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**DAVIES, Thelma Jean Perdue, 1928-
THE CONSTRUCTION OF AN INVENTORY
TO ASSESS FAMILIARITY WITH THE
GENERAL PRINCIPLES OF GUIDANCE.**

**The University of Oklahoma, Ed.D., 1969
Education, guidance and counseling**

University Microfilms, Inc., Ann Arbor, Michigan

THE UNIVERSITY OF OKLAHOMA

GRADUATE COLLEGE

THE CONSTRUCTION OF AN INVENTORY TO ASSESS FAMILIARITY

WITH THE GENERAL PRINCIPLES OF GUIDANCE

A DISSERTATION

SUBMITTED TO THE GRADUATE FACULTY

in partial fulfillment of the requirements for the

degree of

DOCTOR OF EDUCATION

BY

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Norman, Oklahoma

1969

THE CONSTRUCTION OF AN INVENTORY TO ASSESS FAMILIARITY
WITH THE GENERAL PRINCIPLES OF GUIDANCE

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THE CONSTRUCTION OF AN INVENTORY TO ASSESS FAMILIARITY
WITH THE GENERAL PRINCIPLES OF GUIDANCE

CHAPTER I

INTRODUCTION

Background of Study

The conditions of living in the present affluent society with its contradictions in moral, religious, and political beliefs and practices increasingly require organized guidance assistance. Certainly, industrial and economic complexities make intelligent choice an impossibility without some form of assistance. Upon the school has fallen the major responsibility for initiating and continuing to provide such assistance. The demand has come from labor and industry, from all levels and areas of government, from communities attempting to improve their educational programs, and from students themselves. The need intensifies as birth rates and interest in education continue to increase, as the concepts of education are modified, as the school curriculum expands, and as teachers attempt to individualize instruction. And schools have recognized the demand and need for this assistance, and subsequently, have instigated guidance programs.

The concept of guidance, a part of the educational scene only since 1908,¹ has developed rapidly in order to meet these demands and needs and has evolved into a movement which encompasses most areas in which the members of our society function. The National Defense Act of 1958, serving as an impetus to the guidance movement, has precipitated an increased number of programs and consequently of participants in the programs. Indeed, approximately seventy-five percent of all secondary students in the nation are enrolled in schools participating under the provisions of Title V-A of the Act.² Dramatically illustrating the growth of guidance programs are Oklahoma Department of Education statistics:

There are 500 guidance programs in 244 school districts participating in Title V-A this year in the state. This represents growth from 67 school districts in 1958-59, 149 in 1959-60, 159 in 1960-61, 169 in 1961-62, 161 in 1962-63, 201 in 1963-64, and 239 school districts in 1964-65.³

With such increase in the number of guidance programs, subsequent needs arise for specialized guidance workers. Further, there is every indication that more guidance programs would be instituted if certified personnel were available.

¹Anna Reed, Guidance and Personnel Services in Education (Ithaca, New York: Cornell University Press, 1944), p. 3.

²"Growth of Counseling and Guidance Services in Oklahoma," Guidance News, Guidance Division--Oklahoma Department of Education (May, 1966), p. 5.

³Ibid., p. 6.

One important outgrowth of scientific and technological advances and of improved economic conditions for the general population has been a tremendous increase in enrollment in universities and colleges. Enrollment in institutions of higher learning has risen from a 1950 figure of 2,659,021 to the 1960 figure of 3,778,000; enrollment in 1970 has been projected to be 6,443,000.¹ Enrollment in graduate colleges reflects the same trend. Obviously, institutions must increase and expand their offerings even as enrollment increases.

Graduate colleges offering professional curriculums for the training of counselors are increasing in number, primarily because of the demand for specialized workers to staff the growing number of school guidance programs. The National Defense Act of 1958, by making federal funds available to counselor training institutions, has contributed significantly to the rapidity with which they have increased. For instance, in Oklahoma there are now eight state counselor training institutions, an increase of six over a period of six years. However, increasing demands for guidance programs and specialized personnel have given rise to and intensified problems of organization and administration of graduate programs in those institutions providing counselor training curriculums.

One of the major problems resides in the area of evaluation, for evaluation is an important and continuous

¹Seymore E. Harris, "Financing of Higher Education: Broad Issues," Financing Higher Education 1960-70, Dexter Keezer, ed. (New York: McGraw-Hill Book Co., Inc., 1959), p. 74.

part of any guidance program. Certainly, one characteristic of American education is a history of critical self-evaluation. Coupled with the ideal of an education for all those who can benefit from the experience, the widespread practice of examination, experimentation, and evaluation has been responsible for the innovations in curriculum and personnel services that have made the American concept of education a unique and basic structure of our society. That evaluation is still ingrained within the field of education is apparent in the recognition given to the recent concern over professional counselor training in Oklahoma. The revised state regulations for the certification of counselors that become effective in October, 1965, reflect this concern.¹ The need for a standard program of training for counselors in the public schools was recognized, studies were made, and steps were taken to alleviate some of the confusion which had resulted from the complete diversification of programs among the training institutions.

Consistent evaluation procedures, therefore, are basic to improved and effective guidance programs. For it is only through evaluation procedures that guidance workers can determine the adequacy of the principles, procedures, and tools within their area of interest and responsibility. The guidance worker can choose from a wide range of methods, sources of

¹See Appendix H, pp. 117-120.

data, and techniques. But the method of collecting data that enjoys the highest degree of accuracy and that can be confirmed by repetition is measuring devices.¹ The test-and-measurement movement parallels the guidance movement in the rapid strides made during the past fifty years. Standardized tests as both diagnostic and predictive devices have increased significantly. Tests and/or inventories are usually included in the procedures for selection of government personnel, in the placement of employees of industry, and in the selection of candidates for both the freshman class and the graduate college of many institutions of higher education.

While the various types of measuring instruments are readily recognized and used, the principles of psychological measurement have yet to be applied in some areas within the educational environment.² Although instruments measuring general intelligence or academic aptitude are used in the selection of students for admission to institutions of higher learning, they are not, as yet, used for selecting students for admission to specific programs or curriculums. Very probably they should be. Specific graduate programs, especially professional training programs, require a valid

¹Reed, Guidance and Personnel Services in Education, p. 438.

²Dorothy A. Wood, Test Construction (Columbus, Ohio: Charles E. Merrill Books, Inc., 1961), p. 2.

measurement of educational achievement in those areas of knowledge which form prerequisites to the further professional growth inherent in the graduate professional curriculum.

Purpose of Study

The guidance curriculum is a graduate professional training program. As such, preparation in the fields of psychology, sociology, and education is obviously important. Equally if not more important are continuous professional growth and evaluation during the time spent in the program of study. Those involved in appraising this preparation and subsequent growth need some type of measuring instrument. Construction of such an instrument requires careful considerations of the objectives of the instrument. Familiarity with the generally accepted principles of guidance would seem to fill this requirement, since they are applicable to all specialized areas within the guidance field. A candidate for admission into the guidance curriculum may have become familiar with these principles in undergraduate or graduate courses in psychology, educational psychology, curriculum, and other guidance-related fields. Certainly it would be helpful to the training personnel to know the extent of the student's familiarity with these principles at the outset of his training.

A properly constructed inventory should give some indication of the knowledge, beliefs, and techniques of guidance personnel working in an organized school guidance

program and of the student's familiarity with and understanding of them. Further, such an instrument could be used for diagnostic purposes and for determining achievement upon the student's completion of the training program. Therefore, while the problem of this study is to construct an inventory by means of which a student's familiarity with the basic principles of guidance can be determined, its purpose is to determine the bases, objectives, and achievements from which a valid and reliable measurement of a student's familiarity can be made.

Organization of the Study

This study follows in its organization the exact steps taken in the development of this inventory. The first points to recognize and specify were the needs for such an inventory. These needs were in part determined and confirmed by a review of the literature which involves guidance principles and practices. This review further provided the sources for the principles upon which the inventory is based as well as providing the bases for item construction. Certain assumptions were made and limitations recognized, which are indicated at the end of Chapter II in which these needs and sources are discussed.

In Chapter III the procedures followed for the actual development of the inventory itself¹ are explained. Following the guidelines established by the American Psychological Association, items were developed in sufficient number to administer in trial form to four hundred fifty-four graduate students enrolled in guidance curriculums in Oklahoma colleges and universities, as indicated in Table 1. Following the first administration and subsequent statistical studies on discriminating and difficulty power of the individual items, an experimental form was administered to a second sample group, consisting of four hundred seventy-one graduate students representing a wider geographical area, as indicated by Table 2, p. 10.

Chapter IV, on the basis of the response to the experimental form of the instrument, discusses findings and treatment of data. An analysis of the responses made to this form provided the bases for the establishment of norms as well as evidence of validity and reliability. The final chapter indicates conclusions that may be drawn from the construction of such an inventory as well as recommendations for its use and applicability. Recommendations for further study are also made.

¹The various forms of this inventory, as it was developed, appear in this study as Appendixes A through D: the 300-item Trial Form, Appendix A, pp. 67-86; the 140-item Experimental Form, Appendix B, pp. 87-96; the final forms, A and B, Appendixes C and D respectively, pp.97-104; and pp.105-112.

TABLE 1
TESTS RECEIVED FROM THE TRIAL SAMPLING

Schools	Number Received
University of Oklahoma	59
Northwestern State College	44
East Central State College	76
Southeastern State College	47
Oklahoma State University	36
Southwestern State College	19
Central State College	89
University of Tulsa	59
University of Arkansas	1
Oklahoma College of Liberal Arts	1
North Texas State University	1
Kansas State University	1
Oklahoma City University	1
No School Listed	20
Total	454

TABLE 2

TESTS RECEIVED FROM THE EXPERIMENTAL SAMPLING

Schools	<u>Groups</u>			Total
	I	II	III	
Northwestern State College	20	14	14	48
Oklahoma State University	19	9	2	30
University of New Mexico	38	34	4	76
Sam Houston State College	39	31	5	75
New Mexico State University	21	8	7	36
Henderson State College	22	21	6	49
Abilene Christian College	11	5	3	19
Kansas State University	3	4	4	11
East Central State College	8	2	16	26
University of Nevada	3	6	7	16
University of Oklahoma	9	19	2	30
Tulane University	6	6	5	17
Adams State College		2	7	9
University of Houston	1			1
University of San Francisco			1	1
Florida State University			16	16
University of Arkansas			5	5
Utah State University			5	5
University of Texas		1		1
Totals	200	162	109	471

CHAPTER II

THE PROBLEM

The problem of constructing an inventory for assessing familiarity with guidance principles demanded a recognition of the needs for such a study. Also required was the establishment of those principles of guidance and the educational objectives on which assessment would be made. Certain basic assumptions were made and limitations recognized in the attempt to meet these requirements and to construct inventory items which would validly and reliably indicate the degree of an individual's familiarity with guidance principles.

Needs for Study

The initial step in constructing an inventory to assess familiarity with general principles of guidance was to identify the needs for such a study. Three needs are readily apparent. These needs concern the selection and retention of candidates for counselor training, the self-evaluation of guidance and prospective-guidance personnel, and the construction of a standardized test of achievement and/or aptitude.

Selection and Retention of Counselor-

Training Candidates

The irreversible conditions accounting for the demand for guidance personnel have resulted in the natural trend within mass education for students to enter those fields showing such a demand. This tendency combined with the availability of federal funds for both training of counselors and setting up guidance programs in public schools has presented the institutions of higher education offering counselor training programs with the need to evaluate the practices now employed in the selection and retention of candidates for counselor certification. One of the most important steps in the process of appraising the end-product of the training curriculum is the selection of those who are admitted to it. The individual not having the academic training and personal characteristics considered essential for successful counseling at the time he begins his specialized counselor training or not showing promise of developing them during the early stages of the program is not a good prospect and should not be selected. Similarly, that individual not showing continuous systematic growth while in the professional training program is not a good prospect and should not be retained. A valid objective instrument which could assist in determining a candidate's academic and personal qualifications both prior to his admission to the professional program and during his training would be most helpful to the

professional training personnel in their task of selecting and retaining students. The proposed instrument should fill this need.

