 26 per cent., two jobs; 23 per cent., three jobs; 12 per cent., four jobs, and 6 per cent., five jobs.' (7)

This condition indicates that young workers give little or no thought to their future. They enter employment knowing practically nothing of what it is like, what its possibilities are respecting future remuneration and possibility of promotion, and without stopping to enquire whether their particular abilities are adapted to that occupation. They try it out, and, finding that they do not like it, try something else. It is the trial and error method applied to employment. If the possibility of tragedy were not so great, and if the trial and error did not tend to develop drifters, from an educational point of view this trying out of several occupations might be defensible, but the chances for the individual becoming an unhappy member of the great army of exploited unskilled labour are apparently so great that the game is not worth the effort.

However, in this modern world where we worship at efficiency's shrine, the waste involved in this process whereby the young worker seeks to find his niche by trying out several occupations, becoming a jack-of-all-trades-but-master-of-none, is positively inexcusable, from the standpoint of both the employer and the employee. For the latter it means acquiring a little

skill at one trade, and then moving on to another where the skill acquired in the first, unless the two occupations are very much alike in technique, avails him naught, this process being repeated until the worker arrives at that point in his career where the realization that his productive value is not sufficient to earn him a reasonable income always brings keen disappointment, and sometimes tragedy. A knowledge of the blind-alley occupations, and of the value of training and skill to the worker, given as part of school instruction, combined with definite personal vocational advice might do much to obviate these undesirable results. Perhaps quite as unfortunate a phase of the situation is the fact that after the individual really gets initiated into a particular occupation, he may find that the work is irksome simply because he is not adapted to doing that particular task, but, having once begun it, he cannot break away from it for economic reasons. This is the greatest tragedy of all, ...the square peg in the round hole, the good farmer unhappy as a poor preacher. To quote Payne (1): 'If we take two workers who produce the same amount of work each day, and, from the standpoint of production, are equally successful, one may be doing this amount easily, and without any great expenditure of effort, while the other may be exerting himself to the point of over-work and extreme fatigue to accomplish the task. The latter worker will very soon degenerate nervously and physically and become a common grouch and possible trouble maker, because he knows he is working to his utmost limits and soon feels dissatisfied with his wage for such strenuous effort kept up day after day.'

Economically, for the employer the case is just as bad.

1. The Organization of Vocational Guidance, p.331.

There is cited above the large percentage of turnover in 105 industries in the United States. Each new workman must be trained, and this process of training costs a good deal of money. A street railway company estimates, according to Myers, that the training given one trainman for one year or less costs about \$370.00. The average cost of labour turnover is said to be from \$50.00 to \$200.00 per man, depending upon the kind of work done. The loss of an experienced telephone operator costs the company about \$75.00.

Brewer (1) puts the cost of training unskilled labour at \$8.50, clerk, \$9.00, pieceworker, \$65.00, but this does not include the overhead created by the employment department in advertising, salaries, and other expenses incidental to the handling of labour turnover. Other occupations, involving less skill, would be less costly in turnover. A judicious choice of employees involving a closer study of their experience, training, aptitudes, etc., ought to result in a very definite reduction in the percentage of turnover in the average plant, especially in the ranks of the more skilled labour classes.

These two losses, that of the individual and that of industry must ultimately be borne by society itself. To again refer to the old illustration, society loses materially in every way when the good farmer becomes a poor preacher. It loses on the negative side; instead of happy, contented, citizen producing to the limit, it has a disgruntled misfit on its hands, perhaps writhing under the torture produced by failure and by lack of love for his work; It loses on the positive side; the worker who likes his work and is suited to it performs that work with the minimum effort and the minimum consumption

1. The Vocational Guidance Movement.

of nervous energy, does better work and more of it; society has a citizen happy and contented. When individuals are happy at their work, society is happy at its work; when individuals are producing to the maximum of their capacity, society reaps the harvest of greater wealth and prosperity, with all that prosperity brings in the way of higher standards of living and culture. It is merely a question of the conservation and the most economical use of human resources.

Meyer (1) is right when he asserts that society has always assumed responsibility for some sort of protection of its young. At one time this amounted only to protection from wild animals and other destructive forces of nature. To-day, protection is provided against communicable diseases, against exploitation by unscrupulous employers, against the consequences of illiteracy, and so on through a long list. It is only a step farther, and that a very natural one, to provide such protection as is possible against the misfortunes and evils resulting from unwise choice of occupations.'

Society is peculiarly wasteful in its educational provisions for its youthful members. We spend millions of dollars in this Dominion on the instruction of the youth of this nation in the lore of the ages, ancient and modern. We are erecting with careless abandon huge centres of learning dedicated to the historic academic studies, and to the more modern commercial, industrial and scientific subjects, both in secondary, and higher educational circles. But by our adolescent acts of various sorts, we drive the youth of the nation indiscriminately through the portals of our schools, in somewhat the same manner as a farmer would drive a flock of sheep into a pasture, with the

1. The Problem of Vocational Guidance, p. 40

inferential command: 'There the field; in it are springs of water to quench your thirst; acres of fodder to satisfy your hunger; and shade-trees to protect you from the scorching heat of the midday sun; find them for yourself'. But the task of the modern youth is more difficult than that of the sheep. The latter, led on by instinct, finds his task very simple, largely because the problem is simple. The former is in a maze of occupations; he may choose to be a ditch-digger, or an exponent of the most abstract philosophy, or any of the thousand and one vocations that lie between these two extremes. The skilled educational shepherd, equipped with all the facilities of modern educational and psychological knowledge, could, with a little help here, and advice there, do a great deal toward throwing light on the pathway of the individual in search of life's highest gift, a useful sphere in which to perform a useful work contentedly.

Society should be able to do this readily since the ideal organization is at hand. Through the years men have been constantly shaping, with the chisels of their wisdom and experience, an educational system fitted to their needs, in which at present is found a group of highly trained specialists whose life interest and specialty is the training of youth. To fit an extra cog or two into this machine would be the work of but a short time. Vocational Guidance, if it is to be done at all, should be done within the present organization, as an integral part of the educational efforts of to-day.

Chapter 111.

THE AIMS OF VOCATIONAL GUIDANCE.

In view of the situation presented in the last chapter, it is necessary to state just what the science of vocational guidance aims to offer as a solution, in as far as a solution can be found. In general terms, it seeks to preserve for society the utmost capacity of every individual in order that each citizen may serve his generation in the way best suited to his abilities, and most conducive to his own happiness and prosperity. This aim makes it necessary to look upon guidance not merely as the placement of a boy or girl in a position where he can earn a livelihood, a viewpoint that would be only interfering in a process of haphazard preparation for the work of life after most of the wrong steps had been taken, but rather as a means to the scientific guidance of youth in every choice that he has to make after entering our educational system until he is finally and happily settled in some useful occupation fitted to his capacity. Bloomfield (1) has stated it as follows: 'Three aims have stood out above all others: first, to secure thoughtful consideration, on the part of parents, pupils, and teachers of the importance of a life-career motive; second, to assist in every way possible in placing pupils in some remunerative work on leaving school; and third, to keep in touch with and help them thereafter, suggesting means of improvement and watching the advancement of those who need such aid.' In the first aim this author emphasizes the necessity of the boy

1. The Vocational Guidance of Youth, p. 37.

or girl along with their parents and teachers, having some intelligent appreciation of their possible future work in order that their present studies will become meaningful to the point of being an incentive to greater endeavor.

Bogle (1) emphasizes the advisability of preventing drifting through school without any definite ambition before one, and states the purpose of vocational guidance to be 'to assist individuals in choosing, preparing for, entering upon, and making progress in occupations'.

To accomplish this end, the individual will need to be instructed in everything that relates to his success as a producing citizen, ...care of health, his character, his social responsibilities, his aptitudes, his educational opportunities and the best use of them, his occupational opportunities, their differences, advantages, disadvantages, possibilities, his choice of life-work, the best roads to successful achievement and the utmost use of his talents.

This does not mean that the individual will become a mere cipher, plastic clay in the hands of the educator, with no will of his own, and with no freedom to choose according to his desire, but rather that the means of successfully making a free choice under the best possible conditions, and with all available information regarding occupational life, and regarding his own native capacities ^{will be} mapped out before him. 'The primary aim of guidance programme should be to make advisees more largely intelligently self-directive' (2).

1. Vocational Guidance in Secondary Schools, ch. 1.
2. Vocational Guidance Magazine, February, 1930, p. 841.

Chapter IV.

FACTORS IN VOCATIONAL GUIDANCE.

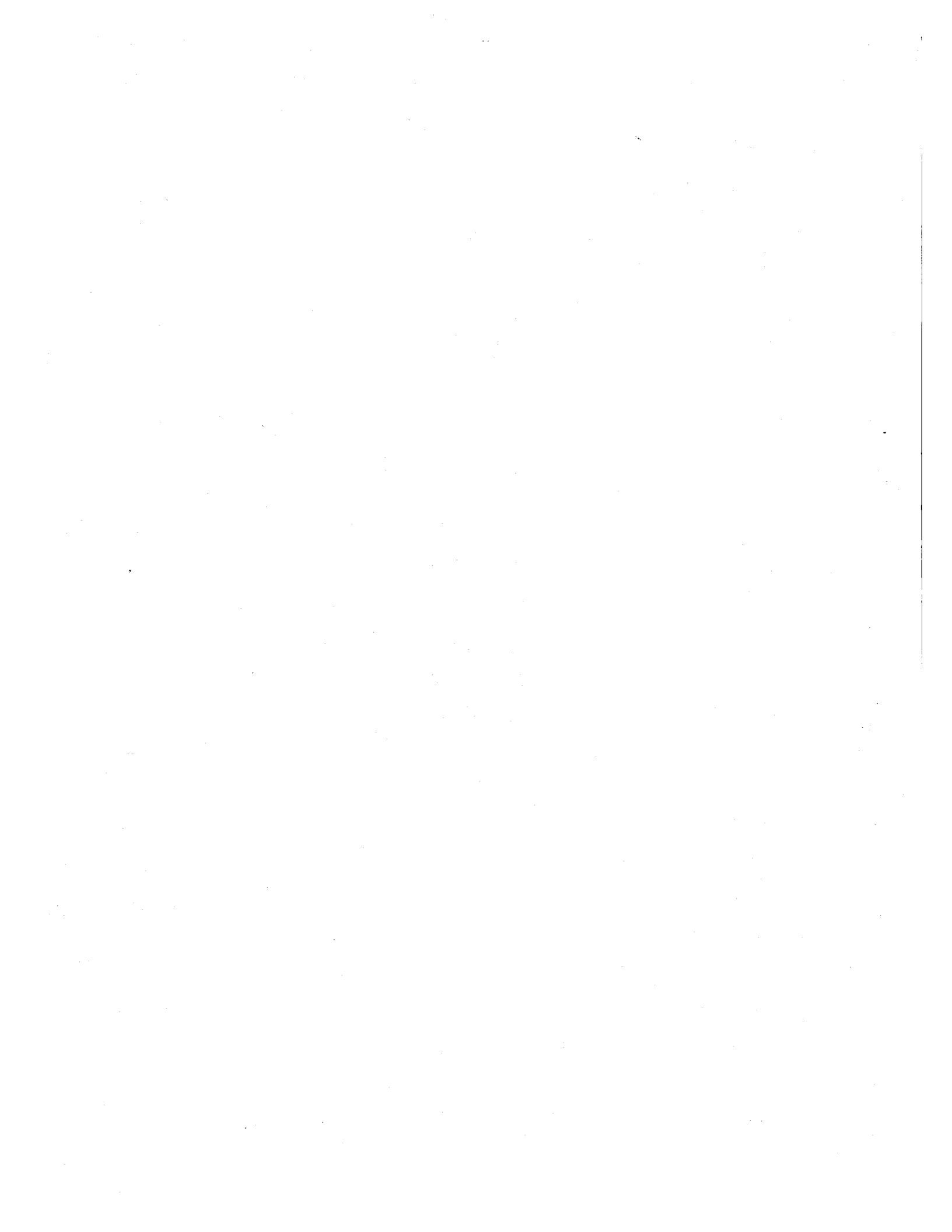
Moral Guidance.

