

THE EDUCATIONAL FATES OF COLLEGE
ENTRANTS IN THE TWO LOWEST AMERICAN COUNCIL
ON EDUCATION TEST DECILES

by

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CHAPTER I

Some of the General Problems of Guidance

While guidance is probably as old as mankind, it is a very new activity as a formal movement with consciously defined purpose and procedures, a scientific foundation, and a school-wide or a universal scope. There are many considerations of guidance in its several branches in the writings of the classical authors (30). In the later centuries of recorded history there have been many excellent teachers who inspired their pupils and influenced their lives profoundly long after the young people left their early classrooms and even the communities of their youth (5, 12, 17, 18). Many of the famous teachers in history have been famous because they improved the methods or the philosophies of education; but they should be more revered because they sent out, in many cases, younger teachers filled with the determination to be the best teachers within the bounds of their abilities. Uniformly, the interests of the really great teachers have been in children and young people as entities.

Unfortunately, the history of education has been too much a succession of fads and counterfads (17, 18). There is little that is new in the processes of education. In the last several decades, there has been an elaborate attempt at the analysis of the educative process, principally in the techniques of education. The testing movement in its several fields has been developed. The methods of

big business have been introduced into the management of school systems. These movements have yielded something of good and something of bad, largely through the extent to which they have superseded the welfare of the pupils as the principal work of the schools. The analysis of techniques has yielded some more definite understanding of the psychology of learning and the development of attitudes, but it has done much harm in the cases in which it has supplanted interest in and working with the pupils themselves. The same thing is true of the testing movement. It contains great potentiality for good, but always in terms of pupils instead of compilations of unapplied data (31, 52, 53). The introduction of the methods of big business has not been altogether beneficial for the schools. Instead of being held to a useful minimum, they have brought about some extensive misinterpretations of the purposes of education and of school systems. In too many cases, they have placed their emphasis on minutiae, artificial systematization, and a relegation of the teacher to the distant background of unimportance. Not only has there been, in too frequent practice, a minimization of the work of the teacher but limitations have been placed on the teachers' initiatives by the formalization of methods and a demand for docility (40) that has resulted in making the teachers spiritless or, what is worse, petty politicians in imitation of their superiors in rank. Too frequently, the center of the school has been a set of accounting books or the political fortunes of the dispenser of the funds rather than the guidance and instruction of the pupils themselves and, next to them, the assistance of the teachers who actually work with the children.

The rise of three movements during the present century, especially the last decade, confirms the belief that many educators have

gone too far in the formalization of the schools and that a counter-movement has set in. In all three of these new movements lies some degree of attempt to restore the emphasis in the schools to the children. The latest of these movements, and in some ways the least tangible, is the movement for the re-organization of the curriculum. Such re-organization has been going on for centuries, lagging sometimes it is true; but there is nothing new in the idea and little that is new in the technique of re-organization. Another of these movements is the so-called progressive education movement. This contains nothing new to experienced educators but is merely a swing of the pendulum away from one kind of formalization back to the general development of the children themselves and, possibly, to another kind of formalization (42).

The third movement designed to return the attention of the schools to the pupils is the guidance movement. Like all movements in education, it will succeed or fail as it is developed in a sane and useful manner or is treated as a panacea to be composed of empty terms. At the present time, it is a quaint mixture of both in actual practice (9, 10, 13, 15, 20, 28, 34, 35, 48). Its stated purposes contain the highest ideals as set forth in the following: "The purpose of organized guidance (1) is to assure to every child the advantages of individual treatment that have always been provided by the best teachers for the most fortunate children under the most favorable circumstances and to improve these services through the development of a specially selected and trained personnel, improved instruments, better understood scientific principles, and an organization within the curriculum and the program of the school which will provide the conditions

necessary for the greatest possible success of the work."

The guidance movement has arisen from many sources --- some thoroughly commendable, others more questionable (9, 10, 13, 15, 28, 30, 33, 34, 35, 37, 46, 52, 53). Among these are the desire of conscientious school people to carry the pupils through to some logical destination; to protect the young people just out of school and in industry from exploitation by those employers who are unscrupulous and, in turn, to protect employers from unscrupulous, misplaced, or ill-advised young people just out of school and placed in industry by the school; to train the pupils of the school as specifically and as thoroughly as possible for their immediate destinations at the end of the school period in which they are located at that time --- whether this destination be employment or continued formal education; and to correct such personality or behavior patterns as handicap the pupil in his self-development or which make him or her unemployable in spite of having attained certain specific skills.

Teachers who developed a program caring for the part-time employment of pupils and the placement of pupils in full-time positions had a large hand in the actual development of the guidance movement. Employers, themselves, had a considerable part --- whether their motives were beneficent or selfish. Educational philosophers, also, had some part in the growth of the movement; but whether a large part or not is at least debatable. The growth of analytical psychology and the testing movement have contributed a great deal to guidance --- some of it good, some of it not so good. The labor unions have played a part in this movement, as well. The periods of financial stringency in the last two or three decades have called attention to the possibili-

ties inherent in guidance. The fact of the rapid stratification of society, possibly interrupted for the time by the current political regime, has played and is playing a part. The industrialization of the United States and most of the civilized and even semi-civilized nations has had a most important influence. All of these and other contributing factors have brought about guidance and have made it what it is at the moment. It may, in the future, grow to a place of large educational importance or it may be strangled by superficiality and incompetent administration until it becomes merely another unit in the long procession of ghostly educational enthusiasms.

What is guidance and the guidance movement? What are its purposes? What limits should be circumscribed about it and why? What problems does it face in its administration and in the maintenance of its existence?

At the present time it is impossible to give a definition of guidance or the guidance movements. Definition means the inclusion of the desired things and the exclusion of all other things. Definition also means a general acceptance of the limits laid out. At present, guidance includes practically all of the field of education or a close correlation with all parts of the field of education, much of the field of psychology, a great deal of the field of sociology, and more than a dash of economics, civics, physiology, trade and professional training, and anything else that can be related to the training, direction, advising, or the placement and adjustment in placement of pupils in employment or in more advanced schools. Among other things, it involves the measurement of mechanical and artistic skills, the rates of muscular reaction times, the quality of

hearing and of color vision, the correction of personality faults, the giving of mental hygiene therapy, the development of attitudes and ambitions, corrective gymnastics and remedial teaching in subject-matter, placement in jobs and supervision on the job, oversight of living conditions and recreational activities, selection of institutions of higher learning and of major fields of specialization within these, the selection and training of foremen, the compilation of information about jobs and analyses of their requirements and rewards, health and civic information, and many other things (2, 3, 4, 7, 8, 9, 10, 11, 13, 14, 15, 16, 17, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 35, 36, 37, 38, 39, 40, 43, 45, 46, 47, 48, 49, 50, 51, 52, 53, 33).