Self-Evaluation of Guidance and Prospective-Guidance Personnel

Because guidance personnel are in a position to influence greatly the lives of school children, it is extremely important that their knowledge, opinions, beliefs, and techniques be of the highest standard. Judicious self-evaluation is one means of attaining and maintaining such a standard. And self-evaluation concerns not only experienced counselors and guidance workers but also prospective counselors and new guidance personnel. Ideally, the student who is in training for guidance work should initiate self-evaluation. Preceding and during his basic academic course work, the pre-professional should be prepared to assess his strengths and weaknesses, not only for his own benefit but also for the benefit of the training personnel. Such self-evaluation by the pre-professional may alleviate part of the heavy burden of responsibility thrust upon the training personnel in the selection and retention of counselor trainees in that some candidates may voluntarily decide not to enter the program. Certainly the pre-professional needs some standard of reference to aid in this evaluation, some guidelines against which he can evaluate practices and beliefs, some bases so that he can assume responsibility for self-evaluation. The fundamental principles of guidance

upon which the items of the inventory are based can serve as this needed standard of reference.

Also it is incumbent upon the professional guidance counselor that he systematically and regularly expand his knowledge of both his fundamental field of work and related areas. To keep up to date in the subject matter of the guidance field, to keep professionally alive, the counselor must systematically grow. Improvement does not come automatically and years of experience do not necessarily mean higher competence. Again, an instrument to help in assessing professional status and growth is needed. Valuable to the guidance worker would be a list of principles that can guide him in the evaluation of his practices. The proposed inventory should fill this need in that it will give the worker an opportunity to assess his ideas about techniques and his beliefs and opinions within the specific context covered by each of the accepted basic principles.

Construction of Standardized Test of Achievement and/or Aptitude

Even as no guidance worker can afford to neglect the standardized test as a means by which to obtain reliable information on which to act with confidence with the student, neither can he afford to neglect this aid in obtaining reliable facts in regard to prospective workers in his field or in evaluating his own professional growth. Possibly, a standardized test for measuring objectively degrees of quality and

achievement among pre-professional and professional workers in the field of guidance not only would aid in the diagnosis of strengths and weaknesses but also would provide a base for judging abilities against a standard of excellence. As yet, no such standardized test is available in the guidance field with which to compare an individual student's or counselor's knowledge, beliefs, and techniques to those of another or to a standard of excellence in achievement as determined by recognized leaders in the field.

A study devoted to finding a basis for such a test of achievement, to designing items which interpret those objectives, and subsequently to establishing their validity through statistical means can be a first step in constructing such a standardized test. Because achievement tests are designed to measure skills and information which have been learned in courses of training or from work experience, items are usually selected from those which have been used by instructors as indications of success in a course of study. It is natural to assume that the generally accepted basic principles of guidance are covered in the beginning courses of the guidance curriculum. Therefore, items in this proposed inventory which cover beliefs, knowledge, and techniques as they relate to the basic principles could be the basis of a standardized achievement test when and if it is subjected to many preliminary trials and the norms are available for persons in various age, grade, or occupational groups.

Similarly, the inventory could become the basis for an aptitude test or scale. By definition, the aptitude scale implies that all persons tested have through previous experience reached fairly high levels of proficiency in the skills tested.¹ Thus, those with high scores demonstrate ability to develop in work of a similar nature. Consequently, the proposed inventory could be used to predict success in the guidance field if and when items included are weighed in proportion to the more relevant principles upon which it is based. To make this predictability possible, a careful analysis of the skills which tend to lead to success for the experienced counselor as well as long-time development studies which compare ratings of success with the scores derived from the measuring instrument must be made.

Several studies have laid the ground work and pointed in this direction, and it is indicated that this type of inventory is the next step in the evaluation of any guidance training program.² The "knowledge explosion," the changing needs of those taught, and the increased research in the guidance field all give increasing emphasis to this type of evaluation.

¹Edward B. Greene, Measurements of Human Behavior (New York: Odyssey Press, 1952), p. 38.

²Stanley Benz, "An Investigation of the Attributes and Techniques of High School Counselors." Unpublished Ph. D. dissertation, Purdue University, 1948.

Recent Literature Relating to
the Problem

Familiarity with basic principles of guidance would seem to meet the basic requirements of each of the three needs discussed above. Certainly the establishment of those basic principles is the natural prerequisite to the building of an instrument designed to determine guidance personnel's knowledge, beliefs, and techniques as they are stated or implied in principles which govern the field. Two recent studies were devoted to analyzing textbooks with the purpose of arriving at a core of accepted principles. Textbooks, because of their role as the traditional tool of instruction, were the sources for the isolation, either by statement or implication, of commonly accepted principles which are considered basic to the fields of guidance and student personnel services. The dissertation problem treated by Constance Palms dealt with isolating those basic principles underlying student personnel services.¹ That of Velma Adkins concerned the identification of accepted principles of guidance.²

The study of Adkins was devoted to analyzing nineteen textbooks considered as authoritative in the guidance field,

¹Constance N. Palms, "An Analysis of Textbooks on Student Personnel Services with Emphasis on Common Core of Topics Treated." Unpublished Ed.D. dissertation, University of Oklahoma, 1963.

²Velma S. Adkins, "An Analysis of Textbooks on Principles of Guidance." Unpublished Ph.D. dissertation, University of Oklahoma, 1965.

with the purpose of establishing a core of accepted principles of guidance. These principles were used as the working basis of this inventory. Slight modifications in the wording and listing of these principles have been made in order to be conducive to the diagnostic evaluation of a student's familiarity with them. The general principles isolated by Adkins are listed in Appendix E, p.113 , of this study; these principles as modified and used in this study are stated in Table 3.

TABLE 3

THE PRINCIPLES OF GUIDANCE UPON
WHICH THE TEST IS BASED

1. Guidance respects individual differences and recognizes the unique position of the individual within the community.
2. Guidance services should be available to all students, not just to those who are atypical or show evidence of its need.
3. Guidance is concerned with the individual as a whole, not with isolated areas of his life; therefore, it is a unified and continuous process.
4. Guidance is fundamentally a preventive function with emphasis on causes of behavior rather than on observable symptoms; therefore, it has limits and cannot be all inclusive.
5. Guidance recognizes as essential the use of scientific methods in the collection and interpretation of data which are employed in helping the individual solve his problems.
6. Guidance and instructional activities share the same basic goals and objectives within the total educational process.
7. Guidance assists the individual in formulating and accepting appropriate goals of behavior that will enable him to become increasingly self-directed.
8. Guidance requires the services of trained guidance personnel who provide the leadership and specialized technical assistance for the organized guidance program; this includes the cooperation and services of home, school, church, and community.

9. Guidance works within and contributes to a democratic society wherein the process is one of counsel, not compulsion.
10. Guidance respects individual worth and dignity as it relates to basic American values and is subject to those conflicts which exist in contemporary society.
11. Guidance refers to the process of putting into effect a program of integrated services that are consistently evaluated.

Because these guidance principles include well-established principles of education and psychology as well as philosophy about human behavior and ways of dealing effectively with people and their problems, they can serve well as the basis for evaluation. Because these guidance principles encompass the entire guidance field, not a single specialized area, they can be utilized by training personnel or by those concerned for self-evaluation.

The works of those authors surveyed by Adkins and Palms¹ were reviewed with the purpose of building items around the guidance concepts implied or stated within the principles established. Also, data derived from periodicals, brochures, dissertations, and other such publications relative to concepts, practices, and allocated responsibilities which enlarge upon the principles were used as bases for inventory items. Every effort was made to build items based on varying specialized areas within the guidance field. For example, some items refer

¹Appendix F lists titles and authors included in Adkins' study, pp.114-115. Appendix G lists titles and authors included in Palms' study, p.116.

specifically to vocational problems, while others deal with counseling techniques; some items deal with factual knowledge of human behavior, while others deal with opinions on administrative responsibilities.

Further, the construction of inventory items was based upon four well-established educational objectives as they relate to the selected basic principles:¹ (1) to determine the degree of knowledge and understanding of the general principles, (2) to determine ability in recognizing the cause-and-effect relationships basic to the principles, (3) to determine the ability to recognize and appraise situations relating to the principles, and (4) to determine ability in interpreting and evaluating data and in drawing conclusions consistent with the principles.

Basic Assumptions and Limitations

It is assumed that in any guidance curriculum one objective would be for the student to gain familiarity with basic principles of guidance, to understand relationships, and to acquire proficiency in techniques implied in those principles. A second assumption was made that students completing the basic courses in any guidance curriculum possess a greater familiarity with the principles of guidance than

¹Benjamin S. Bloom, ed., Taxonomy of Educational Objectives: Handbook 1, Cognitive Domain (New York: David McKay Co., Inc., 1956), pp. 201-207.

do students just entering the curriculum. A further assumption was that students completing half of the required basic courses would have a greater familiarity with the subject matter and the required process categories than students just entering the curriculum but less than those completing the curriculum.

This study has several limitations:

1. The inventory is based upon principles of guidance identified by Adkins. As modified and stated here, they may not be identical with those selected by others.

2. No attempt is made to identify principles of guidance by writers other than those used in Adkins' study.

3. The test norms are based upon a limited sample from a limited geographical area. For the trial form of the inventory, the sample group was predominately the product of the training programs and curriculums of Oklahoma colleges and universities. For the experimental form of the inventory, the sample group was again southwestern in character, although taken from a larger geographical area. The sample groups to which the inventory was administered are listed in Tables 1 and 2, pages 9 and 10.

4. The definition of "basic guidance courses" finds its source in Oklahoma requirements for counselor certification. These requirements appear in Appendix H, pp. 117-120. Since requirements vary from state to state, the definition of "basic guidance courses" will also vary. In those

instances where course titles and requirements varied from those standard in Oklahoma colleges and universities, attempts were made to establish acceptable equivalency of particular courses in order to obtain as homogeneous sub-grouping as possible.

CHAPTER III

METHODS AND PROCEDURES

The development of any evaluation instrument entails the use of uniform and recognized procedures which contribute to the validity and reliability of the measurements derived from the use of that instrument. An Inventory to Assess Familiarity with the General Principles of Guidance has been prepared to evaluate systematically knowledge of basic guidance principles. Thus, the very purpose of the inventory demands that certain basic procedures be followed: (1) the establishment of the basic guidance principles and the educational objectives upon which the inventory is to be based; (2) the review of pertinent literature from which specific items within the inventory are to be derived; (3) the definition of sample groups to provide bases for standardization of the inventory; (4) the establishment of directions for administration and scoring; (5) the designation of a sample population from which norms can be derived; and (6) the establishment of equivalent forms as a result of the administration of the inventory in experimental forms.

Item Construction

After the establishment of the basic guidance principles and the educational objectives upon which the inventory was to be constructed,¹ a review of pertinent literature was made in order to construct specific items. Works by the authors surveyed by Adkins and Palms² were reviewed with the purpose of building the test around concepts implied or stated within the principles established.

Included in the inventory were those items upon which a majority of the writers surveyed agreed in regard to the statement's validity, in that the content of the statement was explicit or implicit in the text material, and in regard to this instrument's given answer of "agree" or "disagree." The inventory thus consists of a series of statements which have been prejudged as "agree with" or "disagree with" on two bases: their pertinence to the objectives of the measuring instrument and their recognition by leaders in the field of guidance. Consequently, for the individual completing the instrument, a satisfactory answer to each of the statements would be agreement with the prejudged answer. His total raw score would be the number of instances in which his opinion agrees with the opinion of the writers, and thus the raw score

¹Refer to Chapter II, pp. 18-19 and 20.

²See Appendixes F and G, pp. 114-116.

would provide an index of similarity between his practices and beliefs and those stated or implied in the publications of thirty-three recognized leaders in the field of guidance. Table 4 presents the prejudged answer for each of the two final forms of the inventory.

The content of the inventory is so arranged that a premium is placed on the ability to perceive relationships; the importance of rote memorization of guidance principles as presented in standard textbooks is minimized. There are no trick questions; however, some items are included which are readily comprehended only by that individual with a clear understanding of the principles and relationships involved. Tables 5-A and 5-B present the items on both Forms A and B as they reflect the basic guidance principles and the four objectives of the inventory.

Definition of Sample Groups

The frame of reference used in defining the standardization groups for the inventory is Oklahoma requirements for counselor certification. These requirements appear in Appendix H, pp. 117-120. Although requirements for certification vary from state to state and college guidance curriculums vary in the number and type of courses offered, the basic courses in the Oklahoma requirements are representative of those of other states and their colleges and universities.