The moral aspects of education do not appear to be emphasized as greatly now as in former days. Our early schools were built on the three R's, along with catechisms and the Bible. In fact, the whole aim of early education on this continent was to provide an educated ministry for the churches, so seriously was religion taken by our ancestors of two and three centuries ago. To-day, the case is somewhat reversed. Except in private denominational schools, or in the schools controlled by the Roman Catholics in Canada, the exposition, though not the reading, of the Bible is practically suspended, a state of affairs brought about by the zeal with which the various religious interests guard the children of their own fold, and resulting in the religious education of our youth being left to the somewhat haphazard efforts of our church schools. Perhaps this is just as well. Morality is caught, not taught. The building of character is a long process that is never completely finished, but which is contributed to by all the contacts of life. During the years of the average child from six to sixteen or twenty, a large part of its life is spent in fellowship with other children of the same age, under the controlling influence of some adult who is acting as teacher. Here is ready made a cross-section of society, with its problems, social contacts, influences, quarrels, character-making situations of all sorts,...

the ideal place to form character, since here are the very situations in which the moral outlook must be both exercised and formed. Since this is the melting pot in which the dross in the lives of the youth of school age is to be burned, it becomes the duty and the opportunity of the school and related organizations to have definitely in mind the training of the individual along moral lines. Relationship of the individual to other individuals in the same society, to authority, to his work, to the obligations of life here receives emphasis in the only way in which it can be effective,...in the response to actual situations that arise in the everyday life of the school society. The aim of guidance in these situations is always, of course, the development of the kind of character that will best help the individual to become the most useful type of citizen.

The agencies which promote the development of character are many and varied. Proctor (1) reports upon a study made by a committee of the California High-school Teachers' Association in which it was sought to establish the order of importance of the various influences which promote the development of desirable moral qualities among High-School pupils. These influences, in the order of their importance, were listed as follows: personal influence of teachers, daily lessons, athletics, student clubs, self-government, reading and literature, student assemblies, advisory systems, direct instruction. It would thus seem that direct instruction has the least influence in the formation of character of the average school citizen, and that the main source of character development is found in the ordinary contacts of the students with their teachers and fellows. If

1. Educational and Vocational Guidance, p. 224.



for this purpose only, it would be advisable, therefore, to encourage a variety of school activities lying outside the ordinary curriculum of study. Morality is social, and the creation of circumstances under which the individual is taught by social pressure to conform to the needs and rights of society should be created in school life.

Health Guidance.

It is gratifying that much attention is now being given to those phases of education which tend to teach the youth of our country to look after their physical welfare. But it is still felt that children are required to sit still over too long periods of time absorbing information, when it is maintained that the information could be imparted in less time, leaving a much-needed period to be devoted to work or play in which the pent-up energy would have opportunity for natural use. In fact it has been suggested that the academic work of the usual public school course could be done in half a day instead of the usual whole day, and that the remainder of the day could then be spent in work of a physical nature which would allow the children to develop along more natural lines. (1) However that may be, it is likely that manual work of a varied nature will become more prominent in our educational life as time goes on.

To properly train our future citizens in physical fitness, our courses should include courses in hygiene, this to be interpreted as the care of the body and sex hygiene, a frank but sympathetic presentation of the true relationship of the sexes. In addition to this, Proctor (2) rightly suggests that physical education in the schools should have three phases:

1. Proctor, Educational and Vocational Guidance, p. 182.
2. Educational and Vocational Guidance, p. 189.

i. The natural physical training activities, arising out of play, sports, and folk-dances. This is extremely important in the future life of the individual, as it develops the capacity to spend leisure time in those games which are physically and mentally helpful. To be able to play the game for the game's sake, with the maximum of enjoyment and relaxation is one of the major needs of the hectic industrial period through which we are passing. Men who have never learned, or perhaps have lost, the art of playing are severely handicapped. There should, then, be a definite attempt in our schools, an attempt controlled by experts, to teach every boy and girl to play. The development of pennant-winning teams certainly should not be the aim, but rather the inducing of every individual in the school to learn to play. to learn to love to play, a sufficient number of games to make it possible for him to enjoy some athletic pastime during any season of the year.

ii. Related physical-training activities, like walking, hunting and fishing expeditions, wood-working interests, and other avocational activities are all very closely related to the proper employment of leisure time, and should be developed to the greatest possible extent.

iii. Formal physical training activities, designed to provide an all-round muscular development, to correct any physical defect from which the individual may be suffering. This should be very closely related to the question of medical inspection in the schools, a current problem in our schools in Ontario at the present time. That every student should be given a physical examination on entering school, and several times during his academic career is, I think, beyond dispute, such examination

to be given by a medical man who understands and sympathizes with the aims of our physical-training courses, and who would be in a position to recommend the proper physical exercises for the correction of defects. This is a phase of our work neglected at the present time. The tendency is to have one physical training instructor for each sex in each secondary school, and one in each elementary system in the smaller cities, their time being so much occupied with directing sports and formal drill that they have little time left to study and prescribe for the needs of the individual.

In addition to this the school system ought to include, as it does in many of the larger centres, dental advice, and, in the case of those who are not in a position to pay for the service, free dental treatment. This is absolutely necessary if the youth of the land, especially those who come from homes where regular care of the teeth is not insisted upon, are to be trained in the proper care of this most important part of their physical equipment.

Guidance in the Use of Leisure Time.

A century or so ago when the labouring element of our population was forced to spend anywhere from ten to sixteen or seventeen hours per day behind a machine, the employment of leisure time was not an important consideration since the time left after the day's work was done was usually spent in sleep. But to-day, when the hours spent at the bench or in the store, are about equal to the number of hours free from work and not spent in sleep, the question of how to spend the one-third of every day, and Saturday afternoons and Sundays, becomes a vital problem. There are so many character-destroying things one may

do 'after hours' that it is quite necessary to have some worthy employment during the leisure hours.

There is also another side to the question. In our industries of to-day specialization is so great that, unless the individual worker has some other interests, he is very likely to become very narrow, both in mind and in habits. It behoves our educational leadership to provide habit-forming activities of a varied nature. I have already dealt with the question of physical activities, stressing the advisability of teaching every boy to learn to enjoy two or three good games, and other forms of athletic endeavor. There are many other fields in which similar interest should be aroused. The field of literature presents a fascinating opportunity for school librarians to lead the students to feel that the literature of the classroom, oftentimes presented in a fashion much too cut-and-dried, is not the only type of literature to be found. Every opportunity to encourage literary ability should be seized by school authorities with avidity. Dramatics constitute a form of expression which is almost ideal for school production, since it brings into play so many different aspects of life. The hidden feeling of the play must be interpreted and appreciated; the stage setting must be produced, much of it in the carpenter's and painter's shop; the costumes must be found, and oftentimes they can be made by the students themselves; the historical setting of the play must be investigated, presenting an opportunity for some student to begin a little research work. In one play in Oshawa recently a young man who had scarcely ever been in the school library spent two hours there finding out whether the Babylonians made use of the arch in their archi-

ecture. Social, organizing, reading, histrionic and manual ability all have opportunity for expression in this most fascinating of school activities.

The social life of the school should not be neglected. Many an otherwise successful man has been handicapped in life simply because he has not learned to take his place easily among other people in the pursuit of legitimate pleasure, and in the conduct of those religious, fraternal, and philanthropic organizations which are met with in every community.

A more obvious need is that of training in the manual and household arts. Practically every man and woman will have a home, but in the vast majority of the schools no provision is made for the cultivation of those arts that are to be used in the home. In order that the future home-makers may gain some idea at least of the scientific management of her future domain, domestic science should be a part of every curriculum. No better avocation could be found for a large number of men than that of wood-working, especially for those men whose daily task causes them to pursue sedentary occupations for long hours at a time.

In this section, it is being suggested that the school curricula should include some subjects that would cause the individual to be prepared for the proper use of the one-third of the average life-time that is spent in occupations not connected with earning a livelihood.

Chapter V.

FACTORS IN VOCATIONAL GUIDANCE (CONTINUED)

Educational Guidance.

It is the purpose of this chapter to show what types of schools should be adopted in each community to give the necessary background for guidance activities, and what each of these schools contributes to the education of our youth.

1. Elementary Schools.

Terman (1) gives a vivid picture of the differences among children in the elementary schools. In the Fifth Grade, for example, there was an age range in one class from $9\frac{1}{2}$ to 14 years, and in another class from $9\frac{1}{2}$ to 15 years, and, worse still, a range in mental age from less than 10 years to more than 15 years in one class, and from $7\frac{3}{4}$ years to 14 years in another. That this is the case in the average school class is but the subject of common observation. In Chapter 11 of this present study, is given a table showing that from 20 to 27 per. cent. of the enrolment is above the average age for that class, that is to say, is retarded from one to five years in school work, using the word retarded in the sense that they are in a class lower than they should be when judged on the basis of chronological age. In addition, authorities agree that for every child who is retarded on the basis of chronological age, there is one child who is not being advanced quickly enough for his ability, and is therefore retarded on the basis of mental age.

This is a serious situation. Investigations show that many of the truancy problems arise from groups of children who are

retarded on the basis of chronological age. 'That is why,' says Harris C. Allen (1) 'most cases of discipline and of truancy are found among the 25 to 30 percent. of the boys who are seriously retarded in the public schools. It may also account for an equally high proportion of young male inmates of a certain prison, 90 percent. of whom were found to have left school below the sixth grade, having become retarded more than two years'. This agrees with the investigation made by a group of Canadian business men and reported by C. E. Burton, President of the Robert Simpson Co., (2) concerning fifty-six boys sentenced to terms in Kingston Penitentiary before the age of twenty-two. Sixty percent. of these boys had court appearances for truancy in the Public School, and, according to their own statement, every one had been guilty of truancy, though the forty percent. apparently had not been apprehended for the offence. Mr. Burton maintains that a truant is but an unhappy, ill-adjusted school boy, who has lost interest in his work. This loss of interest may be attributed to one of several causes: inability on the part of the boy to master the ordinary elementary school curriculum; retardation to such an extent that his size makes him ashamed to associate with smaller children; the failure of school authorities to provide on the curriculum studies and work that would be suitable to his ability and desires.

That there are large numbers of students of this type is indicated by a study, based on psychometric tests, made over a

1. The Functions of Guidance in the Elementary Schools, Vocational Guidance Magazine, February, 1930, p. 219;
2. Address to Kiwanis Club, West Toronto, March 13, 1930;

three year period in the Toronto public schools by the Director of the Mental Hygiene Division of the Toronto Public Health Department, and summarized in the table reproduced below. (1) The economic conditions represented in the schools were classed as poor, average and fair; the number and percentage of non-academic pupils found in each school are also reported.

NON-ACADEMIC PUPILS

School	Social and Economic Conditions	No. of pupils Examined	Non-academic No.	and %
A.	P.	1,067	390	36.5
B.	P.	213	81	38
C.	F.	961	244	25
D.	Av.	1,087	150	13.8
E.	F.	484	136	28.1
F.	F.	248	66	26.6
G.	P.	188	67	35.7
		4,248	1,134	

Further evidence is added by a report from a Committee of Teachers' Institute No. 6, in the City of Toronto, given in the above named article as follows:

1. According to statistics gathered from the reports of twelve representative schools, 39 percent. of the pupils in the Junior First to Senior Third Grades inclusive, repeat their grades from one to four times before promotion is gained.
 2. These repeaters are costing the Board of Education \$90. per year, per pupil.
 3. Principals of schools find that these pupils provide almost all our delinquents.
 4. The non-academic child being compelled to pursue the present public school course of study, often becomes discouraged, rebellious and anti-social.
 5. We believe the present course of study and equipment fail
1. Social Welfare, March 1930, p. 126, 'The Outlook for the Non-Academic Child' by Frank T. Sharpe.

to meet the needs of the non-academic child.