The purpose of guidance, in theory, is simple enough. It is the furnishing of specifically directed and carefully adapted education or training carried to a logical conclusion in the adequate self-dependence of the pupil in all normal phases of activity. In practice, it is so comprehensive that no small staff within a school or elsewhere can have either the necessary training or the time to carry out the ideals of the movement in a satisfactory way. Staffs large enough to do all that is implied in a complete program of guidance are economically unacceptable according to present fashions of thought. This means, then, the limitation of the guidance program which any particular school or similar unit can seek to provide. This, in turn, means the selection of the activities which will be carried out, the degree of emphasis to be placed on each, and the reasons for these selections and emphases. At the present, then, and for many years in the future any limitations will have to be largely

arbitrary in the absence of funds sufficient to carry out the whole program and the lack of much scientific knowledge of the parts of the program essential for the meeting of particular needs.

The problems of the administration of guidance and the choosing of courses of action that will preserve the usefulness of the field are many and momentous --- not only to the workers in the field but to the pupils who would be benefitted by a good guidance program and through them the nations of which they are parts (25, 26, 29, 47). From within the schools, the greatest dangers are probably superficiality and formalization. From without, the dangers are less predictable and less subject to control. One is the rapidly changing economic situation which at present approaches a condition of economic turmoil (30). Another is the changing social organization, with its unstable ideals and desires (30). Another is the present conflict of ideals and plans of governmental organization and morality (30). A crisis seems to be approaching between the democratic form of government and the authoritarian form. In many nations, governmental morality --- within and without the nation --- is at a low ebb. Whether this is a matter of decades or of centuries can not be determined at the present time, but it does influence the field of guidance on a strictly factual basis. The attitudes of the labor unions present a very real difficulty to both vocational education and vocational guidance. If one accepts guidance as education or training adapted toward fairly specific ends for each pupil, he can see that this purpose can be successful only in a fairly stable situation where the duration of the ends for which pupils are to be trained can be predicted with some reasonableness and accuracy.

Another part of the problem of guidance is its continued mainten-

ance as one broad field or its re-division into three, or more, specialized fields (2, 3, 4, 7, 8, 9, 10, 11, 13, 14, 15, 20, 23, 28, 30, 31, 32, 33, 34, 35, 37, 39, 41, 45, 46, 47, 48, 49, 50, 52, 53). In the earlier stages of the development of the guidance movement, the only part that was definitely organized was vocational guidance. The movement was called by this name for more than a decade. Later the term, educational guidance, was added as people recognized the importance of directing different types of pupils through the multiplicity of courses in the metropolitan junior and senior high schools and the desirability of choosing different kinds of high schools, colleges, and universities for young people of different interests and abilities. Still later, and influenced by the rise of the mental hygiene movement, personal guidance was added; and the name of the whole field was changed to the "guidance movement".

Another part of the problem of guidance is its relation to vocational education. Vocational education had its inception in the guild schools of Europe (c. 1000-1800) and the industrial revolution (c. 1750-1850). In the United States, it worked its way through the early academies; the land grants to colleges of agriculture and mechanical arts; the Sloyd movement; the manual training movement; the vestibule schools; the Smith-Hughes Act of 1917; the George-Deen Act of 1936; the private schools in the slum districts --- such as the Jane Hayes Gates School in Kansas City, Missouri, and the Emily Griffith School in Denver, Colorado; and the "metropolitan" and vocational junior and senior high schools of many of the industrial cities.

Vocational education is as comprehensive and vague in its definitions as is guidance in its. Under the name of vocational education,

classes in shoe-shining and the most routine tasks of "helpers" in the skilled trades have been taught in public and in private schools. In a similar way, research work of a most technical nature and requiring the highest intelligence and long years of training has been carried on in small laboratory groups made up of people who were said to be receiving vocational education. The problem of the relation of vocational guidance to vocational education is complicated because both are so illy-defined; they overlap considerably; and the question of which should lead and which should follow depends primarily on the field in which the speaker or writer is working.

With this most hasty introduction to the subject of guidance, this thesis turns to an equally brief survey of the guidance movement and its development in the larger nations of the occidental hemisphere.

CHAPTER II

A Brief Discussion of the Development of the Guidance Movement

Vocational guidance is the conscious process by which young people are helped to select, prepare for, enter into, and make progress in a vocation that is optimally satisfying to the best of their capabilities and with which they may contribute to their own and to society's well-being. Such a process implies an analysis of individuals, an outlining by the use of the best scientific techniques available of occupational demands and occupational trends, and wise deductions from these analyses that will help the individual so that he may choose certain occupational channels for his own. Educational guidance is so interwoven with the general processes of education that a similar statement concerning its limits is well-nigh impossible. The same is true for personal guidance except that it is more closely related to mental hygiene.

In order to understand more fully the present status of guidance, one should have some background knowledge of the development of this movement in other nations as well as in the United States. He should understand the social, economic, and political beliefs and traditions which intermingle to form the setting in which guidance must function. In ancient times, there was an environment vastly different from that of today. In Europe, as compared with the United States, two polar ideas stand out at present. One emphasizes the ultimate good of the state through the freedom of the individual to select and develop his interests; the other pronounces that what is good for the state is good for the individual and the latter must subject himself almost en-

tirely to the former. While modern nations differ on this point, they resemble each other closely in conditions of economic and social change and the importance of the adjustment of individuals to these changes. All of the civilized nations have turned or are turning to guidance, especially vocational guidance as the most obvious kind, as one of the most useful tools in the furtherance of their programs and the development of their people.