TABLE 4

PREJUDGED ANSWERS TO INVENTORY ITEMS

FORM A				FORM B			
Item	Answer	Item	Answer	Item	Answer	Item	Answer
1	D	36	D	1	A	36	D
2	D	37	D	2	D	37	D
3	D	38	D	3	D	38	D
4	A	39	D	4	D	39	D
5	A	40	D	5	A	40	D
6	D	41	A	6	D	41	D
7	D	42	D	7	D	42	A
8	D	43	A	8	D	43	A
9	D	44	D	9	D	44	D
10	D	45	D	10	D	45	A
11	D	46	A	11	A	46	D
12	A	47	A	12	A	47	D
13	A	48	D	13	A	48	D
14	D	49	D	14	D	49	D
15	D	50	D	15	D	50	D
16	A	51	A	16	D	51	D
17	D	52	A	17	D	52	D
18	D	53	D	18	A	53	D
19	A	54	A	19	A	54	A
20	D	55	D	20	D	55	D
21	D	56	D	21	D	56	A
22	A	57	A	22	D	57	D
23	A	58	A	23	D	58	A
24	D	59	A	24	D	59	A
25	D	60	D	25	A	60	A
26	D	61	A	26	D	61	D
27	A	62	A	27	D	62	A
28	D	63	D	28	D	63	D
29	D	64	D	29	D	64	A
30	D	65	A	30	D	65	A
31	D	66	D	31	D	66	D
32	A	67	A	32	D	67	D
33	D	68	D	33	D	68	D
34	A	69	A	34	D	69	A
35	D	70	A	35	A	70	A

TABLE 5-A

PRINCIPLES OF GUIDANCE AND EDUCATIONAL OBJECTIVES ON WHICH THE
INVENTORY ITEMS OF FORM A ARE CONSTRUCTED¹

Objectives	Degree of Knowledge and Understanding	Ability to Recognize Cause-Effect Relationships	Ability to Recognize and Appraise Situations	Ability to Interpret and Evaluate Data
Principle	Item Numbers			
1. Respect of Individual Differences	1, 21, 23	2, 48		22
2. Availability to All	20, 49	24, 47	50	29
3. Totality of Concern	26, 37, 70	25, 51, 56, 60	3, 55	59
4. Preventive with Limited Functions	28, 36	18	17	29
5. Validity of Data	19, 61	4, 38	27	
6. Shared Basic Goals	31, 43		16	39
7. Self-Direction Orientation	19, 28, 30, 36	40, 44, 62	52	15, 35
8. Specialized Personnel	5, 13, 41	32	54, 57	
9. Process of Counsel		33, 42, 53, 63	6, 34	7, 14
10. Individual within Society	11, 66	8, 10	67	65
11. Integrated Services	64, 68, 69	9, 46	12, 58	45

¹Note that shortened forms of the principles are used; refer to Chapter II, pp. 18-19, for complete statements.

TABLE 5-B

PRINCIPLES OF GUIDANCE AND EDUCATIONAL OBJECTIVES ON WHICH THE
INVENTORY ITEMS OF FORM B ARE CONSTRUCTED¹

Objectives	Degree of Knowledge and Understanding	Ability to Recognize Cause-Effect Relationships	Ability to Recognize and Appraise Situations	Ability to Interpret and Evaluate Data
Principle	Item Numbers			
1. Respect of Individual Differences	22, 40	23		25, 42
2. Availability to All	1, 2, 11, 26	24	41	
3. Totality of Concern	20, 45, 69	21, 27, 28, 43, 44	55	3
4. Preventative with Limited Functions	5	30, 46	4, 47	29
5. Validity of Data		31, 38		6, 19
6. Shared Basic Goals	7, 32			8, 18
7. Self-Direction Orientation	17, 56	9, 10, 46		14, 49
8. Specialized Personnel	11	36, 50	68	16, 58
9. Process of Counsel	59, 67	57	15, 51, 64	33, 48, 52
10. Individual within Society	60		39, 47, 54, 61, 65	12, 34, 53
11. Integrated Services	17	13, 70	35, 62	14, 37, 63, 66

¹Note that shortened forms of the principles are used; refer to Chapter II, pp. 18-19, for complete statements.

Where variances occurred in course titles and requirements, acceptable equivalency of particular courses was made, thus assuring homogeneous groups.

The basic guidance courses consist of twelve credit hours in Oklahoma and include the following courses:

- (1) Principles, Practices and Administration of Guidance,
- (2) Methods and Techniques of Counseling, (3) Educational and Vocational Information, and (4) Counseling Practicum.

Since all training institutions do not assign the same credit hours to each of the basic courses, another required course for certification, Educational and/or Psychological Measurements, was included to allow for discrepancies in the twelve-hour standard.

Directions for Administration and Scoring

Administration of the inventory is so simple that a single person can test large groups with ease or an inexperienced examiner, if well briefed, can readily administer it. However, since the score on any standardized instrument is meaningful only when the directions have been followed and the student has marked the answer sheet properly, clear and concise standards for administration and scoring were established.

Adequate lighting, comfortable seating, adequate writing space, and lack of outside disturbances are the normal requirements for good testing conditions. Even in

those situations where it is necessary to administer the instrument under less satisfactory circumstances, every effort should be made to provide for the ease of the individual completing the inventory.

The inventory is printed in single reusable sets. Two equivalent forms are available. Answers are marked on separate answer sheets which are scored by hand,¹ although the standard IBM answer sheet for test-scoring machines can be readily adapted for use. When such an adaptation is made, some changes in the instructions for administration may have to be made. However, the changes in instructions should be made for the purpose of explaining to the individual how he is to mark his answer sheet; there should be no changes in the directions which explain the inventory content or its nature. Each answer sheet contains sufficient space for taking the entire inventory. Thus, similar answer sheets are used for either Form A or Form B.

Materials should be assembled prior to the administering session. Inventories and answer sheets should be counted to make sure that a sufficient number are available for the group. When the group is large and the time is limited, the answer sheet should be inserted under the first page of the inventory to eliminate separate distribution. After each

¹Sample answer sheets are to be found in Appendixes C and D, following the two forms of the inventory, pp. 103-4 and pp. 111-12.

use, the tests should be carefully checked for any marks, since many students will mark on the inventory itself, even though they have been instructed not to do so. When machine-scoring answer sheets have been adapted for use, an extra supply of electrographic pencils should be available.

After distributing the inventories, answer sheets, and pencils which are compatible with the particular answer sheet being used, the person administering the inventory should instruct the students to fill in the necessary identification information on their answer sheets. He should check to see that all students have completed this information correctly. Then all directions are to be read from the inventory itself, the examiner reading the directions aloud while the examinees read them silently. The examiner should ask if there are any questions, and in answering, he should stay within the exact wording of the printed directions as far as possible. Questions about the meanings of words are not to be answered; the questioner is to be told that his comprehension of the words included in the instrument is a part of the inventory. It should be emphasized that only one response should be recorded for each item and that each item should be answered. Test items are constructed in the form of statements that can be answered in one of three ways: "agree," "disagree," or "uncertain." This three-point scale is considered adequate since it not only includes provision for lack of opinion but also forces the individual completing the instrument to make a definite

decision on each issue instead of shading opinion. The choice of "uncertain" also removes the necessity of applying one of the formulas often used for "correction for guessing."

Examinees should be told to work rapidly and record their first reactions to the items. No time limit is given; however, almost all individuals should be able to complete the inventory within a fifty-minute period.

Each answer sheet should be inspected before it is scored, whether by hand or machine. Any items which are omitted or have more than one answer marked are to be considered as being marked "uncertain." Thus, for machine scoring, omitted and multiple-marked items should be marked "uncertain" on the answer sheet; further, light marks should be made darker, short marks should be made as long as the space, and stray marks should be erased. After screening the machine-scoring answer sheet, the scorer should follow the procedures recommended by the manufacturer of the machine being used. Again, for hand scoring, omitted and multiple-marked answers must be recognized. One method which is much faster than erasing multiple marks and/or marking the "uncertain" choice is to draw a horizontal red line through the entire line for that item. When a stencil is placed over the answer sheet, the red marks will show through the holes and those items can be easily eliminated from the count. There is a different single scoring stencil for each form of

the inventory.¹ The scorer should be careful to place the correct scoring stencil over the answer sheet. Only one score is derived from the inventory. The maximum raw score for each form is 70. Correct answers for both forms are given in Table 4, p. 26.

Norms Population

Based upon the assumption that familiarity with guidance principles grows as the result of guidance courses satisfactorily completed, the norms population was established on the criterion of the number of basic guidance courses completed. Three sub-groups for the norms population were established: (1) students enrolled in the first course of the guidance curriculum, (2) students who had completed half of the required basic courses in guidance, and (3) students who had completed the basic guidance courses. These groupings were used both for the item-analysis studies done on the trial form of the inventory and for the establishment of norms as the result of the administration of the experimental form.

Two sample populations were designated, each performing a different function in the development of the inventory. The trial form of the instrument was administered to four hundred fifty-four graduate students in the guidance curriculums

¹Sample scoring stencils will be found for Forms A and B following those forms in Appendixes C and D, respectively, p. 104 and p. 112.

of Oklahoma universities and colleges. Table 1, p. 9, presented in Chapter I, lists the training institution and the number of students completing the trial form. A new sample group of four hundred seventy-one graduate students, representing nineteen universities and colleges of the south and southwest, completed the experimental form of the inventory. For the selection of the second sample population, college catalogues were surveyed to determine which of the universities and colleges in the area offer training programs on the graduate level in guidance and counseling. Of the thirty-seven institutions invited to participate in the sample, nineteen did so within the time period allotted to the gathering of data. Again, this sample consisted of the same sub-groupings as in the trial form administration of the inventory. Table 2, p. 10, listing this sample group, indicates training institution and sub-groups.

Equivalent Forms

Inventory items were constructed on the basis of four educational objectives as they relate to the established basic principles. Tables 5-A and 5-B, pp. 27 and 28, list each item in a manner indicating the principle covered and the objective on which it was constructed. Table 6 summarizes this information with totals for the number of items devoted to each principle and the number of items based on each of the four objectives.

TABLE 6

NUMBER OF ITEMS DEVOTED TO EACH PRINCIPLE AND
EDUCATIONAL OBJECTIVE

Form A		Form B	
Principle	No. of Items	Principle	No. of Items
One	6	One	5
Two	6	Two	6
Three	10	Three	10
Four	5	Four	6
Five	5	Five	4
Six	4	Six	4
Seven	10	Seven	7
Eight	6	Eight	6
Nine	8	Nine	9
Ten	6	Ten	9
Eleven	8	Eleven	9
	<u>74*</u>		<u>75**</u>

*Four items cover two principles

**Five items cover two principles

Form A		Form B	
Objective	No. of Items	Objective	No. of Items
One	23	One	17
Two	24	Two	18
Three	13	Three	14
Four	10	Four	21
	<u>70</u>		<u>70</u>

Every item of the inventory was carefully examined prior to provisional administrations. Those items which survived this editorial scrutiny were arranged in a trial form and then administered to the first sample population. Item analysis of the responses to the trial form, including both difficulty levels and discrimination index coefficients, determined the items to be included in the experimental form of the inventory. Discrimination indexes, in the form of tetrachoric coefficients, were first computed for all three hundred items included in the trial form. On the second calculation, those items with an index of less than an r_t of .30 were dropped from the inventory. For the same sample population, discrimination indexes were then calculated on the remaining items. After seven repetitions of this procedure, one hundred forty items survived, with discrimination indexes of r_t .30 to .97. Item difficulty indexes ranged from .17 to .91. Appendix I, pp.121-28, shows the development of the inventory on the basis of this procedure.

Thus, for the experimental form, those items were selected which sufficiently discriminated between the more able and less able students and which satisfied requirements for balance of items according to difficulty and content. The one hundred forty items surviving the item-analysis process were included in the experimental form which was administered to the second sample group whose responses provided the bases upon which norms were established.

The final step in the construction of the inventory was the assignment of specific items to Form A or Form B. Equivalent alternate forms were developed by arranging the one hundred forty items of the experimental form in order of difficulty and assigning the even-numbered items to Form A and the odd-numbered items to Form B. Care was taken to insure that the two forms are equivalent in terms of similarity of content, of discrimination indexes, and of difficulty values. Tables 7-A and 7-B show the discriminating power and the difficulty index of the seventy items on each of the two forms of the inventory.