The case of those children who are able to make more rapid progress than is made by the average school child is almost as insistent. Graded with children whose ability only warrants the covering of the course in a certain set time, these brighter children, not compelled to work to their limit, are likely to get the idea that life's problems are not very difficult, and to develop habits of laziness together with the habit of only working at a fraction of their maximum capacity. This very probably accounts for the large number of very bright children who do not make a conspicuous success of life, although it is recognized at once that other factors in their personality may contribute something to their failure.

To take care of these different cases, the following requisites for a public school curriculum are suggested:

a. The Prevocational School. Many children who are not adapted to the ordinary public school course, either on account of natural bent, or of lack of mental ability, may study in these schools subjects such as dressmaking, millinery, shop work, wood-working, and other manual arts, along with a certain amount of the regular academic subjects.

An outstanding school of this type is the Junior Vocational School in Toronto, the results of whose work can be most satisfactorily summarized by quoting the Principal's report as found in 'Social Welfare' (1)

1. A special study was made of the group of the boys leaving our school in one month; in this unselected group of 16 boys, who had secured special training of approximately one year's duration

1. March, 1930, p. 127, 'The Outlook for the Non-Academic Child', Frank T. Sharpe.

in the Junior Vocational School, and were assisted into occupations, it was found that their average salary was slightly higher than the average salary of an unselected group of boys graduating from the public school with no special training.

2. In a survey made four years ago with the assistance of the Big Brother Movement, a group of 134 boys were studied: 34 of these were among the worst court cases in Toronto. All but one of this special group of thirty-four have turned out well. Many of this group out in industry are among the most promising; one has his own business; one is foreman of his department and another is making over \$5,000.00 a year. We do not hesitate to state that these boys could not have been the success they are had they not had the training to suit their needs.

3. A year ago a special survey was made of 224 boys discharged from the school during the previous year and it was found:

(a) that those who had more than a year's training at the Junior Vocational School were earning an average salary of \$10.47 per week; those with less than a year's training were earning an average salary of \$7.15 per week (these groups include such pupils as were not employed at the time.)

(b) that only 20 percent. of those who had more than a year's training were in unsatisfactory employment, while 66 2/3 percent. of the group with less than a year's training were in blind alley jobs.

4. On several occasions we have taken a partial survey and have never found more than 10 percent. of our boys unemployed. We have more often found the parents unemployed than our trained boys. In most cases their parents have never had the advantage of any vocational training.

5. It is generally recognized that in large industrial centres where no special training is given to boys of the type we have, 25 percent. to 30 percent. eventually become charges upon the public in either mental hospitals or penal institutions. In London, England, where this work has been developed extensively, the number has been reduced to 8 percent. sent direct to institutions and 25 percent. adjusting themselves but under very close supervision. In our School we have never had more than 3 percent. sent to institutions in any one year and this has been as low as 1 percent.

These schools are a success because the pupils find there something that is suited to their ability, and in which they find themselves interested. It is very probable that an extension of this movement to reach, not only the badly retarded cases of our public schools, but also those who are moderately retarded, would be in the interests of our school systems.

b. Graded Classes in the Ordinary Elementary School Work. Even among those who are able to master the elementary school curriculum, there are great differences in the speed with which they can cover the work successfully. Terman (1) found that, in the four fundamentals of mathematics and in reasoning ability, the children of two fifth-grade classes were more than two grades apart on the average. This did not take into account the great individual differences within each class as reported above. As far as possible those students of like intelligence should be grouped together, and allowed to proceed at a rate consistent with their ability. This plan would result in fewer failures, and it must be remembered that nothing so much as failure causes

1. Intelligence of School Children, p. 72.

the child to forsake the quest of education in favor of some ill-paid employment with no future. It is always, or nearly always, the child who is retarded on the basis of his chronological age who leaves school before completing the elementary grades.

Classes should be graded in at least three different groups, the dull, the average, and the bright, and, in the larger school system this might be extended to include classes for the very dull and the very bright. Each class would cover similar programmes of study, although the brighter groups would cover them more quickly, and with a slightly richer content. This plan would tend to keep all the children happy and contented simply because they were not trying to cover more work than their ability would warrant.

Many who are interested in introducing effective vocational guidance into our educational system insist that the elementary course should contain some studies of occupations in life-career classes. These would be given, not with the idea of having the children make a definite choice of vocation at so tender an age, but to give some general knowledge of the various groups of occupations that they would study in more detailed and definite manner at a later time in their school curriculum. This would tend to give the children a definite knowledge background for the work of the later years, in somewhat the same way as the elementary school course in geography gives a background for the Collegiate course in the same subject. The data concerned in such a study will be considered at a later point in this thesis.

ii. Junior High School.

It is felt by many who are interested in the various phases of education that the young boy or girl who has just finished the courses provided by the elementary school is called upon to make too radical a change when he or she enters the modern High School. Besides having to become accustomed to different subjects, and different atmosphere, the individual must make a decision in regard to which of several courses he will take, a decision which, in the large majority of cases he is not capable of making with any degree of intelligent understanding of the issues at stake. He has had little experience of the vocational demands of life, little opportunity to test his aptitudes and inclinations, and knows very little about the difficulties and possibilities of the various courses. In the great majority of cases, his parents and friends are not in a position to give adequate advice of any sort. Hence, without the proper background, the child of from eleven to fifteen years is compelled to decide whether he will take the regular matriculation course, looking to a general education which may possibly lead him to College at a later date, or a Commercial course, with a view to a life spent in business, or a technical course, which leads into the various trades.

To overcome this difficulty, the Junior High School is being established in many centres in Canada and the United States. The last two grades of the Elementary School are combined with the first grade of the High School with a course which is designed to be exploratory in nature. In addition to the usual subjects of those courses others of a more vocational nature are offered, commercial, industrial, homemaking. The aims of both

academic and shop subjects are to arouse interests, discover talents, and develop special abilities which must be considered in the planning of the programmes of all pupils. In order to guide children properly, a Junior High School must make provision for the study of the individual differences of its pupils, and for the study of possible individual adjustments designed "to cut the educational garment to fit each child." (1) Mr. H.B. Fitch, Principal Templeton Junior High School, Vancouver, B.C., states the function of the school to be 'exploration with guidance', to which end a flexible and wide curriculum has been provided. The course of study in Industrial Arts Education for Junior High Schools of the Province of Manitoba (2) states the purpose of these industrial courses in these junior schools as follows:

a. To try out individual inclinations and abilities for industrial pursuits through typical experiences in various occupations.

b. To make reliable studies of the conditions, demands and opportunities in related occupations.

c. To develop an appreciation of the economic production by first-hand experience in productive work.

Inglis (3) states the purpose thus: 'To provide children with broader and richer forms of educational contacts, so that they,

1. The Functions and Organization of Educational and Vocational Guidance in the Junior High School, Vocational Guidance Magazine, December, 1929, p. 99.

2. Obtained from Department of Education, Winnipeg, Manitoba.

3. Meyers: The Problem of Vocational Guidance, p. 85.

for themselves, may develop interests, may learn something of their own limitations and capacities as far as certain walks of life are concerned....'.

To accomplish this purpose a wide variety of courses is offered. Given certain constants, usually English, Geography, History and Mathematics, the student is allowed in some schools to elect other commercial, industrial or academic subjects; but in others is forced to take one or two representative subjects from each field in order that his preferences and aptitudes will be allowed to emerge. Meyers (1) gives the curriculum of several representative Junior High Schools, which for lack of space are not reproduced here. These vary greatly in the liberty allowed in choosing electives. The difficulty in planning the curriculum seems to be to allow sufficient elasticity for transfer from one course to another when it is found that the pupil is not suited for the particular subjects chosen. Payne (2) maintains that 'a well-organized Junior High School, to fulfill the special purposes of such a school, should have at least four curricula offerings:

- a. The straight academic course.
- b. The household arts course.
- c. The industrial arts course.
- d. The Commercial arts course.

These should not be strictly prescribed courses, but should be made up of required constants, with electives as variables.'

Proctor (3) quotes an illuminating description of the

1. The Problem of Vocational Guidance, Chapter VI.
2. The Organization of Vocational Guidance, p. 155.
3. Educational and Vocational Guidance, p. 297.

courses given the first grade of Rochester Junior High Schools:

'There are two try-out shops. One is a general utility shop with a limited equipment for wood-working, sheet metal, concrete, and electricity. Boys entering Seventh B grade in the Junior High School receive instruction in this shop. For boys in the Seventh A grade an elementary machine shop equipped with light metal working machines is provided. To boys who are about to make a choice of curriculum, these two seventh-grade try-out shops offer a means of familiarizing themselves with hand processes in wood, metal and other materials. The experience thus gained helps the pupils to understand the opportunities offered in the technical, or industrial curriculum at the beginning of the eighth grade. The types of shops for the eighth and ninth grade boys cover the woodworking, metal and electrical trades, as well as graphic and commercial art.'

Both Payne (1) and Meyers (2) point out defects in the theory of exploratory or try-out courses. The latter maintains that there is great need for the development of effective standardized objective tests designed for the purpose of measuring the try-out courses in exploratory value. The former submits that, while these try-out courses have educational value, their exploratory value is largely negative in causing the student to discover that he has no capacity or liking for a particular kind of work, the inference being that they do not help the student in really finding his capacity. The real try-out value of the

1. The Organization of Vocational Guidance, p. 160.

2. The Problem of Vocational Guidance, p. 114.

courses' is ridiculed on the ground that they are not sufficiently like the actual vocation they are supposed to represent to constitute any valuable test. Even admitting the defects, the Junior High School is an attempt proceeding in the right direction, and offers a splendid opportunity to investigate and record the aptitudes of the boys and girls coming into contact with the officials of our educational system. This is the open door through which vocational guidance may find easy entrance, since it is right here in the exploratory period that the youthful individual needs the sympathetic hand of an expert adviser.

III. The Senior High School.

The Elementary School provides a training in the basic and tool subjects; the Junior High School gives the individual the opportunity of exploring his tastes and native ability; in the Senior High School the student must make his decision regarding the course in which he will specialize, a decision which ought to be rendered somewhat easier by any experiences the individual may have had in the courses given in the Junior High School. In the larger centres there are usually three different types of courses, the technical, including the industrial and household arts; the former for boys, the latter for girls; the commercial, for both boys and girls; the academic or college matriculation, including the time-honoured language and history courses, plus the added scientific lore of modern times. If a boy begins the technical or commercial courses, there is no way in which he can transfer the matriculation course effectively without sacrificing a year or more of his time. In all the technical schools and departments in Ontario,

it is not possible for a boy to matriculate to any University course, except to the courses of the School of Practical Science of the University of Toronto, and that only from a very few schools in the larger centres. The same is true of the Commercial schools and departments, only in their case matriculation may be obtained, from a few of the larger schools, but only to the course in commerce and finance given by the University of Toronto. If the individual enter the matriculation course, he still has before him several choices: pursue the course to the point of matriculation, go to University and there specialize in some definite study; take the course with the idea of acquiring a general education, but without proceeding to University; follow the course for two or three years, and then transfer to the technical or commercial courses, there to pursue a very specialized course for a year, a procedure which may give a slightly wider general education, but not so thorough a specialized training.

If the matriculation course be chosen, with a college course in mind, the individual is called upon to carefully choose the subjects he will study in order that they may coincide with the requirements of his projected university career. A young lady, for instance, who wishes to become a teacher of moderns should not take Greek instead of Spanish, nor should a young man intent on becoming a civil engineer substitute Spanish for Trigonometry. This makes an early choice necessary, in fact as early as the third year in High School, the student must have his options settled.

If the student elect the technical course, it is necessary for him to decide early in the course whether he intends to

specialize in woodworking, motor mechanics, drafting, machine shop practice, electrical construction, or any other of the special trades that are there presented.

If the individual decides in favour of the commercial course, in some schools it is necessary to elect one of many courses at the end of the first year, in other schools at the end of the second year. In the smaller schools and departments perhaps only two options are presented; namely stenography and accounting, but in the larger commercial schools there are two, three, and four year courses; accounting, stenography, general, and matriculation courses.

All of this emphasizes the need for wise decisions, and for the advice of someone who is thoroughly conversant with the courses and who is able to properly weigh the needs of the pupils concerned.