From the ancient times, Plato's "Republic" is suggested (30, 38) as having contributed to the present concepts of guidance as an organized procedure. Another suggested early source is Pascal's (38) article, written in 1670, and stating the importance of wise choices of occupations in the lives of the people. In the United States, Parsons (45), who established the Vocation Bureau in the Civic Service House in Boston in 1908, is usually recognized as the founder of the vocational guidance movement. Hanus, chairman of the Commission of Industrial Education for the state of Massachusetts, was another early supporter of the movement. As chairman of the governing board of the Bureau from 1908 until 1917, this Harvard professor's aid was most salutary (10). He helped arrange for the first vocational guidance conference in 1910 (30). It was he who influenced Bloomfield to give, in the Harvard summer session of 1911, the first course for counsellors; and who established at Harvard, in 1917, the first group of courses for the preparation of counsellors. In 1917, the Bureau moved to the School of Education of Harvard University and was renamed, the Bureau of Vocational Guidance (30). In 1919, Brewer became the director, succeeding Bloomfield who turned his activities toward helping establish vocational guidance in New York. The first

public school system to adopt a definite program of guidance was Boston, in 1909 (30). The National Vocational Guidance Association was organized in 1910. This association began, in 1915, to publish a four-page folder, "The Vocational Guidance Bulletin", which two years later became the "Vocational Guidance Magazine", the official organ of the Association. Conducive to the strengthening of vocational guidance was the development, in 1910, of employment management which was begun by a small number of employment managers in Boston (30). Undoubtedly, at that time, studies of labor turn-over directed attention toward the serious problem of occupational stability and instability (10, 30). Almost simultaneously with Boston's initial guidance program was the establishment of the Vocation Bureau in the Cincinnati Public Schools in 1911 (30). At the same time, Stanford University faculty committees started a self-analysis of guidance activities within their departments (39). About the same time, school principals in New York became interested in guidance, mainly through the efforts of Eli W. Weaver; but no organization resulted at that time (30). The Des Moines (Iowa) Board of Education appointed a director of guidance as early as 1914 (30). Two years later Chicago, through its Board of Education, organized a Central Bureau of Guidance with an extensive program; but this was all swept away by the depression of 1933.

The establishment of a principal emphasis on applied psychology at the Carnegie Institute of Technology shortly before the entry of the United States into the World War was significant in the field of guidance research (4, 21, 22, 23, 35, 46). During the War, great progress was made in intelligence testing and in personnel analysis

and rating. Out of these grew an interest in a scientific program of guidance at the college level. The Division of Anthropology and Psychology of the National Research Council took over the program and began its work by making available each year new forms of freshman intelligence tests. Between 1923 and 1926, the Council organized its Committee on Co-operative Experiments in Student Personnel. The work of this committee included: the provision of standard cumulative record cards and simplified rating scales; encouragement of Strong's work which resulted in his Interest Analysis Blank, first made available in 1928; vocational information monographs, as exemplified by the work of Yale's Crawford and Clement; achievement tests at the secondary and junior college levels; and many batteries of many kinds of objective tests (2). At the same time as these development, other workers with social, scientific, or professional backgrounds were combining for more effective work in the study of guidance or in making it available to the people who needed it. The thirty-eight branches of the National Vocational Guidance Association, with their 2,000 members, have contributed a great deal to interest in and work on this movement. Research has been and is being carried on in university and college laboratories, by the Personnel Research Federation, and by the Psychological Corporation of America (30).

Vocational guidance is not mentioned in any specific legislation of the Federal Government and has received very little mention in the legislation in the various states of the Union. Connecticut, in 1913, passed a law whereby boards of education were permitted to establish vocational guidance systems and to employ vocational counsellors. New York has been in the vanguard of guidance legislation by amending

its law in 1924 so that it provided for teachers of vocational guidance instruction, for placement services, and for part-time schools. More recently, every city in New York of 1,000,000 population or more, must have an organized vocational guidance program which includes a director of guidance in order to be eligible for state approval (30).

For vocational education, the legislative picture is quite different. As early as 1862, the Federal Government showed its interest in vocational education by the Morris Act for Land Grant Colleges. Again, it showed its concern for vocational education by the Smith-Hughes Law of 1917 to assist states with their education in agricultural and industrial pursuits; and in 1936, by the George-Deen Law which doubled the annual appropriations of the Smith-Hughes Law, and increased the scope of the work to include the distributive trades. Unfortunately, the leaders in the two fields of vocational education and of guidance, with their different backgrounds and differing emphases, have generally failed to recognize the mutual benefit that would result if they should work together. This does occur in a few school systems, for example, the Metropolitan Vocational High School in New York City and the Milwaukee Vocational School in which one finds all of the techniques of good vocational guidance and good vocational education combined (30). In most schools, however, this is not the case and guidance is sacrificed to vocational education or vice versa. Vocational guidance is usually a part of the secondary schools and is usually closely allied with the research and placement activities. The vocational or trade schools, too, are usually secondary schools; but they are usually under a different division of

the school system from that in which the guidance is (30). The vocational schools very frequently operate with few, if any, of the approved guidance techniques.

In the European nations, too, one finds guidance and vocational education separated, frequently. Vocational education is usually operated under the office of the minister of education, while guidance is carried on under the minister of labor (30). Spain, where the entire guidance function is taken over by the minister of education; and Italy and France, with close co-operation between the directors of guidance and vocational education are gratifying exceptions (30).

Though the programs of vocational guidance as they are actually conducted in the United States vary greatly, it is fairly well agreed that a complete guidance program implies the following steps (30):

- A) maintenance and use of cumulative record cards --- including personality and extra-curricular indications
- B) the administration and interpretation of tests
- C) the administration and analysis of interviews
- D) try-out courses or experiences
- E) the presentation of occupational information
- F) placement
- G) follow-up --- including graduates as well as drop-outs.

Cumulative pupil records should show tendencies of the person being counselled toward new points of emphasis. By anecdote, or otherwise, they should give indications of interests and tendencies and any other data that are pertinent in planning a pupil's future

with him. They should be a vital part of the guidance process. Where possible, they should be objective in form (2, 3, 9, 10, 13, 14, 15, 28, 30, 33, 39, 46, 52, 53). In content, they should reveal as nearly as possible a true picture of all of the pupil's potentialities --- educational, health, special abilities, personality, and characteristic behavior. In Europe, these records are likely to be of school grades only (30).

Intelligence tests should be given several times during each pupil's school life to indicate his mental growth. Achievement tests are useful at the beginning of each school term or year, if it is possible to give them this frequently. In most subjects, such tests are quite well standardized and give the pupils and the teachers objective indices of comparative strengths and weaknesses. Aptitude and achievement tests are used freely in Europe but more among industrial employees than among school pupils (30). Personality and interests tests are promising fields for further study since they are not well developed at the present time. There are many of these tests and scales in wide use in the United States at this time, however. European educators are more inclined to trust their observations of the pupils while they are being tested in other ways than they are to rely on these types of tests, at least in their present states of development (30). The special tests for specific aptitudes and abilities are almost countless, but few of them have established acceptable degrees of reliability, validity, or extensivity of norms yet (7, 8, 11, 19, 24, 26, 27, 31, 35, 36, 41, 50.) Studies in physiological aptitudes and physical examinations are coming to be recognized as parts of the study of individual aptitudes.