The coefficients of reliability for the instrument were calculated by the split-test method, using the scores of the entire experimental sample population and of each of the sub-groups. Further studies were made by lengthening the two halves of the experimental inventory through addition of items selected from those remaining in the trial form and having the highest discriminating power. From the initial inventory, two equivalent forms were established; their equivalency is confirmed by the Pearson correlation coefficient of .979.¹ Each form includes seventy items and requires approximately fifty minutes to complete.

¹These multiple coefficients are discussed in Chapter IV and demonstrated in Tables 8 and 9, p. 51 and p. 53.

TABLE 7-A

DISCRIMINATING POWER¹ AND DIFFICULTY INDEXES²
OF ITEMS INCLUDED IN FORM A

Item No.	Difficulty Index	Discrimination Index	Item No.	Difficulty Index	Discrimination Index
1	.91	.61	36	.49	.70
2	.90	.78	37	.25	.46
3	.78	.68	38	.39	.72
4	.85	.38	39	.82	.58
5	.72	.40	40	.44	.53
6	.42	.62	41	.91	.43
7	.72	.53	42	.55	.67
8	.61	.77	43	.86	.34
9	.35	.47	44	.54	.75
10	.57	.61	45	.86	.48
11	.51	.46	46	.81	.41
12	.96	.54	47	.90	.48
13	.81	.41	48	.86	.90
14	.68	.65	49	.77	.74
15	.17	.56	50	.66	.69
16	.70	.50	51	.89	.52
17	.89	.57	52	.44	.39
18	.84	.63	53	.47	.68
19	.53	.41	54	.87	.55
20	.61	.53	55	.56	.44
21	.56	.56	56	.28	.48
22	.37	.60	57	.95	.43
23	.57	.42	58	.57	.40
24	.89	.79	59	.93	.62
25	.68	.62	60	.39	.49
26	.27	.59	61	.89	.31
27	.86	.38	62	.48	.42
28	.85	.88	63	.85	.62
29	.53	.53	64	.45	.45
30	.92	.63	65	.78	.45
31	.52	.58	66	.82	.94
32	.74	.55	67	.60	.53
33	.67	.63	68	.72	.52
34	.96	.67	69	.83	.44
35	.35	.53	70	.64	.34

¹Discriminating power based on tetrachoric coefficients.

²Difficulty index is based on the proportion of the sample giving the correct answer to the item.

TABLE 7-B

DISCRIMINATING POWER¹ AND DIFFICULTY INDEXES²
OF ITEMS INCLUDED IN FORM B

Item No.	Difficulty Index	Discrimination Index	Item No.	Difficulty Index	Discrimination Index
1	.94	.48	36	.66	.52
2	.80	.58	37	.42	.46
3	.52	.59	38	.24	.56
4	.49	.49	39	.42	.56
5	.50	.40	40	.75	.50
6	.74	.54	41	.60	.45
7	.15	.60	42	.83	.45
8	.88	.55	43	.95	.86
9	.20	.53	44	.59	.59
10	.51	.60	45	.92	.59
11	.83	.52	46	.75	.60
12	.52	.58	47	.38	.70
13	.55	.45	48	.58	.51
14	.72	.67	49	.35	.54
15	.71	.65	50	.74	.70
16	.37	.74	51	.88	.81
17	.42	.51	52	.53	.66
18	.95	.42	53	.71	.68
19	.47	.40	54	.90	.62
20	.79	.72	55	.87	.52
21	.62	.77	56	.74	.58
22	.76	.65	57	.38	.70
23	.88	.74	58	.78	.46
24	.66	.50	59	.88	.42
25	.71	.43	60	.65	.35
26	.68	.66	61	.41	.77
27	.85	.58	62	.86	.74
28	.78	.58	63	.85	.80
29	.27	.45	64	.96	.61
30	.87	.46	65	.91	.61
31	.50	.48	66	.70	.61
32	.28	.51	67	.60	.43
33	.81	.97	68	.91	.37
34	.59	.43	69	.81	.44
35	.92	.68	70	.95	.47

¹Discriminating power based on tetrachoric coefficients.

²Difficulty index is based on the proportion of the sample giving the correct answer to the item.

CHAPTER IV

FINDINGS AND TREATMENT OF DATA

Response to the Instrument

Thirty-seven institutions which offer training programs on the graduate level in guidance and counseling were invited to participate in the experimental administration of the inventory. Nineteen did so within the time period allotted to the gathering of data; a total of four hundred seventy-one graduate students enrolled in the guidance curriculums in these southern and southwestern colleges and universities participated in the sample.¹ Administration took place in June and July of 1968. The norms for An Inventory to Assess Familiarity with the General Principles of Guidance are, therefore, based upon the performances of these students who participated in the testing during summer-semester or third-quarter sessions.

It should be noted that many institutions with professional training programs in guidance offer many of the required basic courses during the summer semester when many educators return to work toward advanced degrees or to complete requirements for licensing in various specialized areas

¹See Table 2, p. 10.

within the educational field. It should also be noted that certification for guidance workers in some states includes the requirement of two years of satisfactory teaching experience and a year of work experience other than in the field of education. Consequently, one should be aware that the norms sample was selected from summer-session students, many of whom are educators and have fulfilled the various work-experience requirements for certification. This situation is especially true of Group 3.

Treatment of Data

As with any standardized instrument, the most valuable norms for the user are those representing the distribution of the ability being measured in the population with which he is actually working. Thus, for the guidance worker, norms become valuable when he can determine norms from actual distribution of scores obtained from a sample population of guidance pre-professional and professional workers. Therefore, the norms established in this study are particularly applicable in a southern and southwestern population.

Interpretation of Scores

Only one score for each participant was obtained from the inventory. This raw score was the total number of instances of agreement between the individual completing

the inventory and the pre-judged correct answer.¹ However, except for special and limited uses, raw scores have little value in interpreting an individual's familiarity with principles of guidance. To achieve meaning, they are converted into standard scores, percentile ranks, and percentile bands.²

Three types of norms, provided for each of the three sub-groups as well as for the combined sample group, are presented for the inventory: standard scores, percentile ranks, and percentile bands.³ All three types are based on the same standardization sample. Because the norms for the two forms differ slightly, care should be taken that the raw-score interpretation for the individual completing the inventory be read from the proper norms table. The procedure for reading the norms tables is to locate a given raw score in the extreme left column in the table for the form and sub-group it represents and to read across the page for the standard score, percentile rank, and, in the extreme right column, the percentile band.

Standard Scores

Scores become meaningful when considered in relation to a collection of scores obtained from a reference group.

¹See Table 4, p. 26.

²SCAT Handbook, Series II (Princeton, New Jersey: Educational Testing Service, 1967), p. 8.

³See Appendixes J through U, pp. 129-141.

The interpretation of an individual raw score requires some measurement of its placement or position in a distribution of scores obtained from a sample population. Through statistical procedures, an original score can be altered to exhibit a standard degree of variability and to show some standard mean value. The resultant values are known as standard scores.¹

Two types of standard scores are given for each individual raw score: z-values and T-scores. The z-values system of standard scores alters the original raw scores to a standard set by assigning a mean of zero and a standard deviation of one. The z-scores result in values which are expressed in standard deviation units. Thus, any z-value is directly interpretable as the number of standard deviation units the given raw score is above or below the mean. Three standard deviations on either side of the mean usually include all of the cases, the highest z-value being +3.00, the lowest -3.00.² Because z-values are equal units of measurement and do not change the shape of the original distribution, they can be arithmetically manipulated. However, for the statistician or test researcher, z-values have certain disadvantages. Half of the scores are negative; moreover, the user must work with decimal scores in order to obtain

¹Paul Blommers and E. F. Lindquist, Elementary Statistical Methods (Boston: Houghton-Mifflin Co., 1960), pp. 157-158.

²N. M. Downie and R. W. Heath, Basic Statistical Methods (New York: Harper and Brothers, 1959), p. 61.

differentiation between individuals. By nonlinear transformation of the raw score distribution, these disadvantages can be eliminated. The normalized T-score system sets the mean at 50 in order to avoid negative scores, and it makes each standard deviation 10 points. Further, if each T-score is rounded to two-place numbers, no decimal scores result.

Thus, both types of standard scores are easily interpretable. A T-score of 60 is recognized as being one standard deviation above the mean in a normalized distribution, or a z-value of -1.5 easily is determined to be a T-score of 35.

Percentile Ranks

The percentile scale provides an estimate of the value of an individual score in relation to other scores in the same sample population. A percentile is defined as "the point on the scale below which a fixed percentage of the distribution falls."¹ It is a rank expressed in percentage terms and tells what proportion of the group falls below any point on the scale. For example, if on Form A of the inventory an individual in Group 1 has a raw score of 51 items, he obtains a percentile rank of 80. This figure means that eighty percent of those individuals just entering the guidance curriculum obtained a raw score lower

¹David Magnusson, Test Theory (Reading, Mass.: Addison-Wesley Publishing Co., 1967), p. 238.

than 51 in this norms group. The person exactly in the middle of the group is at the fiftieth percentile and represents the most typical performer.

Transforming raw scores to percentile scores is non-linear and changes the shape of the distribution. The distribution becomes rectangular in shape with individual scores near the middle of the raw-score scale spread apart while those at the end are squeezed together.¹ For example, in the normal curve distribution of scores, a difference of five points near the middle of the distribution represents a larger increase in percentile ranks than a five-point difference does at the extremes of the distribution. Therefore, in interpreting percentile scores, one should remember that a relatively large percentile difference near the fiftieth percentile represents a small difference in performance.

The percentile rank an individual obtains must be interpreted only with reference to the group on which the percentiles are based. Percentile ranks cannot be validly compared unless the reference groups on which they are based are comparable. If an individual is compared with a group of superior students, his percentile rank will be lower than if compared with a less able group.

¹Lee J. Cronbach, Essentials of Psychological Testing (New York: Harper and Brothers, 1960), p. 76.

Percentile ranks are given for each of the subgroupings in the normalizing population. For those users interested in comparing a given raw score with the entire sample group, percentile ranks are provided in Appendix M, p. 132, using Form A, and in Appendix Q, p. 136, using Form B. Taking the previous example of the individual in Group 1 having a raw-point score of 51, one sees that, when compared with his reference group, he had a percentile score of 80. However, if compared with the entire sample group, his raw score of 51 ranks in the forty-eighth percentile.

In addition to a single percentile rank for each individual raw score, the norms tables present pairs of percentile scores representing a band. This feature is one of those developed by the Educational Testing Service and used in its Cooperative School and College Ability Tests.¹ The purpose of percentile bands is to emphasize the inaccuracy of a single test score. Theoretically, if an individual were to take several forms of the same test, the raw scores made would be distributed in the shape of a normal curve. The average of these scores could be called the individual's true score.² The score derived from taking only one form of the measuring instrument is not necessarily the true

¹Cooperative School and College Ability Tests
(Princeton, New Jersey: Educational Testing Service, 1967).

²SCAT Series II, p. 9.

score. However, by adding and subtracting from the obtained score the standard error of measurement, the chances are two out of three that the individual's true score falls within this range of scores. Again using the previous example, an obtained raw score of 51 is represented by the percentile 72 at the lower end of the band and by 88 at the upper end. The band is approximately two standard errors of measurement wide. The chances are two out of three that this individual would score within this percentile band on any retest situation.

When an interpreter determines the probable range of scores by using the standard error of measurement and converting this range into a percentile band, the width of the band will depend upon the number of individuals whose scores fall in the area. As is true with percentile ranks, the bands at the extremes of the distribution will be narrow, but in the middle of the distribution where scores tend to pile up, the bands will be wide. Percentile bands are presented in Appendixes J through U, pp. 129-141, for each of the sub-groups as well as for the combined sample population for both Forms A and B.

Diagnostic Profile

Tables 5-A and 5-B, pp. 27 and 28, list each of the principles of guidance covered by the inventory and the specific items relating to each principle. These tables are so designed that they can function as diagnostic charts

and can be used for instructional or evaluative purposes. If an individual's answer on an item does not agree with the pre-judged answer, one can refer to Table 5-A or 5-B to determine readily the principle of guidance covered and the objective on which that item is based. Therefore, the area of an individual's weaknesses in familiarity will be reflected. For example, if an individual's answer on item 10, Form A, is marked as incorrect, reference to Table 5-A will show that item 10 covers principle 10 and is based on objective 2. A similar chart is designed for Form B and is labeled Table 5-B. Through the use of these charts, one can draw a profile of an individual's strengths and weaknesses.