There is another aspect to this subject. In Chapter 11 of this essay, Table III, it was shown that for the year 1928, a typical year, 45 per cent. of the students who entered first form did not remain for second form, 64 per cent. did not remain for the third year, and 74 per cent. did not return for the fourth year, from which we can draw only the conclusion that these students entered upon the work of life without any definite occupational skill. Doubtless many of these would have been better advised to take some form of commercial, industrial or home-economics course, in which they would have obtained, in addition to a general education, a specialized training as well. The writer is very definitely of the opinion that another course, embracing the study of business management, economics, business mathematics, salesmanship, the science of materials, history of commerce, business correspondence, and

similar subjects, could well be made a part of our modern high school courses having in mind the accommodation of those young men and women who want to obtain a general training that will help them in general business activities.

The function of the Senior High School as thus organized is to present to the youthful citizens an opportunity to obtain an education that is suited to their particular needs, and to continue the exploratory process begun in the Junior High School, in order that the individual may finally find an occupation that is consistent with the capacities he possesses. To this end, one of the great needs of the system is elasticity, courses so arranged that transfer from one to the other would not present the difficulties it does now. Unfortunately a very rigid system has developed, a system which seems to occupy the centre of the stage rather than the individual pupil. A further need is an ever-expanding curriculum, so that every possible means of discovering latent talents and aptitudes will be used to the limit. Much can be done in this direction by encouraging extra-curricular activities like dramatics, music-clubs, and nature-clubs.

It is very possible also that in Ontario, where we do not seem to have taken kindly to the Junior High School, with its exploratory aims, it would be advantageous to organize a first year high school course that would be common to all departments, and that would embrace representative commercial and industrial subjects. This would enable all pupils to find out the nature of each course and their reactions to each type of course, and would possibly result in more intelligent specialization in later years.

iv. Survey of Community Educational Opportunities.

In order that the individual student may choose wisely, the educational opportunities of his community should be fully presented to him in printed form. This is done in many communities in partial form in the annual announcement printed by many of the Collegiate Institutes and Vocational Schools of the different provinces. The announcement of the Oshawa Collegiate and Vocational Institute for 1929-30 is taken as an example. It outlines fully the courses of study, commercial, technical and matriculation, explaining the purpose of each. Naturally, the possibilities of the matriculation course require more detailed explanation than the other two. Consequently, the different courses, ...arts, medicine, dentistry, civil, mechanical, mining or electrical engineering, architecture, pharmacy, law and teaching, are outlined as to requirements and necessary preparation. A table is appended showing the time required for preparation for the various professions, and the cost of such training.

As far as it goes, the above is valuable, but there is a great deal omitted. It is prepared strictly with the opportunities offered by the public school in view, and therefore has nothing to say about the various private, secondary, business and trade schools, that are usually to be found in a community of any size. It does not give information about the various educational institutions to which a matriculant may go to carry on further studies. It fails to mention many important lines of endeavor for which educational facilities are provided in many communities, ...forestry, dietetics, nursing, aeronautics, agriculture. It should be possible to prepare a

booklet which would indicate all the institutions, both private and public, where training could be obtained for any particular vocation. Such a handbook would be invaluable in providing for the student a handy manual of educational opportunities for his community.

Chapter VI.

FACTORS IN VOCATIONAL GUIDANCE (CONTINUED)

A study of the Student.

It is a pedagogical truism that the individual student should be at the centre of every educational system, and that all the theory and practice of education should be planned with the welfare of the centre as its aim. Until recent years, however, no definite effort has been made to make any scientific study of the student.

In this connection I can do no better than quote the 'Report of the Committee on the Revision of the Principles of Vocational Guidance', a committee appointed by the National Vocational Guidance Association, (1).

'a. All available data bearing on the individual should be assembled before an attempt is made to give counsel and advice.

b. The cumulative school record which from year to year keeps an account of all school experiences, physical and mental tests, academic standing, recreational interests and activities, and of family situations, shows more clearly than any other one instrument the development of the pupil in each respect and the direction which his occupational interests and ability will take. This record should be begun in the kindergarten and first grade and should follow the student through the senior high school and college.

1. Vocational Guidance Magazine, February, 1930, p.228.

c. Tests of various sorts furnish valuable data regarding the individual. Care should be taken to see that all tests of intelligence, abilities, or achievements (where these are used other than for purposes of experimentation) should be chosen from those standardized by reliable and scientific procedure. The giving and grading of tests should be in the hands of carefully trained people and the administration and supervision of a testing programme should be the function of a trained and experienced psychologist.

d. Interviews should be had with parents, and with teachers, principals, social workers, physicians and others who might throw light on the personality of the individual and his possible future plans.

e. On the records which should be kept for each student, space should be provided for recording each interview, and brief reports of interviews with other persons concerning the individual.'

The above extract emphasizes the necessity of knowing the history of the individual, his heredity, his environment, his economic status, his health, his school record, and his aptitudes as revealed by authentic tests. There are additional factors, however, which might well be recorded by the officers of any guidance system. I refer to his personal and social qualities. It is of the utmost importance that the individual's social assets should be carefully noted,--his ability to associate and work with people, his size, his social limitations, his diligence or lack of it, type of personality, qualities of leadership, whether studious or non-studious, and his avocational interests. Many of these things would have to be con-

sidered for certain types of employment.

Too much emphasis cannot be put upon the thorough exploration of the desires and tastes of the individual. In fact many guidance experts suggest that a splendid way in which to begin the work of counseling is to have the student fill out a self-analysis chart similar to that given by the Educational Department of the Young Men's Christian Association at Minneapolis, Minnesota. (1) The chart when completed is retained as a confidential record by the counselor, and is made the basis of further investigation, advice, and interviews. This card asks such questions as the following:

What are your favorite studies? In what studies are you weak? What is your hobby? Do you act impulsively? Do you make friends easily? Are you fond of company? Are you sensitive? Are you inclined to think yourself misunderstood? Are you most interested and at home with things--machinery tools, etc.--or with men, or with ideas? Are you persevering?

These questions are not unduly difficult, and, while the answers would have to be subject to verification in as many ways as possible, their use would appear to have some value as indicating the trend of the mind and character of the individual concerned.

The Vocational Guidance Record card used in the Technical Institute, Hamilton, Ontario, has seven sections, and yet is not unduly large. One section records the usual data: name, address, phone, day, month and year of birth, grade, date of first interview. A second section records the place of birth, date of enrolment, school last attended, grade attained, height, weight,

1. Davis: Vocational and Moral Guidance, p. 264.

appearance, name of parent or guardian, nationality of parent or guardian, occupation of parent or guardian, previous employment, if any, wages per week or month, firm's name, and phone. A third section records what a pupil excels in, what he fails in, his choice of special study, and parent's choice of special study. A fourth section gives a record of occupation secured on leaving school, with date, name of firm, rate of pay, probable increase, nature of employment. A fifth section classifies his attendance as regular or irregular, gives his special activity while at school, gives an estimate of his personality, and sums up his school conduct. A sixth section reviews his home conditions, noting kind of father and mother, regularity and kind of their employment, financial status, and leaves space for general remarks on this subject. A seventh section briefly sums up the student's academic standing, giving marks in each subject. The same school has another card reviewing thoroughly the medical and class-room history of the pupil.

Stratford Collegiate-Vocational Institute uses a record card for its commercial department which has five divisions: the first for name, address, phone, father's name, occupation, nationality and religion, his Collegiate standing, post-graduate schooling, other business training, school activities; the second for the usual academic record; the third for a personal analysis, giving health, initiative, willingness, dependability, thoroughness, type of employment preferred, personality, adaptability, comprehension, neatness, speed of work, public appearance, speaking voice, loyalty, punctuality; the fourth for business experience record giving occupation, employer, and references; a fifth for co-ordination record, giving date of visits

to the office in which he works by co-ordinating officer, employee's opinion of his office work, and employer's opinion of the individual.

To gain information for these records, the guidance officer must keep in very close touch with the class-room teacher who has extraordinary opportunities for learning the individuals character and personality as he responds to the discipline and work of the ordinary class-room and school activities. It is possible to do this by interview, and periodical reports by the teacher to the guidance officer on specially prepared forms.

A Study of Industries.

A child who is brought up in the country or in a small town has ample opportunity to acquire considerable information regarding the various industries in his community, but the individual whose home is in a large centre of population, where the number of different occupations number in the hundreds has very little chance to obtain first-hand information regarding the kind of work done in his city, and the conditions under which it is performed. As our industrial life grows in complexity this becomes increasingly true. It would therefore seem necessary, if our girls and boys are to make intelligent choice of life work, that some means be adopted to bring to their attention the nature and conditions of, and possibility of success in a wide field of human labour.

With this in mind, many educationists and others are now preparing occupational studies which present the facts concerning the nature, remuneration, working conditions, labour supply, education required for successful participation, chances of promotion, advantages and disadvantages, annual absorption, appren-

ticeship provisions, and characteristics of workers, of each industry, or major industries, in their particular community. In Canada the Department of Labor has published a series of booklets entitled 'Choosing a Life Work', embracing studies of general office work, stenography, bricklaying, and other occupations, such studies being available for the asking. The Vocational Guidance Committee of Montreal published in 1928 a booklet entitled 'Report of a Survey of Vocational Schools and Opportunities in Montreal' which contains, among other things, the name and address of each firm studied, the jobs they have to offer, the minimum age and the sex of employees, education required, whether apprentice training given, time required to learn, starting wage, wages for skilled workers, annual demand, chances of promotion, where to apply and any interesting general information found. (1) These booklets were distributed to the schools and social agencies for distribution to the boys and girls of the city. The Minneapolis Public School system, under the direction of the Vocational Guidance Director, publishes a monthly bulletin containing industrial studies based on surveys of industries. (2) The November, 1929, bulletin contains a study of 'Workers in the Knitting Mills', giving working conditions, labor supply, education and special training, promotion, advantages and disadvantages, divisions of the work, and summary of the industry.

1. Booklet obtainable from Prof. J. A. Coote, Engineering Bldg., McGill University, Montreal.

2. Vocational Guidance Bulletin, obtainable from Miss Barbara H. Wright, Board of Education, City Hall, Minneapolis.

In compiling such studies, a survey of each industry is essential and for this survey a definite outline should be adopted. Meyers (1) gives a very good general outline, which would need to be adapted to local conditions. The one given below was used by the writer in making a survey of the printing industry of the city of Oshawa.

SUGGESTED SURVEY OF PRINTING TRADES.

1. NATURE OF WORK:
 - a. Divisions of work, and duties in each division.
 - b. National or local.
 - c. Stable or frequently changing.
 - d. Seasonal or steady employment?
 - e. Holidays.
 - f. Sex of Workers.
2. MAIN ADVANTAGES AND DISADVANTAGES:
 - a. Factors that interest and develop the workers.
 - b. Factors that cause physical or nervous strain.
 - i. Eye.
 - ii. Ventilation....Any standard in shops?
 - iii. ~~Length of hours.~~
 - iv. Intensity of work.
 - v. Noise.
 - vi. Stand or sit.
 - vii. Time for lunch.
 - viii. Dust in atmosphere.
 - ix. Danger from machinery.
 - x. Contact with poisonous chemicals.
 - xi. Occupational diseases.
 - xii. Ventilation.
 - c. Factors that restrict or encourage mental growth:
 - i. Anything that would cause the individual to become narrow-minded, mechanized, machine-like.
 - ii. Broadening influence.
 - d. Influence of trade on moral character:
 - i. Character of associates, etc.
 - ii. Bad moral influences.
3. QUALIFICATIONS AND TRAINING NEEDED:
 - a. General Education.
 - b. Necessary technical education.
 - c. Manipulative skill required, if any, and tests thereof.
 - d. Qualities necessary;
 - Reading ability.
 - Accuracy.
 - Ability to meet public, etc.
 - e. Common deficiencies of workers.
4. POSSIBILITIES AND REQUIREMENTS OF TRADE:
 - a. Provisions for instruction, e.g., apprentice system.
 1. Problem of Vocational Guidance, p. 66.