Only people who have been specially and fully trained in testing and in psychological interpretation and who have personalities suited to the winning of the confidence and support of the people being tested should be used in administering tests of any kind. Heretofore, too little attention has been paid to the personalities of testers and too much to their mechanical proficiency.

In Europe, many laboratory directors have devoted their efforts to the devising (30, 36) of special kinds of apparatus and techniques for vocational selection, for example, the German railways operate three laboratories and twenty-five affiliated offices in which about 18,000 examinations are given annually to select workers for employment or promotion. In Italy, Belgium, Poland, and Russia, and in practically all of the other countries in Europe to a lesser degree, similar types of examinations are given (30). In some of the larger industrial organizations in the United States, the same is true (46). Vocational selection is concerned largely with getting the best workers for given jobs, while vocational guidance has a broader conception, that is, helping all individuals to select, prepare for, and succeed in occupations well suited to their natural abilities. Vocational guidance and vocational selection can and should be mutually helpful and should support each other in their respective fields.

Vocational or guidance counsellors should, by nature, be fond of adolescents, well trained in psychology, thoroughly familiar with interview techniques, and well informed in economics, sociology, mental hygiene, occupational information, and the current trends in these fields. They should be able and willing to keep complete and

accurate records. Without seeming to be inquisitive, they should be able to extract all of the pertinent personal information that they need in an interview. Interviews with children and with parents are an important part of guidance work all over the world.

Some schools in the United States, such as the Milwaukee Vocational School, the David Rankin School in St. Louis, or the Metropolitan Vocational High School of New York City, are making excellent use of their shops and laboratories in giving the pupils a chance to sample many kinds of vocational experiences. Many other schools fail to make these experiences available even when they have all of the necessary equipment (3, 10, 15, 30, 46). This failure is one of the weak spots in guidance practice. With the exception of Spain and, to some extent, Italy where vocational education is fitted into the scheme of generalized education, try-out opportunities are practically unknown in Europe (30).

During the last twenty years much actual and quite valid material on occupations has been gathered together and put into shape for dissemination among the people to whom it will be most valuable (3, 10, 22, 23, 24, 25, 32, 39, 43, 44, 45, 49, 50). Credit for much of this work is due the National Occupations Conference. Eleven agencies for research agreed to co-ordinate their efforts by adhering to certain standards of selection and arrangement of material and by exchanging the results of their endeavors in order that each may be informed of the research work in project or in prospect of the entire group. The White House Conference report (3) carries thirty pages of bibliography on occupations. "A Book About Jobs" (44) lists 8500 titles.

Courses on occupational information given in schools should widen the pupil's knowledge and arouse his sympathetic interest in all useful work as well as assist him in choosing the occupations that should be most useful and interesting to him. He should study several occupations in detail. Through these courses he should gain some hints of factors necessary to success in several kinds of work (30, 46). Except in the United States, courses in occupational information taught in the schools are unknown although analysis of occupations has been quite generally used in industry (30). In Germany, the teachers in the elementary schools are held responsible for giving the pupils the essential facts of occupational life through other subjects (30).

Placement work is not always carried on in schools, but whether it is a part of the work of the city, state, or federal governments alone or with the schools or a task for the schools alone, as much and as complete guidance should be given in connection with the placement work as the time, the conditions, and the receptivity of the prospective employe make possible (46). In the placement --- through the Juvenile Employment Exchanges --- of fourteen to eighteen year olds who are leaving school, Great Britain does her most obvious and most clearly defined type of guidance. In France, the National Placement Offices consider guidance as one of their functions and undertake to guide young people in the choice of an occupation when they leave school (30). In the U. S. S. R., the ultimate outcome of guidance is the placement of individuals at work, for example, the director of the Central Laboratory of Vocational Guidance and Placement of the All-Union Central Council of Trade Unions has devised a special battery

of tests to aid in the selection of pupils for the apprentice schools of the Moscow Electric Trust and similar organizations (30). Practical programs of this kind are common in Russia where many psychological laboratories are busy devising tests that are directed toward more scientific placement (30). In Germany, placement operates in the National Employment Offices under the ministry of labor. Every pupil who leaves school has the opportunity of using the guidance and testing services of these offices (30).

Follow-up is generally acknowledged to be the most neglected link in the guidance chain, yet the measure of the effectiveness of any guidance program must lie in knowing what has become of those whom it guided. Moreover, the results obtained from follow-up work should be used in improving the guidance procedure in use and in adjusting the curricula of the schools to serve the needs indicated by this work. While follow-up is implied in all apprenticeship arrangements, there is generally no actual provision made for it (30, 46).

Various studies have been made since 1938, in an attempt to evaluate the outcomes of vocational guidance programs. There seem to be three general trends along whose lines investigators have directed their studies (2, 3, 8, 9, 10, 14, 15, 18, 25, 28, 30, 39, 46) of guidance plans in schools. These are: (a) the conformity to certain standards and patterns; (b) the activities of the pupils in the schools; and (c) an intensive follow-up of some of the pupils who have been guided. Few indeed are the schools that give full attention to all of the phases of guidance.

Since, in the United States, each community must administer its own schools as it chooses, any one phase of the school program ---

such as guidance --- may be found to be receiving much emphasis, no emphasis, or an emphasis most of which is wasted effort (1, 2, 3, 9, 10, 15, 20, 28, 30, 33, 36, 39, 46, 47, 48, 51, 52, 53). More than fifty shops equipped to duplicate actual working conditions allow the Milwaukee Vocational School to provide an unusually wide variety of try-out courses (30). The guidance in the Baltimore Schools is well co-ordinated by a supervisor of guidance and placement who, with the aid of well trained counsellors, works in the elementary, the junior high, and the senior high schools (10,30). Articulation among the schools is well planned and carried out. Occupational information is obtained for the pupils from representatives of business, industry, and the professions. Conferences with parents about the orientation of the pupils, a program of research, placement, and follow-up are all parts of the guidance program in Baltimore.