Reliability

Reliability refers to the accuracy of a measuring instrument and is demonstrated by the consistency with which the instrument measures the abilities of those to whom it has been administered. A reliable instrument will give a measurement which will be the same as that obtained if the ability is remeasured under the same or similar conditions. Reliability is expressed in terms of a "reliability coefficient," which is the correlation between two measurements obtained in the same manner and which gives the proportion of the test variance that is non-error variance.¹

¹Lee J. Cronbach, Essentials of Psychological Testing, p. 129.

Reliability studies on An Inventory to Assess Familiarity with the General Principles of Guidance consisted of item analysis, internal-consistency estimates and parallel-forms correlations. Item-analysis studies were conducted on the four hundred fifty-four scores represented in the trial form;¹ parallel-forms correlations and internal-consistency estimates were conducted on the four hundred seventy-one scores resulting from the experimental sample.

"When alternate or parallel forms of a test have been constructed, the correlation between Form A . . . and Form B is taken as a measure of the self-correlation of the test."² Both forms of the inventory were constructed from the same pool of items, and item analysis was performed on both forms simultaneously. An attempt was made to rule out such factors as learning, growth, practice, and familiarity which may differ between separate administrations in that both forms were presented as one inventory of one hundred forty items. After arranging the items in order of difficulty, odd-numbered items became Form A on the experimental form of the inventory; even-numbered items, Form B. These two forms, equivalent or parallel, consist of the same types of items, cover the same material, and have similar means and variances. The Pearson product-moment correlation coefficient was computed

¹See Appendix I, pp. 121-128.

²Henry E. Garrett, Statistics in Psychology and Education (New York: Longmans, Green, and Co., 1953), p. 333.

between the two sets of scores of each sub-group; these coefficients are presented in Table 8. Forms A and B are equivalent with respect to measurement of the principles and objectives of the inventory as demonstrated in Table 6, p. 35, which gives the number of items devoted to each principle and to the educational objective, and in Tables 7-A and 7-B, pp. 38 and 39, which give the discrimination and difficulty indexes of each of the items included in the inventory. The two forms are not, however, equivalent in raw scores. Accordingly, in the norms tables, percentiles, z-values, and T-scores differ slightly from Form A to Form B.

Each item of the inventory can be considered as a subtest in the larger composite. So considered, each item yields, then, a distribution of scores, with a mean and a standard deviation. The mean is equal to the proportion of all attempting the item and obtaining the right answer; the standard deviation is the square root of the variance of the distribution. Consequently, each item in the inventory will have a z-score, previously defined as the deviation of a score from the mean as expressed in standard deviation units. Since z-scores are a linear transformation, they do not reflect the size of either the mean or the standard deviation. Correlation involves the relationship of two variables and is also independent of the values of the mean and standard deviation. Thus, the correlation which exists between two variables is preserved when the terms in each distribution

TABLE 8
RELIABILITY COEFFICIENTS ON EQUIVALENCE
OF THE TWO FORMS

Group	Correlation between Form A and Form B ¹	Standard Error of Measurement ²
I	.958	4.464
II	.963	3.576
III	.869	2.232
Total Sample	.979	4.599

¹Pearson product-moment Coefficient of correlation

²Formula used to compute the standard error of measurement:

$$s_e = s \sqrt{1 - r_{tt}}$$

where: s = standard deviation of the instrument
 r_{tt} = reliability of the instrument

are changed to z-scores. "The correlation coefficient is the mean of the cross products of the z-scores of two variables."¹ While it is not necessary to translate the original scores into z-scores to obtain a correlation coefficient, the intercorrelation of the items in the instrument are the essential sources of internal consistency.² To obtain intercorrelations, one must make an item-analysis study, consisting of both discriminating indexes and difficulty indexes. Thus, for practical purposes, the reliability coefficients for internal consistency are based on z-scores. These coefficients, computed by the split-half method and estimated for the total test by the Spearman-Brown Prophecy formula, are presented in Table 9. The same results would have been obtained if the Pearson product-moment coefficient had been used.³

Item intercorrelations, stated as tetrachoric coefficients, and item-difficulty indexes, stated as proportions, are presented in Tables 7-A and 7-B, pp. 38 and 39. The average difficulty index is .67 on Form A; .66 on Form B. The average discrimination index (item intercorrelation) is

¹George H. Weinberg and John A. Schumaker, Statistics: An Intuitive Approach (Belmont, California: Wadsworth Publishing Co., 1965), p. 261.

²J. P. Guilford, Fundamental Statistics in Psychology and Education (New York: McGraw-Hill Book Co., 1965), p. 456.

³Weinberg and Schumaker, Statistics, p. 265.

TABLE 9

RELIABILITY COEFFICIENTS AND STANDARD ERRORS OF MEASUREMENT
FOR AN INVENTORY TO ASSESS FAMILIARITY WITH THE
PRINCIPLES OF GUIDANCE

Group	Mean		Standard Deviation		Reliability Coefficient ¹		Standard Error of Measurement ²	
	Form A	Form B	Form A	Form B	Form A	Form B	Form A	Form B
One	44.4	44.6	6.98	6.81	.939	.957	2.34	2.28
Two	52.4	52.3	5.44	4.92	.934	.961	1.98	1.79
Three	55.7	55.5	5.32	5.40	.827	.883	1.69	1.71
Total Sample	49.8	49.8	7.77	7.49	.959	.982	2.40	2.32

¹Split-half method based on z scores.

$$z = \frac{X - M}{SD} \quad SD = \sqrt{\frac{\sum X^2}{N - 1} - \frac{M^2}{N - 1}}$$

Coupled with the Spearman Brown Prophecy Formula:

$$r_{tt} = \frac{2 r_{oe}}{1 + r_{oe}}$$

²Formula used for computing the standard error of measurement:

$$S_e = s \sqrt{1 - r_{tt}}$$

where: s = the standard deviation of the instrument,
 r_{tt} = the reliability of the instrument

.56 on both forms. In addition to providing evidence of equivalency of forms, these averages also provide evidence of internal consistency. The items not only discriminate between groups but also range from very easy to very difficult. From the point of view of item difficulty, indexes range from .17 to .91. Both of these indexes help to demonstrate the high reliability of the inventory.

Rather than using correlation coefficients to express the reliability of an instrument, it is often preferable to use the standard error of measurement. This statistic is not influenced by the range of scores of the population sampled. The standard error of measurement describes the band of error around test scores and thus provides a more direct, translatable statistic with which to evaluate a test's reliability. For example, a standard error of measurement of 2.5 indicates that a score may be expected in two cases out of three to be within 2.5 raw-score points of the true score. The SEM is a standard deviation, with the true score as the mean. The smaller the standard error of measurement, the more reliable the instrument and the more confidence placed in any score obtained. The perfectly reliable instrument would yield a reliability coefficient of 1.00 and a standard error of measurement of zero. Standard errors of measurement are presented in Table 9 for both Forms A and B.

Validity

Because the inventory's intention is to assess familiarity with the basic principles of guidance, its content-validity is of primary importance. Content-validity, meaning that the items included in the instrument are representative of the kind of performances that constitute the variable being measured,¹ is demonstrated by "how well the content of the test samples the . . . subject matter about which conclusions are to be drawn."²

The fact that there is a significant difference between the mean scores made on the inventory by the three sub-groups indicates that the instrument does distinguish between the more advanced pre-professional student and the beginning one. A t-ratio formula was applied as a test of significance between the means of the three groups on both Forms A and B of the inventory. All ratios are significant at the .01 level, as confirmed in Table 10.

Further, a statistical item-analysis was made on the trial form of the inventory.³ The trial-form results, in regard to total scores, separated groups which did well, the upper one-third, from those which did poorly on the

¹Horace B. and Ava C. English, A Comprehensive Dictionary of Psychological and Psychoanalytical Terms (New York: David McKay Company, Inc., 1958), p. 575.

²Standards for Educational and Psychological Tests and Manuals (Washington, D. C.: American Psychological Association, Inc., 1966), p. 12.

³See Appendix I, pp. 121-28.

TABLE 10

T-RATIOS SHOWING SIGNIFICANCE OF THE MEAN
SCORES OF THE SUB-GROUPS

Group	Form A		Form B		Combined Forms		Significance at the .01 level
	Mean	t-ratio	Mean	t-ratio	Mean	t-ratio	
One	44.44	11.89	44.63	12.13	89.07	11.58	2.588
Two	52.42		52.38		104.80		
One	44.44	14.77	44.63	14.44	89.07	13.98	2.592
Three	55.79		55.56		111.36		
Two	55.42	5.04	52.38	5.01	104.80	5.31	2.592
Three	55.79		55.56		111.36		

¹Formula used for t-ratio, defined as the estimate of standard deviation of distribution of differences of means of samples.

$$s_d = \sqrt{\frac{(N_1 - 1)s_1^2 + (N_2 - 1)s_2^2}{N_1 + N_2 - 2}} \cdot \sqrt{\frac{1}{N_1} + \frac{1}{N_2}}$$

$$t = \frac{\bar{X}_1 - \bar{X}_2}{s_d}$$

inventory, the lower one-third. The test results strongly suggest that those in the higher scoring group possessed greater familiarity with the knowledge, beliefs, and techniques pertaining to the principles of guidance. On the basis of trial-form scores, a comparison between the two groups was made item-by-item. Each item was evaluated in terms of the percentage difference between the upper and lower groups' answering of the items correctly. The greater the difference between the two groups, the greater the discriminating power of the item. The experimental form of the inventory includes the one-hundred forty items having the greatest discriminating power. Thus, an item discriminates individuals in reference to other items in the inventory and in reference to the total score on the inventory of which it is a part. Such a discrimination is frequently known as "item validity," which is a matter of construct-validity.¹ Naturally, correlating items with total score increases the homogeneity of the instrument, a matter of reliability; but because it does guarantee that the same variable is uniform for all items, it is also a matter of construct-validity. The tetrachoric r-method of calculating discriminating power was used. The calculation was first made on four hundred fifty-four total scores resulting from administering the

¹Guilford, Fundamental Statistics, p. 498.

trial inventory to a sample of students enrolled in the guidance curriculum of Oklahoma universities and colleges. This trial inventory consisted of three hundred items. Discrimination indexes were first computed for all three hundred items. On the second calculation, those items with an index of less than an r_t of .30 were dropped from the inventory. On the basis of the scores from the same population sample, discrimination indexes were then calculated on the remaining items. After six repetitions of this procedure, one-hundred forty items survived, with discrimination indexes of r_t .30 to .97. After a seventh computation on the surviving items, the average for Form A is r_t .56; the average for Form B is the same, r_t .56. Appendix I, pp. 121-28, shows the development of the inventory on the basis of discrimination indexes.

CHAPTER V

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

Summary

The problem of constructing an inventory by means of which a student's familiarity with the basic principles of guidance could be assessed was determined by the need for an evaluating instrument which could be used in the selection and retention of counselor-training candidates, in the self-evaluation of guidance and prospective-guidance personnel, and in finding a basis for the construction of a standardized test of achievement or aptitude. As is the case with any device which is to be used for diagnosis, instruction, evaluation, or prognosis, the inventory, tables, directions, and norms should contain information sufficient to enable a user to make judgments regarding its usefulness and interpretation. The standards of test description as approved by the American Psychological Association, the American Educational Research Association, and the National Council on Measurement in Education¹ have been used as reference and as recognized

¹Standards for Educational and Psychological Tests and Manuals. Washington, D.C.: American Psychological Association, Inc., 1966.

authority in the methods and procedures used in the development of this study.

The study has involved a review of literature in which the principles of guidance selected as the basis for the inventory are discussed.¹ After the establishment of these principles,² a pool of items was constructed on the basis of four educational objectives: (1) to determine the degree of knowledge and understanding of the general principles, (2) to determine ability in recognizing cause-and-effect relationships basic to the principles, (3) to determine the ability to recognize and appraise situations relating to the principles, and (4) to determine ability in interpreting and evaluating data and in drawing conclusions consistent with the principles.

This pool of items was arranged in a trial form of the inventory and administered to a sample population consisting of three sub-groups: (1) students enrolled for the first course in guidance, (2) students who had completed half of the required basic courses in guidance, and (3) students who had completed the basic guidance courses. The responses to this trial form were tabulated, and the scores resulting

¹For a listing of authors reviewed, refer to Appendixes F and G, pp. 114-116.