- b. Can occupation be fully learned in establishment?
 - c. Is there any definite line of promotion?
 - d. What is possibility of promotion to better positions, ... foremanships, managerships, etc.
 - e. Speed of attainment...how long, for average boy, required to become Journeyman Printer.
5. HOW TO ENTER TRADE:
- a. Steps to be taken to enter as apprentice.
 - b. Work done at start.
 - c. Age at which generally enter.
 - d. Any written agreement entered into:
 In closed shop.
 In open shop.
6. REMUNERATION:
- a. At beginning.
 - b. At various stages of progress.
 - c. Ultimate wage earning possibility, on average.
 - d. How soon earning maximum.
7. SUPPLY OF LABOUR:
- a. Any difficulty getting labour.
 - b. What kind most difficult to get.
 - c. How many boys do you employ?
 - d. Do you suffer from frequent changes of personnel.
 i. Cost of Changing men..... ii. Boys.
 - e. Percentage of men.....of boys.....of girls in your employ.
 - f. Annual absorption of boys....of girls.
8. RELATIONSHIP TO UNIONS:
- a. Unions concerned.
 - b. What workers belong to Unions?
 - c. Understanding between unions and employers.
 - d. Majority closed or open shops, or non-union shops.
9. RELATION OF INDUSTRY TO SCHOOL:
- a. Could the trade be taught in part, or in its entirety in technical schools?
 - b. Could it be taught in part time classes, or in night school.
 - c. Could schools help you by giving some definite course?
 - d. Interested in having Printing in Technical?
10. GENERAL OBSERVATIONS.

In making such a survey, representative people in the industry should be consulted: the management, the foreman, the workers themselves.

When all the information has been thus collected, the findings should be embodied in a brief pamphlet for use by the boys and girls of the schools. Some Vocational Guidance Bureaus publish two such studies, a longer one for the use of guidance

counselors, and a shorter one for use of the students. The Bureau of the Chicago Board of Education has fifteen such studies as follows: Merchant Tailoring; Electric Light and Power Installation, Artificial Flower Industry; Photography; Beginning Office Positions for Young Women; A Handbook of Occupational Statistics; A Study of Physical Education, Athletic Coaching and Recreation Work; A Study of Nursing and Nursing Education; Mechanical Dentistry; Electrical Work in the Field of Electrical Manufacturing; Opportunities for Home Economists in Food Preparation; Beauty Culture; Work in Clinical Pathological Laboratories; Opportunities in U. S. Forest Service; Clerical Positions for Boys in Large Chicago Offices. (1)

The study that is to follow represents the results of the survey of the Printing Industry in the city of Oshawa made with the use of the above outline.

A STUDY OF OPPORTUNITIES IN THE PRINTING INDUSTRY.

IN THE CITY OF OSHAWA.

Nature and Extent of Work.

The work in the printing shops of this city is divided into five groups:

a. Typesetting, which is done both by hand and by machine. The people who set type by hand are known as Compositers; their duty is to set type using their hands to place the individual letters in the proper place. Practically all the job work of a particular nature must be done in this way. There are two typesetting machines, the linotype, and the monotype, each of which requires an expert operator. Compositers are usually men because of the fact that they are required to stand practically all the time. Women may qualify as linotypists, and

1. These booklets obtainable from Board of Education Chicago.

monotypists.

b. Press Work, which requires skill in the operation of the different kinds of printing presses, turning out the finished page after the type has been set. This work varies from the operation of the large cylinder presses used in the making of newspapers and in doing larger job items, to the use of the small flat presses which are usually used in the small job printing orders. On account of the comparatively heavy nature of this work, the workers are usually men.

c. Bindery Work, which includes the binding, by machine, of magazines, books, and pamphlets, a process which requires definite skill. Most of this work is usually done by female help, but the foreman is usually a man.

d. Ruling, which is the ruling, by machine, of the different forms necessary to accounting, filing and other records. The machine requires the acquisition of a distinct skill, which is only acquired after a prolonged apprenticeship. There is only one machine of this type in Oshawa.

The printing trade is national in scope, and a trained worker in any of the above groups can find similar work in any part of the country; in fact skilled workers frequently come from other countries, as witness the fact that a good many of our printers are immigrants from the British Isles. It is not seasonal; a worker gets steady work throughout the year. He may take two weeks holidays but without pay. The trade is open to both men and women, but as noted above, owing to the heavy work in the pressroom, and the large amount of standing in the work of the compositor, these two trades are generally occupied by men only. There are five shops in Oshawa, two large ones,

one small one, and two one-man shops.

Advantages.

There are certain things that ought to help in the development of the workers' intelligence. All kinds of information is constantly passing through his hands, making it convenient for an observant individual to acquire a good deal of knowledge. A good deal of the work can be done while the worker is sitting down. A skilled worker is practically assured of work since the shops only take on enough apprentices to fill the demand.

Disadvantages.

Due to the reading of all kinds of writing, very often under artificial light, and to the fact that the eye must be trained to recognize different kinds of type, there is a certain amount of eye-strain, which would make it inadvisable for anyone with weak eyes to enter this occupation. There is usually a considerable amount of noise, especially in the press room. The work is frequently quite intense owing to the fact that orders very often must be finished by a definite time. These two factors are found frequently to have a bad effect upon the nervous system of the workers, and some have suffered from bad nervous breakdowns. There is a slight danger from breathing in the fumes from the molten lead used in the operation of monotype and linotype machines, and hence a person with weak lungs would be unwise to enter the printing trade.

Qualifications and Training Needed.

A good general education is highly desirable. No shop is willing to engage an apprentice, except under exceptional conditions, who has not passed his entrance, and they much prefer

those who have taken at least two years of high school; if they have their matriculation, and have the other necessary qualifications, their progress is faster, and their ultimate chance of outstanding achievements much greater. Apprentices should be able to read and spell well, and should be alert and intelligent. A sense of the aesthetic and artistic will help them in setting up and designing jobs, and is of great value to a foreman or superintendent. The common deficiency of workers, say the employers, is the lack of ability to reason things out for themselves and to act on their own initiative.

For linotypists the manufacturers of linotype machines give instruction in their operation, which is of great help in the learning of the trade in the shop. Employers find that the instruction given at technical schools in the larger centres help the beginners materially, and make their progress much more rapid. However, all the training may be obtained in the shops. The worker begins as an apprentice, doing all kinds of odd jobs around the shop, sweeping, cleaning, running errands, and gradually working into the smaller jobs in connection with his trade. After about five years of such apprenticeship study, the boy or girl becomes a journeyman printer, or pressman, the time varying with the application and ability of the worker. The bindery workers attain full skill in their work in about two years.

To enter the trade, a boy simply interviews the manager where there is a vacancy, or a possible vacancy, in the case of a shop which is non-union; in a case of a union shop, he must see and be engaged by a foreman. If his qualifications are suitable he is hired. The employers like to have boys

about sixteen years of age; owing to the Adolescence Act, they are not allowed to take them on at a lesser age, unless with special permission.

Remuneration.

Apprentices are paid about \$6.00 per week to begin. At the end of 6 months, they receive an increase of \$2.00, and at the end of each succeeding six months, a further increase of \$1.00 per week. At the end of five years they are usually receiving about \$10.00 per week, but, since they are then full-fledged journeymen, they are open to engagement at regular journeyman wages. If they are exceptionally capable they may be advanced more quickly than the above indicates.

A journeyman compositor, monotypist, or linotypist receives from \$30.00 to \$60.00 per week, depending on his skill and the size of the city. In Oshawa the wage averages about \$32.00 to \$35.00 per week.

The ordinary employees begin at about the same wage, but, since the time of apprenticeship is not so long, and the skill required not so great, the ultimate wage, except for foremen, is about \$18.00 per week.

Supply of Labour, and Numbers Employed.

a. Compositers. There are about thirty-five employed in the five shops in the city, the majority of these being in two large shops. Four of these are apprentices.

b. Linotypists. There are nine employed in Oshawa, two of these being girls.

c. Monotypists. There are two in Oshawa, one being an apprentice. Both are men.

d. Pressmen. There are thirty-three employed in the city,

That they cannot be expected to make intelligent choice is patent. The first element in such a decision is knowledge.

Many guidance authorities are of the opinion that the imparting of such information should be begun in the elementary schools, on the ground that, since so many of our students enter industry from these schools, they should not be expected to do so with no informational background. Meyers (1) suggests that a general, but very definite study of certain industries should be made, not to develop skilled mechanics, but to produce 'more completely developed individuals, better citizens, and more intelligent consumers', and cites, for example, the importance of a study of the lumber industry, showing 'its place in the development of the country, our dependence upon it to-day, the principal lumber centres, the processes of lumbering, conditions under which the men work and live, and uses of the different kinds of lumber'. There is a limit to such studies, of course, and the same author suggests that those industries having the most relationship to our common life be included in the course of study, and that those having the least influence upon us be omitted.

It may be said that it would be difficult to get teachers capable of teaching such classes, but this should not be impossible, in view of the fact that many geography teachers, using modern methods, are presenting somewhat similar material without the occupational bias. The latter should not be impossible of introduction.

Davis (2) suggests the plan that he originated in the Central High School, at Grand Rapids, Michigan of closely associating

1. The Problem of Vocational Guidance, p.52.
2. Vocational and Moral Guidance, Ch.V.

the work of industrial study with the writing of compositions. He suggests topics for investigation and writing for all the grades from the seventh upward. The subjects include for the seventh and eighth grades, such topics as the following: What I will do when I grow up; an account of a visit to a large store or factory, telling in how many ways men, women, boys and girls were employed; kinds of work that you have seen men and women doing which you would not care to do and why; what some boys (or girls) are doing who left school; hunting a job. The plan is double-barrelled, in that it provides an excellent basis for composition, and a splendid motive for the study of local industrial conditions. Under the guidance of a skilled teacher, excellent results should be obtained. Its weakness lies in the absence of interest in this subject, and the inability of a certain percentage of composition teachers to make it effective.

Proctor (1) suggests that occupational information may best be imparted in the following ways:

- a. In connection with the regular school subjects.
- b. By carefully selected reading, either in the class-room, or by arrangement with the public or school library.
- c. By projects, carrying on, in connection with the class-room, miniature occupations like store-keeping, house-building, letter-carrying.
- d. By excursions to industrial plants, farms, orchards, dairies, stores, and other similar places.
- e. Occupational films, which could be prepared by Departments of Education and held for loan or hire to the individual schools.

All of these have their advantages, and disadvantages, but

1. Educational and Vocational Guidance, p. 272.

the fact remains that it is possible to do a great deal in the elementary grades to lessen the ignorance of our school children respecting the industrial life of their community, of which the great majority of them must become a part.

In the Secondary Schools, the study of occupations may become more definite. Davis (1) suggests that in the tenth grade the composition classes make a classification of occupations under such groups as agriculture, business, professions, industry, and that a general topic dealing with vocation in general, and preparation for vocations be assigned as the topic in composition. For the higher grades, such subjects as, 'What College Shall I Choose', and 'Shall I Go to College' are suggested.

In schools where it is possible to give space on the timetable to the study of occupations apart from any other subject, it will be found that the subject can be well presented from textbooks on occupations. A representative book of this type is 'Occupations' (2), which, after dealing with the general considerations that should mark one's approach to the study of occupations, deals with the more common of the country's industries. Such books must be studied, of course, in conjunction with the surveys of local industries and of industries in other cities by other vocational officers.

Brewer says (3) that 'the textbook should be supplied with exercises and suggestive questions, and should provide for the study of printed matter, visits, interviews, original investigations, reports, discussions and debates. It should candidly

1. Vocational and Moral Guidance, p. 68.
2. Gowin and Wheatley.
3. Vocational Guidance Movement, pp. 269, 270.

state the difficulties and problems in the occupations and should touch on the social and economic questions necessary to be understood.....Three or four good books, to cover the commercial, industrial, and professional occupations should be used as supplementary texts, and the books selected should have been written with the modern vocational guidance point of view in mind. In the high school age the pupils will be able to profit by detailed analyses of the occupations, and by analyses and examinations of their own characteristics as measured by concrete requirements'.