The social science classes, newly correlated into a working laboratory of social living, indicate the emphasis guidance is taking in the Abraham Lincoln High School in Los Angeles (30). During a pupil's entire high school life in this school, the teachers of the social living classes meet their pupils for two hours daily in efforts toward effective guidance. The Fieldston School, of New York, is an example of a small number of selected secondary schools whose graduates are admitted to college without regard to the specific subjects which they have studied. This particular secondary school conceives guidance and education to be the processes by means of which a pupil may be assisted in discovering his greatest interests and abilities and to build on these both vocational preparation and cultural education. An example of excellent guidance work in county unit schools

is that of Rockland County, New York, organized under the direction of Dr. Robert Hoppock. Another is the Breathitt County, Kentucky, Schools which work in conjunction with the Southern Women's Educational Alliance. The latter has placed special emphasis upon curriculum revision, but representatives of all of the agencies interested in any phase of guidance have organized a County Guidance Council in this county (30). This Council has, at the request of the county school commissioner, prepared an outline for a guidance program for all seventh and eighth grades in the county schools. Many private and student-supported colleges are actually doing first class guidance work, for example, Berea College in Kentucky.

In the field of Higher Education, some strong personnel departments may be found (1, 2, 8, 16, 39). Among these are Yale University with a very complete service, Stanford University which emphasizes research techniques, and Chicago University with its board of vocational guidance and placement. The University of Minnesota has an extensive testing bureau and quite a complete clinic devoted to personal assistance and to the evaluation of guidance procedures.

Vocational guidance is sponsored not only by schools but by service clubs and professional organizations (30, 46). Among those giving most attention to the promotion of guidance are the Kiwanians and the members of the Altrusa Clubs, the National Federation of Business and Professional Women's Clubs, the American Association of University Women, the Federation of Employment Services, and the Adjustment Service of New York.

In the United States, the systems of guidance in general use have in large measure expanded along the lines suggested by the early

leaders (30, 46). The history of these developments follows closely the lives of the leaders who desired to help solve their own or others' problems. Some of these leaders have organized systems of vocational guidance; others have decided upon the procedures necessary for utilitarian ends; and still others have worked on the tools useful for such procedures, that is, research.

The enlistment of the laboratories' greatest care, the most accurate and comprehensive compilations of facts and trends in occupations, the analysis both of individuals and of jobs, the interpretation of data which is as objective as possible by adequately trained and humanly understanding persons --- all are needed for making optimally effective the programs of guidance, especially since guidance is changing from the older empirical methods to more scientific procedures. The psychologists, more than any other group, have contributed the means by which guidance has been made more objective and scientific; but science can never entirely replace art in the actual work of guidance (1, 2, 3, 4, 7, 8, 11, 13, 14, 16, 19, 21, 22, 23, 24, 26, 27, 29, 30, 31, 32, 35, 41, 43, 49, 50, 51).

A brief resume of the contributions of psychology to the development of guidance shows that, even before Parsons' classic (45), "Choosing A Vocation", Lahy (38) in Paris in 1905 had started experimental research in the measurement of strictly vocational aptitudes in connection with the physiological and psychological requirements for success in stenographic work. Later (1910) he conducted a similar study on the work of linotype operators. Münsterberg (41), as director of the psychology laboratory at Harvard University, contributed much to the stimulation of systematic research in the field

of guidance. His work gave an impetus, felt throughout the civilized world, to experiment as a means of determining the requirements of occupations and the extent to which the individual meets these requirements. In Italy, as early as 1912, Gemelli (30) started experiments for the selection of aviators. In Brussels in the same year, Christiaens (30) opened a bureau for giving psychological examinations to young people. At Geneva in 1914, the Laboratory (30) started psychotechnical studies of watchmakers and telephone operators. The London County Council, in 1915, made a brief and informal study of the psychological factors in vocational guidance which was interrupted by the World War (30). The application of psychology to vocational guidance in Germany came to the fore with the work of Lipmann (30) at the Institute of Applied Psychology, of Moede at Charlottenburg, of Piorkowski in Berlin, of Stern at Hamburg, and of Giese at Halle (30). In Russia (30), Bernstein and Mandrika, and in Italy, Nargi, have studied the sources of motivation in the choices of careers and the genesis of interest. Much work on the construction, standardization, and validation of analytical tests is being done in both the United States and Europe (30). By 1927, 392 scientific institutes and laboratories in Europe alone were reported busy at the application of psychology to the promotion of human adjustment to work (30). One of the best known of these, especially in fatigue work, is the National Institute of Industrial Psychology of Great Britain (30). Some of the British psychologists (30) who have contributed to guidance are : Alexander with his "skill factor"; Macrae with his study of talents and temperaments; Foote for his establishment of the office and the defining of the duties of

"careers' masters"; Earle for helping establish the minimal qualifications for different occupations and his work with J. W. Cox on the analysis of manual dexterity and mechanical aptitude; Koepke for his studies of the amounts of skill required for certain vocations; Myers for his work on industrial psychology in general; Allen and Smith for their work on test validation; and Burt and Spielman for their studies of the significance of general intelligence in vocational guidance. In France (30), the name of Lahy who held sway in two laboratories and was known also for his emphasis on examinations, conferences, and follow-up; Laugier, known for his biotypological studies; and Fontegne, who worked on the individual profile are all well known (30). Germany (30) has emphasized the psychotechnical phase of guidance more than any other. Among the prominent psychologists who have contributed to the development of guidance in Germany should be included the names of: Lipmann, known for his work on occupational analyses; Ulrich, for his classification of the higher professions; Stern for his emphasis on viewing the whole job; Giese, for his psychotechnical work; Moede, for his special test methods; and Piorkowski for his classifications of occupations by the analysis of special traits.

Switzerland's three centers (30) for psychotechnical work are in Geneva, Zurich, and Bern. Bern has the distinction of being the only university that has a special division for psychotechnics and a special dozent on the subject. This university has the rich collection of tests, question sheets, charts, and similar material which formerly belonged to the Institute of Applied Psychology at Berlin.

In Switzerland, Dr. Franziska Baumgarten is known for her work on job analysis and for her observation sheet for the study of an examinee during the test period. Claparede (14) has contributed much to important psychotechnical principles and practices as carried out in researches by Walter, Suter, Carrard, and others.