²For a listing of the principles, refer to Chapter II, Table 3, pp. 18-19.

from the highest and lowest thirds of the sample group were used for item-analysis studies. Those items surviving the item-analysis process were arranged into an experimental form of the inventory and administered to a new sample population. The responses of this sample were used for establishing norms, against which comparisons can be made by anyone who might subsequently use this inventory.

The final step was the construction of two equivalent alternate forms of the inventory. Coefficients of reliability, equivalency coefficients, and norms for the entire sample and each of the three sub-groups were then calculated for both forms from the scores of the experimental norms sample.

Conclusions

Two equivalent forms of An Inventory to Assess Familiarity with the General Principles of Guidance have been constructed. Each form includes seventy items and requires approximately fifty minutes to complete. That the two forms of the inventory are equivalent is confirmed by the Pearson correlation coefficient of .979. Test items cover beliefs, knowledge, and techniques as they relate to the generally accepted basic principles of guidance and are constructed in the form of statements which have been prejudged as "agree with" or "disagree with." Consequently, for the individual completing the instrument, a satisfactory answer to each of the statements would be agreement with the prejudged answer. His total raw score would be the number

of instances agreement occurs. Standard scores, percentiles, and percentile bands are provided for the entire sample population and for each of the three sub-groups.

Certain basic assumptions were confirmed through statistical treatment of the scores received from the experimental sample population. The assumption was made that students completing the basic guidance courses possess a greater degree of familiarity with the principles of guidance than do students completing half of the required courses or students just entering the curriculum. A further assumption was that those students completing half of the required courses would have a greater familiarity with the subject matter and the required process categories than those students just entering the curriculum but less than those completing the basic courses. The data shows that there is a significant difference between the mean scores made on the inventory by the three sub-groups and indicates that the instrument does distinguish between the more advanced pre-professional student and the beginning one. Tests of significance were applied between the means of the three groups on both forms of the inventory. All ratios are significant at the .01 level.

The types of validity of primary importance in this kind of inventory include content-validity and construct-validity. Every effort was made to include items representing the varying specialized areas within the guidance field. Those

authors surveyed by Adkins, from whose study the principles of guidance were established, were reviewed and inventory items built on the concepts and implications related to those principles. Tables 5-A and 5-B, pp. 27-28, list the principles of guidance covered by the inventory and the specific items relating to each principle. Construct-validity is confirmed through the tetrachoric r -method of calculating discriminating power of the inventory items. The average discrimination index for both Form A and Form B is r_t .56. This coefficient indicates that the same variable is being measured in all of the items.

Reliability studies included split-half measures of internal consistency and correlations between the alternate forms. Split-half measures were taken for both forms and for both the combined sample and the three sub-groups. All coefficients are significantly high. The standard errors of measurement are significantly small with the largest error being only 2.32. For measuring the correlation between the alternate forms, an attempt was made to rule out factors which might operate between separate administrations of the two forms. Both forms were presented as one inventory of one hundred forty items. These two forms are equivalent or parallel, since they consist of the same types of items, cover the same material, and have similar means and variances. The reliability coefficients on the equivalence of the two forms were computed for the entire sample group and for the

three sub-groups. Again, all of the coefficients are significantly high and the standard errors of measurement small.

Recommendations

Three recommendations are made in reference to the use of the inventory.

1. It should be remembered that the norms were established on population groups enrolled in training institutions during the summer sessions of the academic year. Very often, the summer student varies in both personality characteristics and academic background from the student enrolled in guidance courses during the first two semesters of the school year. Care should be taken in the interpretation of norms for the full-time resident student completing the inventory during the first two semesters. This is especially true of Group 3 norms.

2. Tables 5-A and 5-B, pp. 27-28, list each of the principles of guidance covered by the inventory and the specific items, with the educational objective around which it was built, relating to each principle. The tables with the items circled, as an indication of an incorrect answer, should be returned to each person to whom the instrument is administered and used for instructional or evaluative purposes. Through this type of use, training personnel can draw a profile of an individual's strengths and weaknesses.

3. From studying scores of various sub-groups in the same population, training personnel should be able to reach

conclusions about the effectiveness of their particular programs in promoting familiarity with guidance concepts.

Recommendations for Further Study

Most personnel deeply concerned with effective guidance programs accept Hamrin and Erickson's premise that the primary purpose of guidance is "to help the individual to find himself with respect to his interests and abilities and to understand and appreciate the opportunities offered for his development."¹ Those personnel concerned with facilitating this principle must make sure that it is exemplified in the training programs for which they may be responsible, in self-evaluation, and in their efforts toward assisting students under their influence or direction. On the basis of this guidance point of view in reference to An Inventory to Assess Familiarity with the General Principles of Guidance, two recommendations for further study are offered.

1. Over a period of time and as the instrument is used, revised norms should be constructed which will cover sample groups from a wider geographical area. If the inventory achieves the objective of becoming the basis for a standardized achievement test, it must be subjected to many trials and norms must be made available for persons in various grade levels and occupational groups.

¹S. A. Hamrin and Clifford Erickson, Guidance in the Secondary School (New York: D. Appleton-Century Co., 1939), p. 17.

2. In order for the inventory to be used as the basis for prediction of success in the guidance field and in diagnostic situations, a criterion variable must be designated and defined. For predictive validity in the guidance field, the inventory items should be weighed in proportion to the principles upon which the inventory is based. In addition, an analysis must be made of the skills which tend to lead to success for the experienced guidance worker as well as long-time development studies which compare ratings of success with the scores derived from the inventory.

APPENDIX A

AN INVENTORY TO ASSESS FAMILIARITY WITH THE GENERAL PRINCIPLES OF GUIDANCE

Directions: Below are given a number of statements based on principles of guidance. Read each statement and indicate whether you agree with, disagree with, or are uncertain about it. If you agree with the statement, place an X in column A on your answer sheet. If you disagree with the statement, place an X in column D on your answer sheet. If you are uncertain as to whether you are in agreement or disagreement with the statement, place an X in column U on your answer sheet. Do not write on the inventory; place all your answers on the answer sheet. Do not omit any items. There is no time limit.

Example:

A	D	U
☐	☐	☐

O. It is impossible for the school to do its work well unless it knows something about home conditions and the general social life of the students.

1. Guidance should be made available to anyone who can profit from it.
2. It is true that everything that an individual does reveals something about himself.
3. Guidance is most concerned with assisting those individuals who are handicapped-physically, mentally, or emotionally.
4. It is the job of the guidance worker to investigate and examine the mental qualifications and capabilities of young persons, in order to choose that profession which would be most in harmony with their intellectual make-up.
5. There is no area in our society in which guidance programs can not operate and serve a useful function.
6. Students have many problems of which they themselves are not always aware.
7. Guidance must be accepted as a specialized part of education.
8. Teaching is guidance, but not all guidance is teaching.
9. The guidance program should serve the community in addition to faculty and students.

10. The focus of guidance is on the student's problem and on the ways and means by which it can be solved.
11. Guidance is most successful when it involves clients who are voluntary rather than referred cases.
12. The American ideals of busyness and thrift are no longer adequate as personal guidelines in today's society.
13. Guidance is synonymous with counseling.
14. Students are often willing to discuss in a group problems that they are unwilling to discuss in private interviews.
15. Regarding the normally spoken of "disciplines," guidance can be considered a branch of psychology.
16. Modern society has created situations that are totally beyond the power of the average individual to meet without help.
17. Guidance programs should be primarily preventative in nature.
18. The director of guidance should be the only member of the guidance staff with authority to deal with disciplinary problems.
19. Guidance is a life-long process -- from childhood through adulthood.
20. The guidance program is based on the principle that all students have the same basic interests.
21. If the guidance program is to improve its effectiveness, it must be evaluated systematically by a group of qualified specialists in the measurement field.
22. Discrepancies between ambitions and abilities are the most common causes of vocational and educational problems.
23. The direct responsibility for the school guidance program lies with the administrator.
24. The counselor is not the only person who does or who should do counseling.
25. Guidance services assist individuals in acquiring facts about themselves which under other circumstances they would be unable to secure.
26. In the guidance point of view, the school accepts the responsibility for the individual's improving both himself and society.

27. The primary purpose for gathering data and information about students is to help individuals understand themselves.
28. Handwriting analysis and physiognomy are recognized procedures for diagnosis in the guidance program.
29. The employer's demand for more general education makes vocational guidance in the high school obsolete.
30. When a person responds in a certain way to a test situation, we can accurately predict what his response will be in other situations.
31. Guidance implies that society has the obligation to help the individual live the kind of life that is individually satisfying and socially effective.
32. The school and community can be more assured of an effective guidance program if the counselor directs the student toward the right choices.
33. Every student should have a scheduled interview with the guidance counselor at least twice during the school year.
34. Counseling is an educational process.
35. Guidance and curriculum share the same goals, the same functions, and are thus inseparable in the educative process.
36. The counselor is better able to understand and direct the student than is the student himself.
37. Interests, even short-lived ones, are intense while they operate and students usually know what they want.
38. The guidance counselor's role as a disciplinarian is dictated by the relaxed and liberal training most students receive in the home.
39. Most teachers are qualified to assist students with a wide range of problems and should be used by the guidance program as regular counselors.
40. Everyone needs guidance in social adjustments no matter from what sort of home he may come and no matter how well he may be endowed by nature.
41. Maladjusted students are the prime target of the organized guidance program.
42. Most problems arise from related situations.

43. There is no ideal organization for the guidance program.
44. The guidance counselor should act as a social sensitizer to tensions within the school and work toward their resolution.
45. A major emphasis in guidance is remedial programs.
46. An effective means of starting a guidance program is through a study of problem cases or elements which all teachers recognize as interfering with teaching.
47. The distribution of all the guidance services throughout the teaching staff with no specialist would be the most effective type of program organization.
48. The core-study plan of curriculum organization eliminates the need for the school counselor.
49. Being "all absorbed in your job" is the ideal or the goal of the vocational guidance service.
50. There can be no divisions, no separate kinds of guidance.
51. No one can excuse his unsocial behavior by saying:
"That is the way I am; I was born that way; you will just have to take me as I am."
52. The guidance worker should tell the above average student entering high school to take the college preparatory course.
53. The test used to measure mental abilities should yield more than on I.Q. or mental age.
54. At the secondary-school level, the responsibility for individualizing the educational program is shared by guidance workers and teachers.
55. The modern school guidance program is eclectic in that it belongs to no one discipline, draws upon no one body of knowledge, nor gives allegiance to any one "school" of theory.
56. The success of a guidance worker will depend essentially upon his training as a social scientist who knows how to study human behavior scientifically.
57. The possibility of improving the curriculum is one of the strongest justifications for a school testing program.
58. Since they constitute the extreme deviates on the intelligence scale, the gifted must be considered a discrete category of individuals.

59. The most critical period in which guidance services are needed is childhood when adjustment problems are the most frequent.
60. The guidance program not only helps the student, but also promotes general academic efficiency throughout the school.
61. The major emphasis in counseling should be emotive and therapeutic in nature.
62. The problem of identifying the intellectually gifted members of a particular school population is not a matter that can be settled at any given point on the educational ladder.
63. Achievement test results are among the better predictors of future educational success and thus furnish helpful clues for vocational guidance.
64. The vocational guidance program is primarily concerned with providing the student with occupational information, work experiences, and the inclusion of units on vocational opportunities in the curriculum.
65. All measures of human capacity and achievement are indirect.
66. It is now the exception to the rule for a personal whim, a parental prejudice, or pure accident determining the kind of education a child receives and the choice of his occupation.
67. One of the basic objective purposes of the guidance program is remedial in that advice is given on correcting undesirable habits.
68. Guidance programs must be expanded to include all who teach and reach all who learn.
69. It is not possible to carry on a modern guidance program simply by using the classroom teacher without the assistance of more specially trained persons.
70. When students are to work with their own mental maturity scores, percentiles, not I.Q.'s, are recommended.
71. The secondary school has the opportunity and duty for aiding students in obtaining an understanding of their own abilities and characteristics; how they apply this understanding is a moral question and a responsibility of other community institutions.
72. Courses in occupational exploration and information insure adequate vocational guidance for those students enrolled in those courses.