Other Methods of Imparting Industrial Information.

a. Addresses to student-body assemblies by leading men in representative industries. This is being done to a great extent now, even in Canada. Local industries, mercantile business, the various professions, representative trades, as well as politics and other forms of public service, should be included in this list. Speakers should be carefully chosen, on the basis of their ability to impart information logically and to keep a group of high school students interested for a period of half an hour.

b. Personal conferences both with the vocational adviser for the school and leading public-spirited representatives of the various industries and professions who would be willing to give time to interviewing a limited number of young people respecting their particular occupation. The guidance officer of the school should have, of course, definite information regarding all local industries and occupations always on hand, and available in handy form, such as was suggested above. In some schools, it is possible that heads of the various departments will be able to give much help in this direction, but their difficulty is to get

time for local investigation and for the other duties that are part of the work of the useful guidance official.

e. Part-time employment. This can often be arranged for the period after four, for Saturdays and vacation. This is an admirable way of gathering a limited amount of information, but the difficulty of covering a large number of industries in this way reduces the value of this expedient somewhat.

Placement.

At first glance the placement of our young people in the available vacancies would seem to be the function of our public or private employment bureaus. In view, however, of the very great care suggested to prepare the individual to intelligently choose an occupation suitable for his particular capacities, it would appear that society would be unwise to bring the boy or girl to the point where some vocation must be entered, and then leave him largely to his own devices or to the care of some employment agency which may not possess the knowledge and sympathy to give each case the proper consideration. If it is to function in a guidance capacity, if it is to guide the individual in choice of courses, in obtaining industrial information, in analyzing his abilities and tendencies, it seems to follow as a matter of course that the school, with its background of knowledge of, and sympathy for the boy or girl, should also act as the bridge between the school and the occupation. The individual should be placed in a position for which his health, outlook, temperament, ability and skill particularly fit him, and no organization should be better fitted to carry out this work than the school itself.

To do this several types of organization have been set up, types suited to the size and conditions of the local community.

In England, this work has been done frequently in connection with Juvenile Employment Exchanges, which are set up by the Board of Trade for the express purpose of assisting boys and girls under seventeen to obtain suitable employment. (1).

The officer in charge of this bureau is appointed in view of special aptitudes for doing this kind of work, and it is his duty to work in very close conjunction with the school officials who are doing the guidance work. In fact, oftentimes in the same office with the employment official is a representative of the school who first passes upon the youthful applicant for a position, and then turns him over to the employment officer with all the necessary data for intelligent placement.

In large cities, of 100,000 or over, there is frequently set up a central placement office with full-time placement officer, aided by a clerk, an office which is part of the school organization of that community. The individual who is seeking placement first consults the guidance counselor in his own school, who, after making certain that the individual's education, health, economic condition, and skill are such that he should be working, passes him on to the placement officer, who then endeavors to suitably locate the individual in a position.

In smaller cities, it is found more practical to have a placement counselor who may be a part-time teacher, if the community is not large enough to merit a full-time official. In Canada, the plan that seems to be popular is to have one or more regular teachers given time from their regular duties to perform the combined work of vocational adviser, investigator and placement officer. This latter plan, however, scarcely allows one

1. Bloomfield: Youth, School and Vocation. Ch. 6.

individual to do justice to both teaching and guidance duties. It is, however, a beginning.

Whatever the organization, the duties in all cases run along similar lines. The special committee appointed by the National Vocational Guidance Association for the purpose of reporting upon guidance in the placement office (1) states that the function of this office is, in general, to 'assist the individual to enter upon and make progress in the occupation of his choice'. When the individual comes to them seeking placement, the official should have available all the records presenting a full history of the case, including school record health, personality estimate, results of tests of all sorts wherever taken and a knowledge of previous work done by this same student in vacations or after school-hours. He should also have a record of available vacancies, full information about all firms, the employment conditions, wages paid, nature of employment, seasonal or non-seasonal type of employment, promotional policy. To do this, it will be necessary for the placement officer to spend a good deal of his time in actually making contacts with industries in order that there may be established that sympathetic touch between school and industry that will make possible the full utilization of the function of placement.

It is the duty of the placement officer, also, to ascertain if the applicant's desire to enter employment is based on sound reasoning. Many young students get the idea that they should go to work, or that they wish to go to work, which to them amounts often to the same thing, without really taking into consideration all the factors in the case. They should consider the following

1. Vocational Guidance Magazine, February, 1930, p. 211.

questions:

- a. Does the economic condition of the applicant and family make it necessary for him to go to work?
- b. Could he benefit from further educational training?
- c. Has he sufficient skill to enter any occupation with advantage to himself, and with any reasonable prospects for the future?
- d. Is the present the proper time for this particular individual to make the change from school to employment?

Very frequently, the applicant, realizing after an interview, that his decision has been reached with due consideration to the facts of the case decides to return to school and improve his preparation for the work of life. The possibility of such interviews makes it necessary that the placement officer have at his command full information regarding all the educational opportunities of his community.

Assuming, however, that the individual really should go to work, it is the duty of the placement official to introduce him to the employer with whom he is likely to obtain the proper employment. To make the interview successful the official should be able to coach the applicant in the proper method of making application for a position. Meyer (1) reports that A.Y. Reed found that 90 per cent. of those who were given instruction on how to apply were successful in obtaining the positions they sought, while only 60 per cent. of the others were successful. If the individual obtains the position he should report to the officer full particulars regarding the employment; if unsuccessful the officer should keep full record of that fact, along with

1. The Problem of Vocational Guidance, p.174.

the reasons, if obtainable, for the failure.

When the applicant is placed in a position which seems suitable the work of the placement officer is not yet done. It is his business to keep in touch with both the employer and the employee in order that any future difficulties may be ironed out. It may be that the individual will find that he does not possess sufficient qualification for promotion in his chosen field, in which case the placement officer should advise regarding further training. It is possible that the employer will find defects in the training of the employee, a condition which can be remedied by a little timely advice to the latter. This cooperation not only helps the individual but gives the placement officer suggestive material for strengthening the educational work going on in the community by advising the school authorities of the weaknesses of the product of their courses. It is found sometimes that the individual is unhappily placed, due to some slight misunderstanding or minor condition which can be duly remedied by a frank statement or a tactful hint on the part of the placement officer. After placement work has been done it is found sometimes that a mistake has been made and that the individual is either in a blind-alley job, or a position entirely unsuited to his capacity, in which case a change may be made at once to the satisfaction of both employer and employee.

It is seen, therefore, that placement is not merely getting a boy work, not a single act but a process which does not cease until the individual becomes what all guidance officials hope he will become, a self-directing unit in the great industrial or professional machine. Viewed in this light, placement is not at all divorced in principle from the whole educative process, but

is really an integral part of the work of the educational activity of the community.

The Place of Tests in Vocational Guidance.

The contribution of the various forms of psychological tests to education is still open to question, but the wide-spread activity in research in this direction gives the movement special significance to anyone interested in the guidance of youth.

Meyers (1) classifies tests as follows: 1. general intelligence tests; 2. special aptitude tests; 3. tests of personality and character traits; 4. tests of achievement or proficiency along specific lines. With these four different types I shall deal briefly in turn.

1. General Intelligence Tests.

These tests are of two types, individual and group, and are intended to determine the general intellectual ability of the persons tested. Terman distributes children between the ages of five and fourteen, on the basis of results obtained from his revision of the Binet tests, all the way along the road from genius to feeble-mindedness (2). With the Army Alpha and Beta tests, the members of the American expeditionary force were graded from very superior intelligence to very inferior intelligence. (3) Whatever their limitations, it seems to be reasonably well established that these tests do give a fair rating of potential mental capacity, although the results of any one test should not be accepted as final without corroboration being obtained from the use of the same or other tests at a later date.

1. The Problem of Vocational Guidance, p. 213.

2. See p. 14, this thesis.

3. See p. 5, this essay.

It is not the purpose of this thesis to discuss the tests themselves, or their administrations, but rather to point out in what way their results can be utilized in rendering scientific vocational guidance.

Payne (1) presents what he considers to be their uses as follows:

a. As a basis for the classification of students into A, B, and C sections for the purposes of instruction. This use is now quite generally followed in modern school systems.

b. As a means of assignment to courses or sections, so that homogeneous groups of students may be presented to the teacher for instruction, and so that the student may not be submitted to unfair competition by finding himself competing with students of much higher level of intelligence, or so that the student may not develop lazy habits of work by finding himself in a class or section of much lower level of intelligence than his own.

c. As a check on promotion, retardation, and elimination. If a student fails in promotion, and at the same time possesses a normal or higher level of intelligence...this is clearly a case for investigation. If a student of a low level of intelligence is promoted or is given high marks by the teacher, this again calls for investigation.

d. For diagnosing the individual needs of the pupils, recognizing individual differences, and making adjustments as between the individual and the present offerings of the school.

e. As a check on the classroom instruction, an aid in the improvement of classroom instruction, and a check on the marks of the various teachers and various students.

1. Organization of Vocational Guidance, p. 305.

f. As a basis for the formulation of new educational offerings to meet the known needs and individual differences of the various pupils.

g. As basis for a plan for certain pupils of high level of intelligence to do more and better work and to make more rapid progress.

h. As a basis on which the guidance counselor may prognosticate the probable success or failure of any student in an course of study in any school unit or any vocation.

i. As a basis for estimating the probable and possible educational career of any individual.

j. As a basis for the selection of certain schools or certain courses as educational objectives.

k. As a check on abnormal-behavior cases.

l. As a basis for the selection of certain occupations, trades or professions as vocational objectives.

Practically all of the above uses to which Payne suggests putting the results of intelligence tests could be summed up in one general use, namely, the grading and control of the individual pupil in order that he will be encouraged to develop himself to the limit of his intellectual capacity. That they have some real value in this connection is borne out by Froeter (1) who submits the result of a study of 955 high-school pupils to show that of those pupils who had an I. Q. of less than 100, 63.0 per cent. dropped out of the course, a tacit admission in most cases of its too great difficulty, and that of those pupils who had an I. Q. of more than 100, only 8 per cent. dropped out. This study would seem to indicate that the individual who tests

1. Educational and Vocational Guidance, p. 83.

well may be expected to do well in his school work, and that if he is not doing well there must be something wrong with his grouping, the teaching, or his efforts. On the other hand, the score in the test should give some quite definite idea of the possible achievement of the individual concerned on the upper rungs of the educational ladder.

The last use to which Payne suggests putting the results of these tests, namely, the selection of certain occupations, trades or professions as vocational objectives, is also suggested by Terman (1). He presents studies of policemen, express company employees, street-car employees and salesgirls, college students and social and industrial failures, to find out the minimum, maximum and median I. Q. found in these occupational groups, the suggestion being that those below the minimum could not well succeed in that work, that those above the maximum would not be content there, and that the individuals chosen to fill vacancies in the occupation should have I. Q.'s. approximating the median for the group. Payne (2) puts in chart form the results of similar studies over a wide field of occupations covering all phases of labor from unskilled to professional.

That would seem to be about as far as we may safely go in the use of general intelligence tests in vocational guidance. It is possible to point out the general field in which the individual will succeed and be happy, but with these tests alone it is not advisable to limit possible occupational activity to any narrower sphere than that.

2. Special Aptitude Tests.

Although many attempts have been made in this field

1. Intelligence of School Children, p. 271 ff.

2. The Organization of Vocational Guidance, p. 308.

to develop prognostic tests that will show with some degree of reliability the probable success of the individual in a definite occupation, but slight success has been achieved in this direction. Perhaps the most valuable investigations in this connection have been made by Dr. H. A. Toops who sought to develop tests that would show ability to deal with ideas, and symbols for ideas; tests that would test ability to deal with things and mechanisms; and tests to test ability to deal with clerical items and procedures. If successful, this experiment would enable psychologists to designate those who would be successful in the professions, in the trades, and in the counting-house. Of the preliminary work with these experiments, he reports (1) the test for ability with ideas to be satisfactory; the test for ability with things as satisfactory as any likely to be devised with our present knowledge; the test for ability with clerical items to be uncertain in its results.

If these three groups of tests can be perfected, they would make a distinct contribution to the cause of vocational guidance, as their fields coincide closely with the three great divisions of our educational efforts at present,--the matriculation, the commercial, the technical.