In the United States, the psychologists who have contributed most (30) to vocational guidance are: Yerkes, who guided the Army mental testing program; Fryer, who has written on occupational intelligence levels; Viteles, with his job psychograph; Link for his actual work in occupational analysis; Pintner, Thorndike, Terman, and many others for their development of intelligence testing; and Strong and Cowdery for their interest analysis techniques and tests.

From this brief and scattered survey of the historical development of guidance, especially vocational guidance, this thesis turns to a special problem which lies much more in the field of educational guidance than any other. This problem concerns itself with the scholastic careers of the 133 entering freshmen at Oregon State College who were in the lowest two deciles on the American Council Freshman Test in 1933. Their scores lay between 19 and 107 points (inclusive) whereas the average score was 150 points. The question on which the writer of this thesis wished to throw some light was, "Could proper guidance have saved some needless wastes for these young people?"

CHAPTER III

The Educational Fates of the Two Lowest Deciles on the
Freshman Entrance Test

The immediate problem of this paper was the analysis of some of the qualities of the students in the two lowest deciles on the American Council on Education Test for High School Seniors and College Freshmen* for the students entering as freshmen at Oregon State College in the academic year 1933-1934; and, as far as possible, to determine their educational fates. The principal purpose of the study was the discovery of the values that the American Council on Education Test results might have in the selection of student-material or the prediction of scholastic success as shown in college quarters in attendance and in graduation, where it occurred, and in the grades made by these students while they were in attendance. This is in line with the recent statements of President Conant of Harvard University and President Hutchins of Chicago in the non-technical press concerning the desirability of the selection of students before they enter rather than their elimination afterwards. Their statements have been made many times previously and definite plans for such selection have been made (20), but in most colleges and universities nothing has been done about it. A second purpose would have been more valuable than the first if it had been possible

* The College norms were used because they were more readily available and because they were practically the same as the national norms. There was no advantage in the use of either set over the other except availability.

of accomplishment, namely a study of the cost to the students who dropped out from discouragement or were suspended for unsatisfactory scholarship in terms of money, disappointment, and emotional wear-and-tear. This thesis is a small contribution to the study of student selection for the welfare of the students principally and for the facilitation of the work of colleges and universities secondarily.

The method of study was tedious rather than original. It consisted of the collection of the names of the students entering as freshmen during 1933-1934 who were in the two lowest deciles on the A. C. E. Test norms of the Oregon State College. The year, 1933-1934, was chosen because it was five years prior to the preparation of this thesis and the students of this class should have arrived at whatever educational fates they were going to arrive at by the winter of 1937-1938. After the names of as many of these students as possible had been located, the problem of the collection of data was merely one of selection and tabulation.

The materials of the study consisted of the records and tests on file in the office of the registrar of the College. These materials were collected, tabulated, and in some cases treated statistically to the extent that averages or means and the corresponding deviations were found.

The number of cases involved is 133. Of these, seventy-four were young men and fifty-nine young women. In general, the registration of the College is in the ratio of two men and one woman. This makes the division of the group to be studied consist proportionately more largely of women than the general College registration. No explanation of this will be attempted here although explanations

have been attempted in other papers, as in W. F. Book's "Survey of High School Seniors in Indiana".

The mean age of the group was nineteen years and six months with a standard deviation of two years and one month, i. e., two-thirds of the group should fall between the ages of seventeen years and seven months and twenty-one years and nine months. As a matter of fact, more than two-thirds of the group fall within these limits. In TABLE I is shown the distribution of the ages of the group studied, together with the mean and the standard deviation.

TABLE I

The Chronological Ages of the Group Studied

Classes	f	d	fd	fd ²
31-0 # 31-5	1	24	24	576
30-6 # 30-11	0	23	0	0
30-0 # 30-5	0	22	0	0
29-6 # 29-11	0	21	0	0
29-0 # 29-5	0	20	0	0
28-6 # 28-11	0	19	0	0
28-0 # 28-5	0	18	0	0
27-6 # 27-11	1	17	17	289
27-0 # 27-5	0	16	0	0
26-6 # 26-11	0	15	0	0
26-0 # 26-5	1	14	14	196
25-6 # 25-11	0	13	0	0
25-0 # 25-5	1	12	12	144
24-6 # 24-11	1	11	11	121
24-0 # 24-5	0	10	0	0
23-6 # 23-11	1	9	9	81
23-0 # 23-5	3	8	24	192
22-6 # 22-11	4	7	28	196
22-0 # 22-5	1	6	6	36
21-6 # 21-11	2	5	10	50
21-0 # 21-5	4	4	16	64
20-6 # 20-11	6	3	18	54
20-0 # 20-5	6	2	12	24
19-6 # 19-11	15	1	15	15
19-0 # 19-5	25	0	0	0
18-6 # 18-11	23	- 1	- 23	23
18-0 # 18-5	25	- 2	- 50	100
17-6 # 17-11	5	- 3	- 15	45
17-0 # 17-5	4	- 4	- 16	64
16-6 # 16-11	2	- 5	- 10	50
	<u>133</u>		<u>102</u>	<u>2320</u>

N = 131

M = 19 - 8 $\frac{1}{2}$ - 2 - 1

Since a large number of studies in psychology and sociology have placed some emphasis on the position of the child among its siblings and upon the number in the family, TABLE II is included to give this information even though it shows nothing of importance in connection with study of this group although there were slightly more large families among these students than among those of the Nation as a whole. In the 100 families for whom there was available information, there were 143 children or 1.43 children for each family --- about the same as in the Nation as a whole or an even smaller number.

TABLE II

Number of Siblings of the Group Studied

	No. of Cases	No. of Siblings in Family
Seven older -- none younger	1	8
Six older -- one younger	1	8
Six older -- none younger	1	7
Five older -- two younger	1	8
Five older -- one younger	1	7
Five older -- none younger	2	6
Four older -- three younger	1	8
Four older -- one younger	3	6
Four older -- none younger	1	5
Three older -- two younger	1	6
Three older -- one younger	4	5
Three older -- none younger	5	4
Two older -- four younger	1	7
Two older -- two younger	3	5
Two older -- one younger	3	4
Two older -- none younger	5	3
One older -- seven younger	1	9
One older -- five younger	1	7
One older -- two younger	4	4
One older -- one younger	7	3
One older -- none younger	12	2
No siblings	13	1
One younger -- none older	21	2
Two younger -- none older	11	3
Three younger -- none older	4	4
Four younger -- none older	1	5
Five younger -- none older	1	6

N = 100

No. of siblings = 143

The writer believed that some information of value might be obtained from a study of the interval between graduation from high school and entrance to college. This, however, did not prove to be the case since two-thirds of the group for whom information was available had completed their high school courses the spring preceeding their entrance to college. The years in which this group was graduated from high school are given in TABLE III.