73. An activity which does not exist in time does not exist at all.
74. In the case of an underachieving student, the first thing the guidance counselor should look for is a possible physical or health basis for the problem
75. The service around which the guidance program must revolve is individual and group counseling.
76. It is a fallacy to assume that a mode of behavior seen in one situation is characteristic of the individual in all situations.
77. Rapport is a term describing the emotional dependence or "crushes" of an adolescent toward his counselor.
78. By far the great majority of men and women employ their leisure time in ways that are largely escape activities.
79. Individuals are endowed by nature with specialized abilities and they will not be vocationally successful unless they find the specific occupations in which these specific abilities are dominant.
80. The guidance counselor should avoid, when possible, giving bad news to the student.
81. Guidance works on the premise that society is under no obligation to help the individual, that the individual helps himself.
82. Guidance has limits on what it can accomplish.
83. Teachers should expect mature behavior on the basis of physical maturity.
84. Anyone can become anything he chooses. All he needs is proper assistance, training, and the "will to do."
85. There is a necessity for a well-developed guidance program for out-of-school youth.
86. Individuals differ by nature greatly in their ability to adapt themselves to social situations.
87. Many school administrators fail to recognize that guidance objectives can usually be accomplished with a short period of concentrated analytical and diagnostic work if adequate staff is provided.
88. The interests of students are confined to those activities in which they have had experience actually or vicariously and thus, not indicative of what occupation they should choose.

89. Single problems are rare and are usually related to other maladjustments.
90. Information which has been obtained about the student by means of tests, questionnaires, inventories, and teacher reports should not be given to the student.
91. Teachers' marks, as estimates by teachers of qualities and characteristics of students, are facts; as definite and accurate measures of ability and achievement, they are not facts.
92. The counselor must know just what the client's ability is and just what he needs, if adequate help is to be given.
93. The ultimate goal of guidance is to resolve the student's problem.
94. A course in public relations should be a requirement for counselor certification.
95. In the best guidance programs, referral of students to other agencies is common.
96. A good counselor should tell the student if he has made the right decision.
97. Just as all students are required to take English and history, so should they be required to consult with the guidance counselor.
98. A school should attempt a guidance program only if it is willing to undertake and participate in all phases of it.
99. Guidance is a personal service given to an individual; it must be given to him alone; it cannot be given in a group situation.
100. The obvious limitations of objective testing devices should be recognized, but failure to use them at all is almost certain to result in great inaccuracies of diagnosis, since personal observation and judgment are usually unreliable.
101. The school population as a whole, nationwide, contains a higher percentage of gifted individuals than the population as a whole.
102. One method used to improve the quality of guidance services has been the adoption by many states of certification plans for guidance workers.

103. The public school has the responsibility for guaranteeing to each child the opportunity for achieving social effectiveness.
104. In interpreting the meaning of standardized test scores, it is almost always preferable to use local norms and validity data when they are obtainable.
105. It is preferable to report the operational significance of a test score, rather than the score itself, because of the extent to which the I.Q. is misinterpreted by students, by parents, and frequently by teachers.
106. One may find that a pupil who is working above his actual grade placement, but below his ability level, may actually be an "inefficient learner."
107. The early stage of social frustration is the period when the individual is most amenable to direction and guidance.
108. The concept of failure in school is one with which we could very easily dispense since it is never possible to determine with certainty who is failing--child, school, community, or parent.
109. It is safe to assume that children who make very high scores on properly administered and constructed intelligence tests really have high intelligence, although others of high intelligence may not be identified by test results.
110. Since social needs are acquired through conditioning and other learning processes, it is easy to see how some persons develop stronger needs than others for particular kinds of social relationships.
111. The success of the guidance program is best evaluated in terms of the results displayed by the testing program.
112. The present controversies centered on moral and religious beliefs force the school guidance program to set standards of good conduct.
113. Certain guidance activities should be undertaken only by guidance specialists.
114. While there is not yet sufficient evidence to warrant the determination of the exact type of guidance personnel or program organization that is most effective, there is fairly clear data on types of functions, services, and equipment that are essential.
115. The process by which the individual reaches decisions determines whether or not it is guidance.

116. If a student persists in making an unwise choice, the guidance counselor should step aside and allow him to proceed with it.
117. Vocational guidance indicates to the person the best occupation for him to follow.
118. Vocational and educational guidance can be separated only in theoretical discussion.
119. The guidance program in the secondary school cannot effectively serve students on the basis of facts that can be accumulated about them after they enter the secondary school.
120. The dominating function of leisure-time activities is "re-creation" for further work.
121. Guidance is determining for the individual at each step just what he should or should not do.
122. Group guidance can develop the awareness that the problems of an individual student may not be peculiar to him alone but are shared by others.
123. It must be realized that in the effective guidance program the student must have the freedom to accept or reject any proposed course of action.
124. The guidance counselor should concern himself predominately with the severely maladjusted instead of those with the normal problems involved in "growing-up."
125. Self-referral is the only effective type of motivation toward counseling.
126. Guidance programs in the schools must of necessity deal with symptomatic behavior problems; for clinical diagnosis and treatment of the cause of maladjusted behavior, individuals should be referred to specialized agencies.
127. Those individuals with maladjustment problems of their own make the best counselors because they can quickly diagnose those same problems in others.
128. Adapting to social situations is largely a matter of training.
129. We have no means of testing native capacity.
130. The machinery for the organization of guidance services should be allowed to develop as the various needs, problems, and situations of students arise.

131. In the effective guidance program, the student's first introduction to the services offered is usually the result of a discipline problem.
132. When test scores are used as the only criterion of "giftedness," we are not likely to make serious errors within the group identified as gifted; but we may err by not including within that group as many individuals as we should.
133. No child is a school failure if he is working up to capacity.
134. Generally, guidance is a service which begins and terminates at a specific time or place, given at critical points in the school career of the student.
135. The guidance staff must keep in mind that the program cannot become a curative and remedial service.
136. Since guidance is defined as the process of helping individuals make choices and solve problems, a person would need these services only during critical periods in his life.
137. The counselor's primary contribution to the guidance program is with mental and physical health.
138. The service around which the guidance program must revolve is in making available educational and occupational information.
139. The home room is basically a guidance-oriented activity.
140. In theory, the core-study plan of curriculum organization has many advantages for guidance over the usual plan of organization.
141. One is born with certain interests that remain throughout life.
142. A counselor should start with a difficulty of which the student is aware and try to work toward other more basic problems.
143. Occupational information can be used as a means of holding the student until he gains insight into his real behavior.
144. Because of the complexity of the problems with which students are faced, the organization of the guidance program is a complicated affair.
145. Group guidance is based on the premise that most students have the same basic needs and interests.

146. Group guidance operates on the premise that many problems are shared by all students and can be solved with the same basic techniques.
147. Guidance programs should be developed from the vocational approach to student problems.
148. In effect, a total score is a summary of a number of observations of behavior.
149. To be effective, guidance counselors must first be disciplinarians.
150. Any organization of a school guidance program should begin with the classroom teacher.
151. The objectives of education center on group relationships; those of guidance center on the individual.
152. The techniques of guidance change with the individual being served.
153. Guidance cannot be imposed upon the individual.
154. Vocational guidance consists of the evaluation of basic aptitudes of the individual in an effort to redirect his interests along new lines.
155. Guidance services are directed toward those students displaying atypical behavior.
156. Few, if any, traits are always harmful or always useful.
157. The best preparation for civic responsibility in later life is participation in the duties connected with the social group with which the student is now connected.
158. Guidance is a unified process; each phase or aspect is dependent upon every other.
159. The use of sociometric devices is one of the specialized functions of the guidance specialist and should be so recognized by the classroom teacher.
160. Community resources are thoroughly investigated by the guidance director before any student is referred.
161. Attempts to confine guidance to a given area of assistance or to restrict its function to a particular group of the school staff are certain to fail.
162. Freshman Orientation, given in the first few days of the college year to incoming freshmen, is a type of guidance service.

163. The present trend in vocational counseling is toward increased dependence upon standardized tests.
164. Training in morals and conformity to the behavior standards of society is a recognized area in which the guidance program should function.
165. Standardized tests, with all their limitations, are invaluable instruments in guidance and no guidance worker can afford to neglect them.
166. A counselor can be little help to a person, since that individual must make his own decisions independently.
167. In the initiation of effective guidance programs, the need is for teachers and guidance workers with a "passion for anonymity."
168. Rapport implies counselor neutrality.
169. The intellectually gifted student very rarely needs the aid of the guidance counselor.
170. Abnormal behavior is nothing more than exaggerated normal behavior.
171. A counselor should believe that the student can solve his own problems.
172. The school faculty's respect and recognition of the counselor's specialized training give the guidance worker the prerogative of deciding who needs the counseling service.
173. A simple change of educational or social environment can often solve a student's problem.
174. The success of the guidance program should be evaluated in terms of the reflected attitudes and the displayed behavior of all those who are associated with it--guiders and guidees alike.
175. The guidance program requires that all faculty members must be active participants in its planning, organization, and administration.
176. The many problems encountered in the process of "growing-up" are normal and will work themselves out.
177. The formulation and development of "life goals" are basic concerns of the guidance program.

178. Guidance refers to the work of the counselor advising individuals in the solution of their problems.
179. Guidance will always be given to students by students.
180. The average student is a nonentity.
181. If allowed to develop, differences in native capacity result in greater differences; if inhibited, they may result in decreased differences.
182. Personnel work is a term which can be used interchangeably with guidance.
183. Curriculum materials and teaching procedures should be divorced from the guidance program within the school.
184. The guidance counselor's role as a disciplinarian is dictated by demands from home and community.
185. The guidance program is based upon the hypothesis that a well-trained guidance officer will eliminate pupil maladjustments.
186. The organization of college education on the junior college - senior college plan assists in the organization and administration of the vocational guidance program.
187. Guidance must be accepted as a specialized and separate phase of the educational program.
188. The well-trained guidance worker needs to make very few referrals to other community agencies.
189. In the elementary school the major responsibility for guidance rests upon the classroom teacher.
190. The majority of individuals have abilities, as far as native endowment is concerned, that will make it possible for them to be equally successful in any one of several related occupations.
191. One cannot have an interest in some activity in which he has had no experience.
192. Ideally, all guidance programs should meet certain recognized standards and be alike in organization and administration.
193. Group guidance gives an opportunity for the discussion of problems that are common to the group.
194. The chief aim of vocational guidance is to steer people into jobs where they can do their best work.

195. A good counselor will tell the client the best vocation for him to choose.
196. Social and economic unrest are just two of the mal-adjustive factors requiring the cooperation of counselor and student.
197. The counselor must make some moral judgments in order to direct the counselee toward acceptable social behavior.
198. The community environment can make a significant contribution toward the delinquency of youth.
199. Guidance specialists should have a thorough grounding in classroom procedure.
200. The process of investigating the individual cannot be separated from the process of helping him; they both are parts of the same function.
201. In guidance, the counselor is assured of success only if the client recognizes that the training of the counselor allows him to direct procedures toward the solution of a problem.
202. In the counseling process, the initial step is to establish counselee dependency upon the counselor.
203. Ascertaining the extent that students are achieving in relation to their capacity is a function of the follow-up service of the guidance program.
204. Unless the student sincerely wants and actively seeks the help of the counselor, the counseling sessions are ineffective.
205. One of the basic objectives of the guidance program is the development of the capacity to think critically.
206. Guidance should be compulsory for every student within the school program.
207. The placement service of the guidance program is designed to assist the student in adjusting to the transfer from one school to another.
208. The guidance worker must of necessity rely on personal opinions and judgments in analysis of the student's intellectual and social development.
209. Vocational guidance helps the individual in becoming a material success.

210. The success of the guidance program in a school will ultimately depend on administrative policy.
211. The guidance staff should be housed in an office isolated from the other school activities in order to keep interference at a minimum.
212. Evaluating the kind of adjustments which students make to part-time, summer, and permanent jobs is a function of the follow-up service of the guidance program.
213. Guidance may be extended to individuals in a group or directly to individuals alone.
214. The job of the guidance specialist is to guide the guidance activities of classroom teachers.
215. The focus of guidance is the individual, not the problem.
216. The wise counselor would say: "It is never safe to give advice except when you know the other fellow will not follow it."
217. Theoretically, the ideal guidance program should attempt to fill the gaps left by the instructional program of the school.
218. While indispensable, getting facts is not guidance.
219. Guidance is a function of the whole school, administrators, teachers and students.
220. The vocational guidance service regards the individual as primarily a producer and a consumer.
221. Personality traits seen in children are symptomatic of what will be found in later adult life.
222. The value of student activities in the school lies in try-out and exploration of developing interests and abilities.
223. The follow-up service is composed of a continuous series of activities at all grade levels, as well as after students leave school.
224. In the counseling situation, the counselee determines the content of the interview, not the counselor.
225. The counselor deals with each of the individual's problems separately.
226. The objectives of guidance and instructional programs are closely related and often the services overlap.