3. Tests of Personality and Character Traits.

So little has been accomplished in this field of a reliable nature that it would seem unwise to rate it as valuable at the present time. The most useful way of passing upon traits of character yet devised is to list the main elements of character that by common agreement enter into success in any occupation, have those who are intimate contact with the individuals concerned

1. Tests for Vocational Guidance of Children Thirteen to Sixteen, p. iv.

rate them under five classifications, A,B,C,D,E, for each trait named, and then average the ratings for each trait. By this method, it is possible to arrive at an estimate that would be of some value in measuring character. Its chief defect would be the large amount of work entailed for each teacher in recording the data from which she would make her final rating, since if this record is not kept, and the rating made only from a general impression, the final judgment would lack objective evidence, and therefore dependability.

4. Tests of achievement or proficiency along specific lines.

Here we are on more familiar ground; this is what even the traditional educationist has been doing for centuries by means of the age-old written examination. But to-day we are giving it new life. The need for finding out exactly what each man in the American Expeditionary Force was able to do in expert fashion caused those in charge of this work to devise trade tests for some 83 different trades whose services were needed in the ordinary conduct of the war,--carpenters, bricklayers, chauffeurs, and similar workers.

At the present time there are many achievement tests already standardized that can be used to test the proficiency of a candidate in various subjects. Payne (1) tells us that there are 124 such tests in the academic subjects, but only 20 in the field of vocational education. This latter field presents the greatest need in this particular. It would be a distinct advantage to a guidance officer, or, in fact, to any teacher, to have available achievement tests that would give reliable information regarding the ability of any individual in any one field of endeavor. It is very possible that the next few years will see the development

of such tests.

In summary, it is quite possible to obtain comparatively reliable information about the general intelligence of an individual, but not about special abilities or character traits, although tests for the latter two give valuable information. In using the results of any test of any kind, the counselor should not take the evidence of any one effort as being the ultimate judgment, but rather should seek to understand the individual with whom he is working having in mind his scholastic attainment, the results of all tests, the wishes of the person concerned, and any other factor that has a bearing on the case. Since tests have not reached yet a high standard of perfection, this is the only reasonable way to reach a dependable judgment.

Chapter VII.

THE ORGANIZATION OF VOCATIONAL GUIDANCE

The organization for administering a comprehensive programme of vocational guidance in any community should be such as would enable all the detail of the programme to be carried out successfully, and at the same time such as would properly relate the different activities to a well-defined guidance purpose. Every guidance activity should have very definitely in mind the proper development of the individual student with the object of finally assisting him to find life work suitable for his tastes and abilities.

Meyer (1) points out that, no matter how large or small the community, any guidance programme attempted should provide facilities for the following functions:

1. The progressive gathering of information concerning local occupations, and the preparation of this for use by counselors and pupils.
2. The collection of information respecting current vacancies as they occur daily, in order that placement may be carried on efficiently.
3. The collection of data concerning educational opportunities in the community.
4. The assembling in the office of each counselor the necessary physical, educational, social and psychological

1. The Problem of Vocational Guidance, p. 190.

data concerning pupils to be counseled.

5. The appointment of counselors, the definition of their functions, the supervision of their work, and the preparation of a uniform system of records.

6. The setting up of a placement office, properly related to counselors, permit officer, and guidance director.

7. The bringing into proper relationship with the work of guidance of the arrangements for issuing employment permits, in order to insure guidance service to the pupils thus concerned.

8. The investigation of vocational courses, in order to ascertain if they are properly related to the needs of the community.

9. To make arrangements for special examinations to be given individual pupils as to health, general intelligence, special aptitudes and emotional stability. This means a close contact with medical and psychological officials.

10. To determine what training should be given to individuals who choose certain occupations, and to arrange for this training being done effectively.

11. To carry on research into guidance problems in order to improve the service.

Such a broad program means that the work of guidance must be very carefully related to all the educational work going on in the community, but also that it should not be considered a subsidiary activity by officials who think it a minor duty, to be carried out after other and, to them, more important obligations have been satisfied. Guidance,

like every other educational activity, should be administered, therefore, under the direction of the Superintendent of Education for the community, but by a Director of Vocational Guidance, who, no matter how small or large his organization may be, will be responsible for carrying out the functions named above. In small communities he may be the only full-time guidance officer and in quite large cities, he may have a staff to give him assistance.

In view of the above the following organization is suggested.

a. The Advisory Council.

This should include representatives of educational institutions and social organizations especially interested in the problem,--representatives of employers and of labor, of state departments of labor, personnel workers and other appropriate persons. The Council might break up into a number of advisory committees for purposes of assisting in the special divisions of the guidance programme.....Every effort should be made to secure the intelligent interest and cooperation of all teachers, educational administrators, and others concerned with the vocational life of young and old in the community'. (I) With such a committee the director of guidance and his helpers should work in the closest accord since they are the link that will give the chain of guidance service its greatest strength.

1. Report of the Committee on the Revision of the Principles of Vocational Guidance, Vocational Guidance Magazine, February, 1930, p. 234.

In this connection, it is worthy of note that the Kiwanis organization has laid plans for giving the closest co-operation in this work. (1)

b. The Director of Vocational Guidance.

This individual should be a man who understands all the implications of guidance, and who has the ability and the personality to develop a strong, virile guidance service. In the larger communities he will need to direct others in the work; in the smaller, to do a great part of the work, apart from school-room counseling, himself. He should be responsible, whether by his own work or the work of others, for the organization of placement, for gathering information in reference to educational opportunity, for organizing counseling data, for coordinating his work and the work of the permit officer, for the investigation of vocational courses, and for taking the proper steps to make provision for a varied vocational education service in the community. In the larger communities his task should be largely supervisory, the actual work being done by assistants in charge of the various functions; in the smaller communities he will be all general officials combined in one. He should also give directive lectures to the counselors, confer with selected teachers and principals with a view to strengthening the work of guidance in the community, and arrange for careful records of the guidance activities of the community.

1. Vocational Guidance and Placement in Kiwanis for 1930, the Vocational Guidance Magazine, January, 1930, p.161; Kiwanis International and Vocational Guidance, Vocational Guidance Magazine, March 1930, p. 271.

c. The Counselor.

This official is one of the key men in the successful operation of guidance programmes. A very important part of the work of guidance is in his hands, namely, the actual contact with the individual student in the schools. He should be, therefore, a man of keen insight, possessing 'tact, patience, the spirit of service, together with a respect for scientific accuracy and an appreciation of research methods'. (1) He should have also a good education and a specialized training in guidance work of as wide a scope as possible, and preferably a wide experience in social and educational work, especially in the handling of people.

He should be responsible for the occupational courses given in the school, for all guidance activity carried on there, such as guidance clubs among the students, platform lectures by representative men from the various occupations, for consulting and counseling pupils, for keeping proper records of students, for suggesting curricular changes, for cooperating closely with the placement officer and the permit officer, for intelligent co-operation between the school and the parent, for employing tests, interviews and every other possible means to secure a scientific conception of the pupil's health, mental ability, personality and rate of improvement.

1. Report of the Committee on the Revision of the Principles of Vocational Guidance, Vocational Guidance Magazine, February, 1930, p. 235.

Since the work of the counselor is so very vital, it is of paramount importance that he be trained for his work. Proctor (1) suggests that counselors in elementary schools should have courses in economics, in sociology, in educational psychology, in educational tests, measurements and statistics and their interpretation, and that counselors in secondary schools should hold a University degree, be specialists in some branch of teaching, possess definite training in guidance, as well as the qualifications named for the same official for the elementary school. Both types of counselors should be as well trained as facilities will permit, since the counselor is the cornerstone of the whole project.

General Organization.

In the smaller communities vocational guidance activities should be organized at least in a separate office, perhaps a room in the most central school, equipped with the proper recording facilities, and with at least part-time clerical assistance. In the larger communities, the necessities of the case will require separate offices for the various officers. In the school itself the counselor should have a private office for advisory purposes, the necessary recording equipment, and, if his duties are heavy, a part-time clerk to assist him. Since guidance is such an increasingly important factor in our educational progress, no physical equipment should be lacking to make it effective.

1. Educational and Vocational Guidance, p. 722.

Chapter VIII.

THE STATUS OF GUIDANCE IN CANADA

Educational Guidance.

Slow but steady steps are being taken in Canada in the matter of educational guidance. The last fifteen years have seen an outstanding development in what is popularly known as vocational education, a development embracing the operation of commercial and technical schools and departments on an ever-increasing scale of proficiency. Those entering the stage of secondary education do not find themselves forced to follow the old matriculation course and that only, even if their desires would lead them into industrial or clerical work. The weakness of our present situation is, however, that the break between the education as offered in the elementary schools, and that offered in the secondary schools is too great. The child of from eleven to fifteen years of age is asked to decide permanently whether he or she wishes the courses offered in the matriculation, commercial, industrial or household arts department or school, and in most cases the individual must make this momentous decision with very little knowledge of the issues at stake. I have found from a survey of representative secondary and elementary schools of the Province of Ontario that about the only organized attempt to give the children of the entrance classes of our elementary school a knowledge of the courses

offered in the secondary schools has been to do one or more of the following things:

i. Publish an outline of the courses offered in pamphlet form and distribute this to the entrance pupils in the public schools, or to publish the same outline in the local paper.

ii. The Principal of the Secondary Schools or heads of the main departments, go to the various elementary schools to address the entrance classes on the subject of secondary education. This is splendid as far as it goes, but it is woefully lacking in any real value. How much does the average school child comprehend of any new subject presented to him once in a half-hour address by a strange man, especially a subject having as many angles as secondary education? What a fatuous, though admittedly sincere, attempt to solve such a vital problem!

In some centres a little more scientific attempt is being made to solve the problem. The Hamilton Technical Institute offers courses to pupils in the Junior and Senior Fourth classes of the elementary school, and, while the children are pursuing these regular courses of elementary grade, they may also experiment in the various shop subjects for these two years. When they pass their entrance, they have then some basis in experience for choosing the department of that technical school in which they would like to specialize. A similar procedure is followed at the Vocational School in St. John, New Brunswick. This is a commendable departure towards the principle of exploratory courses, but it has one

weakness, namely that the exploration is only in industrial arts.

Those in charge of the Windsor-Walkerville Technical School have worked out a commendable system also. The head of the Technical Department there makes the usual tour of the elementary school entrance classes in the spring of the year explaining the various courses offered by the technical school, but announcing that he will set aside certain hours in his office, in which prospective students with their parents may come and interview him regarding the course to be taken. This is well-worth while, but its weakness lies in the fact that it is a physical impossibility for him to organize the necessary information to give scientific advice, along with the multiplicity of duties which must be his.

The most hopeful experiment found in Canada in this connection is being carried on, not in Ontario at all, but in Manitoba and British Columbia. In these two provinces the Junior High School, which offers exploratory courses in matriculation, technical and commercial subjects, for grades corresponding to our Junior IV, Senior IV, and First Year High School, is being developed to a considerable extent. The city of Winnipeg has at least ten such schools, and the city of Vancouver at least two. The courses offered include certain definite constants in each grade, and several variables from which the individual chooses one or two in which he would like to experiment. This attempt to solve a difficult problem is so significant that the curricula for the three grades of the school, as outlined by the Department

of Education for British Columbia, are appended. (1)

Grade VII.

Constants:	Periods per week.
English.....	5
Social Studies.....	5
Health and Physical Education.....	3
Mathematics.....	5
Practical Arts.....	4
General Science.....	2
Music.....	2
Art.....	2
Study.....	5
Total.....	<u>33</u>

Variables:

French.....	3-5
or	
Special English (additional).....	3-5
or	
General Language.....	5
Practical Arts (additional).....	2-6
Health and Physical Education (additional)	1-2
Study (additional).....	2
Special Try-out Courses in any authorized subject, running from one-quarter to one-half year	3-5.

Grade VIII.