TABLE III

Years of Graduation from High School

1933	63
1932	27
1931	6
1930	3
1929	3
1928	0
1927	1

N = 103

Since Oregon State College must accept as students any graduates of accredited high schools within the State but may exercise such selection among graduates of high schools outside of Oregon as it sees fit except in cases in which graduates are residents of Oregon, the writer tabulated the high schools from which this group of students were graduated. One hundred twenty-one students of this group were from Oregon high schools; twelve were from high schools outside of the State. Of these twelve, one was an Oregon resident and two were admitted against the better judgment of the selecting committee at the urgent request of faculty members. The selection

among out-of-state students is done by a committee of three which has consisted of the same three members who have studied their work somewhat carefully for the last six or seven years. The quality of the work of this committee justifies the continuance of its work of selection among out-of-state students for admission to the College. The fact that eleven of its selections were in the lower two deciles seems to show that where there is a reasonable doubt of scholastic success, the applicant for admission is given the benefit of the doubt. It would be of great advantage to Oregon State College and the cause of higher education in general if legal provisions were made for the selective activity of this, or a similar committee, among the graduates of Oregon high schools.

It was desired to know whether there were leaders among this group of students or not. For this reason a study was made of the offices and honors held by the members of this group while they were pupils in high school insofar as this material was listed in their personal data folders. A study of these folders showed many honors and offices held --- largely, however, among the pupils in the small high schools. Since there appeared no way in which to correlate the honors and offices on the one hand and the sizes of the high schools on the other, it was not attempted. TABLE IV contains a tabulation of the honors and offices held --- first by the girls and then by the boys.

TABLE IV

High School Honors and Offices Held

Girls

Adelphians	1
Alpha Sorosis	1
Associated Girl Students, President	1
Class offices	8
senior class president (1)	
sophomore class president (1)	
freshman class president (1)	
unspecified (5)	
Girls Athletic Association	3
Girls League	11
president (1)	
Treasurer (1)	
unspecified or just membership (9)	
Hall monitor	1
May festival	2
Pep Club	1
Philharmonic Club	1
Quill and Scroll	1
School paper	2
School play	1
School yearbook	3
Senior Girls "Y" and Tri-Y	4
Senior Play	4
State shorthand contest	1
Student body officers	2
treasurer (1)	
unspecified (1)	
Student council	2
Student court	1
Torch Society	1

Boys

Athletic club member	8
Athletic positions	3
football captain (1)	
baseball captain (1)	
track manager (1)	
Class officer	2
senior class president (1)	
junior class vice-president (1)	

TABLE IV: Continued

Class plays	4
senior play (1)	
junior play (2)	
junior play business manager (1)	
Fire squad member	4
Future Farmers of America, officers	3
president (1)	
vice-president (1)	
secretary (1)	
Gym leaders club	2
Hi-Y, president	1
May fete	1
Operetta	2
Pep Club	1
School bank	2
cashier (1)	
unspecified (1)	
School paper	3
manager (1)	
School yearbook, business manager	2
Smith-Hughes scholarship	1
Student body officers	5
president (2)	
treasurer (3)	
Student council	1
Thalian	1
Torch Society	2
treasurer (1)	
Yell leader	1

In the personal data folder sent to each applicant, the principals of the high schools from which the students were graduated were asked to state the quarter or fourth of the graduating class in which the student for whom the folder was being filled out was located. Since many of the high school graduating classes were small and since there is some stigma attached to being in the lower half of the graduating classes, the principals stated that as many of these students were in the upper halves of their classes as in the lower halves. This information is given in TABLE V.

TABLE V

Quarters in Which the Group Was Located in Their
High School Senior Classes

	No.	Per cent of This Group
Uppermost	22	20
Second	33	30
Third	36	33
Lowest	19	17

N = 110

A study of the material from their high school records shows this group to be a very normal or average group in every way --- even in their high school grades. Several were members of high school honor societies, and exactly fifty per cent of them were listed as being in the upper halves of their senior classes. College entrance, crude as it is as a selective device within itself, does bring these people into competition with a group distinctly above the average of the population --- not only in intelligence but in study habits and industry.

This thesis continues with additional tables showing some of the pertinent facts of the college lives of these students. Because a large percentage of the students in this group who dropped out gave lack of money as the reason, TABLE VI which gives the claimed degree of self-support is included.

TABLE VI

Claimed Degree of Self-Support of This Group

Entirely self-supporting	17*
Three-fourths self-supporting	2
One-half self-supporting	16
One-fourth self-supporting	3
Board and room	1
Books and spending money	1
Books	1
Clothes	6
Spending money	4
"Some"	14
None	62

N = 127

* One student expected to support himself and his parents. Another had no idea about the way he was to finance his first year.

From time to time there are charges within colleges and universities that some divisions of these institutions do lower grade work than other divisions and that this makes them more attractive to students of lesser ability since there is more likelihood of their completing the work or of completing it more easily. The following table shows the schools in which the members of this group registered originally, the number transferring into each school

from other schools within the College, the number transferring out of each school, and the number and percentage of the entire group within a school who have been graduated or are within easily attainable reach of graduation.

TABLE VII

Schools Selected by Members of This Group

School Originally Entered	No.	Transferred In	Transferred Out	No. Grad.	Per cent Grad.
Agriculture	22	7	4	5	22
Business Administration	3	3	0	0	0*
Education	11	6	2	7	47
Engineering	8	0	1	1	14
Forestry	10	2	2	2	20
Home Economics	30	3	2	4	13
Industrial Arts	4	0	3	1	100
Lower Division	15	6	7	0	0*
Pharmacy	9	0	5	2	50
Science	1	1	0	1	50
Secretarial Science	22	6	8	3	15

* Non-degree granting schools

The School of Business Administration and the Lower Division can not have graduates on the College campus. The percentages of graduates among the other schools vary widely although the small numbers of cases involved preclude the attachment of serious importance to these percentages.

The number of quarters which this group actually spent in the College may be of some interest. This information is given in TABLE VIII.

TABLE VIII

Quarters Spent in College by this Group

No. of Quarters	No. of Students
0	3
1	13
2	13
3	24
4	8
5	7
6	11
7	4
8	5
9	11
10	5
11	2
12	19
13	8

N = 133

These 133 students spent a total of 815 quarters in the College --- an average of 6.1 quarters or a little more than two academic years.