Constants:

English.....	5
Social Studies.....	5
Health and Physical Education.....	3
Mathematics.....	5
Practical Arts.....	4
General Science.....	2
Music.....	2
Study.....	4
Total.....	<u>30.</u>

Variables:

French.....	5
Latin.....	5
or	
Special English.....	3-5
or	
General Language.....	5
Practical Arts.....	2-6
Health and Physical Education.....	1-2
Agriculture.....	3
Art.....	2-5
Typewriting.....	2-5

1. Programme of Studies for the Junior High Schools of British Columbia, 1927-1928, obtainable from the Department of Education, Victoria, B.C.

Junior Business.....	2-5
Study (additional).....	1-3
Special Try-out Courses, running from one-quarter to one-half year..	3-5

Grade IX.

Constants:

English.....	5
Social Studies.....	5
Health and Physical Education.....	3
Study.....	7

Variables:

French.....	5
Latin.....	5
Ancient History, 5 (for half-year or 3 (for whole year)	
Special English.....	3-5
General Science.....	3-5
Agriculture.....	5
General Mathematics.....	5
Business Arithmetic.....	2-5
Shop Arithmetic.....	2-5
Art.....	2-5
Music.....	2-5
Practical Arts.....	2-10.
Typewriting.....	2-5
Bookkeeping.....	2-5
Shorthand.....	2-5
Junior Business.....	2-5
Health and Physical Education....	1-2.

The above means that in the first year of the Junior High School, experimenting may be done in 7 40-minute periods per week; in the second year, in 10 such periods; and in the third year in 20 such periods.

In addition to the above experiments with normal students, auxiliary and prevocational classes are being conducted in many centres; the former for the very definitely feeble-minded, and in connection with the elementary school work; the latter in Junior Vocational Schools, for the manually-minded dull pupils who are not able to master the usual elementary school course with success. The Junior Vocational School in the city of Toronto is an outstanding example of this latter type. Similar work is being done in small cities having a technical

school, the junior vocational work being done in the same building as the usual industrial work of secondary grade. This does a great deal to solve the problem of what to do with the child who is materially retarded in his elementary school course and seems likely to stop school on account of his failure to master it. The difficulty of handling this work in the smaller city is that it mixes secondary and elementary education to such an extent as to cause administrative troubles, and to engender in the minds of principals and organizers the fear that the work and status of technical education of secondary grade will suffer in the community. This possibility, while it should be guarded against, can scarcely be allowed to outweigh the gain in having the prevocational classes operating.

Another movement of merit in Canada is the attempt to provide classes for the exceptionally brilliant in both the elementary and secondary schools. These are usually discovered by some form of intelligence tests, used in conjunction with the usual examinations, and are grouped in separate classes the curricula for which is greatly enriched. One such class operates in the city of Oshawa with success. In addition to having the regular subjects enriched, it has added to the study of conversational French in which the children are reported to be making splendid progress.

This idea is carried to its logical conclusion in Toronto in one of the large public schools (1) where an X Y Z classification was made in each grade from the second up, the X classes carrying an enriched curriculum, the Z groups having

1. Information obtainable from the Senior Inspector of Public School.

the non-essentials eliminated. Those in charge of this experiment are convinced that it is a marked success, since it allows the teacher to fit the pace and the content of the course to the class, and, in as much as the slower pupils are grouped together, enables the latter to proceed slowly without embarrassment. It requires, however, exceptionally well-qualified teachers.

In the opinion of the writer, there are two or three outstanding needs in the provisions made for education in the Province of Ontario.

i. The extension of the principle of exploratory courses, whether in separately organized Junior High School, or in connection with our Collegiate-Vocational Schools, or as part of the Elementary School. In the larger cities, since in the natural course of events further school accommodation would have to be provided, and since the Junior High School would simply relieve the pressure in the Elementary and Collegiate classes, the first idea could well be adopted as the communities continue to grow. In small communities the classes could readily be carried on according to the second or third plan, using either the Collegiate-Vocational organization, or some central Elementary School equipped with a general shop room, and a typewriting room.

ii. The organization of prevocational or junior vocational schools to take care of the great number of students who do not seem to be able to master the usual elementary school course, thus providing some vocational training for those whose ability does not enable them to proceed to secondary work. Reasons in abundance for this will be found in this thesis pages 18-33.

iii. The organization of a new composite course in our secondary schools. The studies in Chapter 11 of this thesis respecting intergrade shrinkage (1) show that in the Collegiate-Vocational schools from 45 to 52 out of every hundred individuals beginning the high-school course do not return for the second year, 64 out of every hundred do not enter the third year, and about 74 out of every hundred do not enter the fourth year. This indicates that many students either find the course too difficult, or are pursuing it only with the idea of getting a 'general' education. But the trouble is that the course is not 'general'. The matriculation course is designed especially for those who wish to pursue higher education, and the great majority of those taking it do not plan to attend college. To provide a course for such students that would give them a good general training for the life they are going to live would be, in the opinion of the writer, a distinct advance. Many of these students enter mercantile businesses, become sales-clerks, salesmen, general office workers, shop workers of a general kind, contractors, or any one of a hundred other kindred workers. Almost all, male and female alike, set up homes and assume the obligations of citizenship. It is suggested here that a course embracing about twenty-five per cent. business subjects like typewriting, junior bookkeeping, business arithmetic and salesmanship; about twenty-five per cent. industrial or household arts subjects, such as automotives, wood-working, drafting, for the boys, and cooking, dressmaking, millinery, for the girls; and about fifty per cent. social studies, such

as English, history, economics, geography, for all, would be an excellent background for the work that about fifty per cent. of those who now take the matriculation course are going to perform. It would give them an elementary knowledge of business, and the industrial and household arts, and would create that social-consciousness, and that preparation for the proper use of leisure time, that should characterize a good citizenship.

Occupational Information Courses.

Only a beginning, and that very small indeed, has been made in Canada in preparing industrial information courses, or in the imparting of industrial information, to the students of our elementary and secondary schools. Some scientific study of industry has been made, witness the publications of the Ontario Government Department of Labour (1) the publications of the Department of Labour at Ottawa, (2) and the compact study of industries of Montreal. (3) As far as the writer has discovered, however, no such study has been made available for use in schools.

Nor has much been done in the way of organized occupational classes in our schools. In the Port Arthur Technical School,

1. Vocational Opportunities in the Industries of Ontario, a series of surveys available at Department of Labour, Toronto.

2. 'Choosing a Life Work' series obtainable at Department of Labour, Ottawa.

3. Report of a Survey of Vocational School and Opportunities in Montreal, obtainable from Prof. J.A. Coote, McGill University.

the shop teachers give talks in the Spring to the various classes outlining the work of their particular trade. In quite a large number of Secondary Schools addresses on the various vocations and professions are given by leading men of representative occupations of the community. This type of work is supplemented in several schools, the Windsor-Walkerville Technical, the Central and Western High Schools of Commerce, Toronto, the London Technical-Commercial High School, the Hamilton Technical Institute, the Oshawa Collegiate and Vocational School, the Stratford Collegiate and Vocational School, and others, by teachers who are granted time from their regular teaching duties to investigate conditions in offices and shops with a view to co-ordinating the work of the school with the needs of the community. But this, while being a start, is not enough. To be effective occupational courses should be begun in the Elementary Schools, and this is not being done at all.

Study of the Student.

While an adequate study of the student, beyond that relating to everyday contacts which are by no means valueless, is not being made in any Canadian schools to the knowledge of the writer, yet there are hopeful beginnings. Many of our supervising principals and inspectors in the elementary schools are now using intelligence tests to segregate the pupils for auxiliary classes, and, in some instances, for the special classes composed of very bright pupils. In this connection the Chatham Board of Education has appointed a Co-ordination Officer for the public schools whose training is such that he will be able to do intelligence testing, vocational advising, and kindred tasks. This would seem to be

the first officer of this kind for the elementary schools in the Province.

But practically nothing has been done in the actual administration of aptitude tests, and little in the use of achievement tests to get information about the individual students. The usual records of examination marks are being kept, but beyond this our records show little regarding the student. Of about 65 schools, about 50 of which were of Secondary grade, surveyed by the writer only three or four submitted evidence of having an adequate system of records that would give a sufficient history of the individual to make adequate judgments about his abilities or tendencies.

(1) One thing badly needed in Canadian School, if guidance is ever to attain usefulness, is a cumulative record showing the whole history of the individual student from the primary grade upward, including family background, standing in achievement, intelligence and aptitude tests, response to discipline, scholastic record, special abilities, employment experiments, and all other data helpful in giving advice.

Placement.

As far as our vocational schools are concerned this is being done as well as one would expect in a province where so little has been begun in other guidance activities. The larger vocational schools are seeking to place their students properly, are giving time to teachers to do follow-up work, to advise further educational training, and to see to it that

1. See reference to Stratford and Hamilton cards,

students are not placed in objectionable offices and shops. The Commercial Schools and the Technical Schools of London, Toronto, Hamilton, Guelph, Kitchener, Oshawa, Stratford, all are doing this kind of work, but it would seem that the smaller institutions of this type are doing little scientific placement.

Organization.

One or two schools in Ontario have full-time co-ordination officers. The Toronto Technical Schools employ one man, Mr. Gordon N. Kennedy, for this work, and the Inathan Board of Education has recently employed a full-time official for the public schools. In most of the other schools who attempt the co-ordination of industry and office with the school, individual teachers are allowed time from their regular work to look after placement, investigation of industrial and office conditions and requirements, and to keep in touch with students seeking placement and advice. This is about the sum-total of the guidance organization yet attempted in Ontario. The Kitsilano High and Junior High School of Vancouver, B.C., has one teacher who devotes five periods daily to the duties of vocational counselor, for girls, but this is the only case the writer met in his survey where so much importance is attached to guidance. The same school will have a guidance officer for the boys as soon as one of their teachers, who is now at Columbia University qualifying, returns.

In this respect the Matriculation students are given the least attention. It is thought, apparently, that because the student is a potential matriculant that guidance is not needed for him, but even if he does take full matriculation, his

difficulties regarding choice of vocation are, in many cases, only beginning. A good occupational course, or series of courses, during the elementary and secondary grades, plus tactful advice from a guidance officer, advice based on scientific records, would send the individual to College or into industry or office with vocational purposes well-defined in the majority of cases. As the situation rests now, one of the great needs of matriculation students is for guidance, guidance which would cause many of them at least to take courses more suited to their particular capacities.

One school in Ontario that is giving consideration to this programme is Pickering College, a school for boys at Newmarket, Ontario. Mr. Taylor Statten is employed there as personnel worker, and he reports that he adopts every means in his power,--intelligence and aptitude tests, records, interviews, assembly talks on guidance and character, and placement where necessary, to give point to the careers of the boys under his charge. To this care for the individual the Principal attributed the popularity of the school.

In no city in Canada however, is there an adequate vocational guidance organization with a Director in charge to give the guidance activity direction and point, a condition which is in strange contrast to cities like Minneapolis and Boston, where full guidance activities are in full swing.

Training for Vocational Guidance.

One of the pressing needs in Canada is training in Voc-

ational Guidance for teachers. The only place where this is attempted to the knowledge of the writer, is the Ontario Training College for Technical Teachers, at Hamilton, Ontario, where a course in this subject is given by Mr. M.A. Sorsoleil, M.A., a course which embraces the following considerations;

- i. The recognition of individual differences.
- ii. The ancient and modern modes commonly used to account for or determine the existence of these individual differences.
- iii. The need for Vocational Guidance arising from these individual differences, general lack of knowledge of the nature of occupations, and increasing specialization in occupations.
- iv. The personal, social and national loss through mis-directed or undirected abilities.
- v. The function of intelligence, performance and achievement tests in determining abilities.
- vi. The conduct of industrial surveys for the purpose of determining the number of positions available, the nature of occupational training required, remuneration, healthfulness, opportunities for promotion.
- vii. The card indexing of students for the purpose of tabulating their capacities and characteristics as revealed in tests, examinations, school and playfield conduct.
- viii. The placement of students in suitable occupations and the follow up of students placed.
- ix. A brief history of the movement.

Since this course is given only in connection with the training of technical teachers, its usefulness is limited to the service of those teachers. The time is ripe for the adoption on the part of the educational forces of the country of an adequate course in this subject in connection with the various training schools, normal schools, and colleges of education

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