In TABLE IX are shown the classroom grades earned by this group during the four years that have elapsed since the opening of the academic year, 1933-1934. These grades are in terms of the averages and the average deviations of all the grades received by all of this group that were registered in any one quarter. The College grading system (new style) was followed throughout, i.e., "A" equals four

grade points, "B" three, "C" two, "D" one, and "F" none. The table includes, also, the number of students registered during and completing each of the quarters.

TABLE IX

Average College Grades of the Group		
	1933-1934	No. Reg.
autumn	1.61 a.d. .51	111
winter	1.91 a.d. .44	112
spring	1.96 a.d. .43	98
1934-1935		
autumn	1.89 a.d. .45	74
winter	2.07 a.d. .43	67
spring	2.01 a.d. .46	62
1935-1936		
autumn	2.08 a.d. .46	57
winter	2.22 a.d. .53	52
spring	2.15 a.d. .56	48
1936-1937		
autumn	2.26 a.d. .49	40
winter	2.34 a.d. .51	37
spring	2.50 a.d. .42	38
1937-1938		

Ten students of this group were registered at Oregon State College during the autumn quarter of this year. Five others were registered in other institutions --- one making an unsatisfactory scholastic record and four making satisfactory scholastic records. Of these fifteen, twelve are men and three women.

Of the original 133 students of this study, seventeen were graduated from the College. Of these seventeen, eight were women and nine men. It is reasonable to expect that all of the ten who are now registered in the College (1937-1938) will be graduated. Of these ten, none attended the College all of the quarters intervening between their entrance and the present academic year; but all of these and most of those who were graduated from Oregon State College or some other college or university were in attendance more than the usual twelve quarters or eight semesters.

Of the original group being studied and who were in the two lowest deciles in the College freshman entrance test, twenty-seven have been or may reasonably be expected to be graduated. Twenty others of this group asked for transfers of credits to other comparable institutions. Of these twenty, two did not register at the institutions to which they asked that their transcripts be sent. Five others dropped out with unsatisfactory scholastic records, five were in attendance during the current college year. Of these five who were in attendance, one was making an unsatisfactory scholastic record and four were doing average work according to responses from the institutions which they were attending. Responses were not received from the institutions which four others had indicated as their new choices according to their requests for transcripts. An additional four were graduated from these other institutions --- making a total of thirty-one or thirty-two who have been or may reasonably be expected to complete their courses. Of these thirty-one or thirty-two, twenty-one have actually received their diplomas. This makes the per cent actually graduated 15.8. If we accept the

number who may reasonably be expected to graduate plus the number who have graduated as thirty-two, this gives a percentage of 24.0 --- still considerably smaller than the usual percentage of the whole group of entering students who may be expected to complete their courses. Resummarizing --- of the original 133 students, thirty-two have been or may be expected to complete their course, four asked for transfers but no further information could be secured on them, one was killed in automobile accident while a student, and the remaining ninety-six or 72.2% were suspended for poor scholarship or dropped out with very mediocre or clearly unsatisfactory scholastic records. Of the original registrants, three did not complete a single quarter.

CHAPTER IV

Summary and Conclusions

SUMMARY:

1. The guidance movement is one of the movements designed to restore the center of interest in the schools to the pupils and to carry the work of the schools to a logical conclusion in the case of each pupil.

2. The guidance programs in the United States and in the different nations of Europe are varied and, in only a small percentage of cases, are they at all satisfactory in their conceptions and results.

3. A complete program of guidance should include:

- (a) the maintenance and use of cumulative records for each person
- (b) the use of a variety of tests, given and interpreted by adequately trained psychologists.
- (c) the dissemination of up-to-date and accurate occupational information and trends in an interesting manner
- (d) the use of well conducted interviews and the giving of good counseling
- (e) the making available of try-out courses or experiences
- (f) selective placement
- (g) follow-up, including records and judgments of the strengths and weaknesses of the program which has gone before.

4. The public's lack of understanding of what a guidance program can do makes the establishment of complete guidance services very difficult at the present time.

5. In changing from the empirical to the more scientific procedures of guidance, the schools and other agencies offering guidance should take care (a) to select as counsellors only those people fitted by nature as well as by training, and (b) to select as scientific or research workers only those who are fully trained and able.

6. An adequate guidance program implies (a) scientific analysis of occupations and occupational trends, (b) scientific analysis of individuals, and (c) the bringing together of these pieces of information in order that sound reasoning about the whole individual and the whole situation may underlie the advice given.

7. Each pupil from the sixth grade until he is satisfactorily established in a suitable vocation or higher school should have the assistance of well co-ordinated guidance facilities.

8. A satisfactory guidance program should afford to the individual (a) avoidance of unsuitable training and unsatisfactory vocational placement, including blind-alley jobs for those who are capable of doing better, with the consequent losses of morale, time, and money; and (b) to the schools, avoidance of failure to serve optimally the pupils rightly belonging there with a consequent lowering of standards, loss to the school of time, and a further loss to the school of money.

9. Good guidance takes cognizance of the changing environment and the changes in individuals that act reciprocally upon each other.

10. Effective guidance results in the choice, on the part of the individual advised, of the work that is the most satisfying to

his own capacities and interests and most useful to society's best interests.

11. In the cases of the group of entering freshmen studied, proper guidance would have saved most of them from wasted time, wasted effort, and the loss of morale brought about by their inability to make satisfactory scholastic records.

CONCLUSION:

A selective process of guidance should be used for entering freshmen in order that students who can not profit at all fully by registration in colleges and universities, more specifically Oregon State College, should either

(a) not be permitted to register, or

(b) being permitted to register, should do so with full knowledge of their chances of success and under the careful tutelage of advisors trained to give competent counsel and having the time, the tools, and the actual capacities for doing it, or

(c) Adequate guidance in the junior and senior high schools would have diverted many of these people into occupations or into schools more suitable to their needs and more profitable to society. In lieu of such guidance, it is possible that non-academic courses in college should be established to care for their needs.

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* Out of the thousands of magazine articles and hundreds of books on guidance, the writer has listed only a few of those on which she relied most closely in the writing of this thesis. There has been no attempt to compile an exhaustive bibliography. Where the references cited are incomplete, it is due to absence of the magazine from the Oregon State College Library in order that they may be bound.

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