227. If the student is helped by the teacher to discover facts about himself and to draw conclusions about himself, this is distinctly guidance.
228. Counseling is the core of any effective guidance program.
229. In the counseling process, each interview cannot be planned in advance.
230. No two organized guidance programs should be exactly alike.
231. The concept of guidance as a unitary function directs that all guidance offered a given individual should be given by one person.
232. For the modern secondary school, guidance serves its most useful function in giving aid to "problem children" and the emotionally disturbed.
233. Guidance is most successful in the field of vocational counseling.
234. Probably one of the least satisfactory of the items recorded on school records is that regarding reasons for leaving school.
235. The majority of job dismissals are due not to lack of skills but to lack of social adjustment and emotional instability.
236. Guidance should be incorporated in the educational program beginning with the kindergarten.
237. A major function of the guidance counselor is to make decisions for those students who are unable to view themselves objectively.
238. Vocational choices cannot be separated from educational, social or emotional problems.
239. Guidance and the instructional program use similar methodology and techniques of working with students.
240. The point of reference in the guidance worker's concern with a student's behavior is in terms of how it affects the discipline of the classroom.
241. A student should be allowed to decide his own course of action even if failure is clearly indicated.
242. The primary justification for gathering data about students is that it aids the guidance personnel in developing more realistic expectations about them.

- 243. In an organizational chart, the guidance program is strictly within the administrative function of the school.
- 244. Guidance is not concerned with instructional functions and doesn't emphasize intellectual activities.
- 245. The problem of securing sufficient data about a student without doing harm to the concept and practice of counseling is a real one.
- 246. The student personnel worker does many things that cannot be classed specifically under guidance work, though they may be essential to it.
- 247. Social demands and relationships give rise to value conflicts in our society which the individual is unable to resolve without assistance.
- 248. It is not always wise to be cooperative.
- 249. The various forms of student clubs and activities and the general school life contribute to preparation for choice of leisure time activities in adulthood.
- 250. One of the advantages of the school guidance program is that it does not depend for its success with students on the good will of the classroom teachers.
- 251. A good public relations practice for the guidance counselor would be the sending of a weekly bulletin to all classroom teachers describing accepted techniques on how to deal with current discipline problems.
- 252. A school should attempt a guidance program only if it is willing to allow a specialist to operate within the framework of the school and to delegate authority to the specialist in those areas concerning "behavior problems."
- 253. The problem child is one who has an unsolved problem.
- 254. The gifted do not constitute a discrete category of individuals. They differ from others only relatively.
- 255. The value of testing is proportional to the understanding it provides of the learner in the learning situation.
- 256. Since children differ greatly in their abilities to learn and to transfer what they have learned to ever changing social situations, it is understandable why some of them fail to acquire the skills necessary to satisfy their social needs.

257. In the counseling process, the student becomes increasingly more willing to accept the counselor's judgment and decisions in matters where the counselor is better able to make them.
258. Without systematic evaluation, the tendency is for the guidance staff to engage in those activities which may be unimportant but which give tangible results.
259. The major work of guidance must be done by the classroom teachers.
260. Emotions are our most fundamental instincts and affect all our behavior.
261. The primary allegiance of the school guidance counselor is to the counselee.
262. Careful planning of leisure-time activities is even more necessary than planning of one's vocation.
263. The job of guidance is to find what the specific ability and capability of each individual is.
264. All men are created equal.
265. The principles surrounding privileged information are as much a part of the counselor's code of ethics as they are of the lawyer's.
266. The counselor should concern himself predominately with the abnormal or deviant student; the classroom teacher, with the "normal" student.
267. Few children progress in a uniform pattern in all phases of their development.
268. The most sensitive teacher is the one to whom the guidance services can be most beneficial.
269. The community in which the school is located determines the type of services the guidance program provides, and desirably so.
270. The homeroom, if allowed the opportunity for attaining the objectives for which it was designed, has a direct guidance function.
271. Certain forms of guidance can be given in groups more effectively than individually.
272. Group guidance activities often arouse students to a consciousness of the need for individual help.

273. The counselor cannot and should not try to keep the various aspects of guidance entirely distinct and separate.
274. Guidance is clearly associated with practically all modern movements in education--the junior high, tests and measurements, remedial programs, etc.
275. The most important educational choice for which the senior high school student is responsible is that regarding further education.
276. The homeroom teacher should be the one person on the school staff who knows his students most intimately.
277. The guidance program can be considered a community service.
278. It is possible for a student to have a high degree of intellectual maturity and still be immature socially and emotionally.
279. The counselor should be primarily concerned with and should devote most of his time to the development of so-called normal students--relatively normal in intelligence, emotional stability, physical constitution and ability.
280. The organization of a school guidance program should begin with the guidance specialist, upon the delegated authority of the school administrator.
281. Vocational guidance is of little value for college freshmen, since most of the critical decisions have been made previously.
282. The placement service in the guidance program is primarily concerned with helping the student find a suitable job, either part-time while in school or a permanent position after graduation.
283. Curriculum materials and teaching procedures can be completely guidance oriented.
284. The chief value of standardized tests is that they point out weaknesses or strengths.
285. If the individual is assisted in the selection of facts, in choosing methods of securing facts, or in the interpreting of them, this is guidance.
286. Guidance cannot be considered adequate without objective data, including test scores.

287. In order to administer guidance intelligently, programs of individual evaluation should be conducted, and cumulative records should be made accessible to all guidance workers.
288. The testing program is an essential part of successful guidance work.
289. All guidance is education, but education is not always guidance.
290. The focal point of guidance is concerned with choosing and preparing for an occupation and getting a job.
291. The "counselor has many hats." If a problem concerns vocational choice, the counselor puts on the "vocational counselor's hat" and deals with that category.
292. The ideal guidance program provides specialists in each of the services included in the program.
293. Vocational guidance means getting jobs for young people or distributing young people to jobs according to their ability.
294. The guidance program should encompass all schools and all grade levels.
295. Interest does not necessarily predict success in the occupation.
296. The probability of success in any line of work must take into consideration factors other than ability to do the various kinds of operations required by the job.
297. Capability is always less than capacity and probably never equals it; ability can never exceed capability and is usually below it.
298. The objectives of guidance and education are the same; the methods are not the same.
299. The success of students in college is a responsibility both of the secondary school and of the college.
300. Guidance is primarily vocationally and educationally oriented.

APPENDIX B

EXPERIMENTAL FORM OF AN INVENTORY TO ASSESS FAMILIARTY WITH THE GENERAL PRINCIPLES OF GUIDANCE

Directions: Below are given a number of statements based on principles of guidance. Read each statement and indicate whether you agree with, disagree with, or are uncertain about it. If you agree with that statement, place an X in column A on your answer sheet. If you disagree with the statement, place an X in column D on your answer sheet. If you are uncertain as to whether you are in agreement or disagreement with the statement, place an X in column U on your answer sheet. Do not write on the inventory; place all your answers on the answer sheet. Do not omit any items. There is no time limit.

Example:

A	D	U
☐	☐	☐

0. It is impossible for the school to do its work well unless it knows something about home conditions and the general social life of the students.

1. Guidance should be made available to anyone who can profit from it.
2. Guidance is most concerned with assisting those individuals who are handicapped physically, mentally, or emotionally.
3. The guidance program is based on the principle that all students have the same basic interests.
4. Teachers should expect mature behavior on the basis of physical maturity.
5. It is the job of the guidance worker to investigate and examine the mental qualifications and capabilities of young persons in order to choose that profession which would be most in harmony with their intellectual make-up.
6. Being "all absorbed in your job" is the ideal or the goal of the vocational guidance service.
7. The major emphasis in counseling should be emotive and therapeutic in nature.

8. Guidance programs should be primarily preventative in nature.
9. The primary purpose for gathering data and information about students is to help individuals understand themselves.
10. Handwriting analysis and physiognomy are recognized procedures for diagnosis in the guidance program.
11. Guidance must be accepted as a specialized part of education.
12. The core-study plan of curriculum organization eliminates the need for the school counselor.
13. The focus of guidance is on the student's problem and the ways and means by which it can be solved.
14. One of the basic objective purposes of the guidance program is remedial in that advice is given on correcting undesirable habits.
15. The modern school guidance program is eclectic in that it belongs to no one discipline, draws upon no one body of knowledge, nor gives allegiance to any one "school" of theory.
16. Guidance programs must be expanded to include all who teach and to reach all who learn.
17. The school and community can be more assured of an effective guidance program if the counselor directs the student toward the right choices.
18. The guidance counselor's role as a disciplinarian is dictated by the relaxed and liberal training most students receive in the home.
19. The American ideals of busyness and thrift are no longer adequate as personal guidelines in today's society.
20. Guidance is synonymous with counseling.
21. If the guidance program is to improve its effectiveness, it must be evaluated systematically by a group of qualified specialists in the measurement field.
22. Students are often willing to discuss in a group problems that they are unwilling to discuss in private interviews.

23. Courses in occupational exploration and information insure adequate vocational guidance for those students enrolled in those courses.
24. The counselor is better able to understand and direct the student than is the student himself.
25. Since they constitute the extreme deviates on the intelligence scale, the gifted must be considered a discrete category of individuals.
26. Freshman Orientation, given during the first few days of the college year to incoming freshmen, is a type of guidance service.
27. It is not possible to carry on a modern guidance program simply by using the classroom teacher without the assistance of more specially trained persons.
28. The guidance worker should tell the above-average student entering high school to take the college preparatory course.
29. Individuals are endowed by nature with specialized abilities, and they will not be vocationally successful unless they find the specific occupations in which these specific abilities are dominant.
30. The use of sociometric devices is one of the specialized functions of the guidance specialist and should be so recognized by the classroom teacher.
31. The vocational guidance program is primarily concerned with providing the student with occupational information, work experiences, and the inclusion of units on vocational opportunities in the curriculum.
32. The service around which the guidance program must revolve is in making available educational and occupational information.
33. While indispensable, getting facts is not guidance.
34. Guidance is a function of the whole school--administrators, teachers, and students.
35. Those individuals with maladjustment problems of their own make the best counselors because they can quickly diagnose those same problems in others.

36. In the effective guidance program, the student's first introduction to the services offered is usually the result of a discipline problem.
37. All measures of human capacity and achievement are indirect.
38. A counselor should believe that the student can solve his own problems.
39. Generally, guidance is a service which begins and terminates at a specific time or place, given at critical points in the school career of the student.
40. Vocational guidance means getting jobs for young people or distributing young people to jobs according to their ability.
41. One is born with certain interests that remain throughout life.
42. Anyone can become anything he chooses. All he needs is proper assistance, training, and the "will to do."
43. Maladjusted students are the prime target of the organized guidance program.
44. Guidance works on the premise that society is under no obligation to help the individual, that the individual helps himself.
45. Guidance programs should be developed from the vocational approach to student problems.
46. The average student is a nonentity.
47. The majority of individuals have abilities, as far as native endowment is concerned, that will make it possible for them to be equally successful in any one of several related occupations.
48. The gifted do not constitute a discrete category of individuals. They differ from others only relatively.
49. The guidance counselor should concern himself predominantly with the severely maladjusted instead of those with the normal problems involved in "growing-up."
50. Guidance services are directed toward those students displaying atypical behavior.

51. Since guidance is defined as the process of helping individuals make choices and solve problems, a person would need these services only during critical periods in his life.
52. The guidance program is based upon the hypothesis that a well-trained guidance officer will eliminate pupil maladjustments.
53. The focal point of guidance is concerned with choosing and preparing for an occupation and getting a job.
54. Guidance is primarily vocationally and educationally oriented.
55. Because of the complexity of the problems with which students are faced, the organization of the guidance program is a complicated affair.
56. To be effective, guidance counselors must first be disciplinarians.
57. The value of testing is proportional to the understanding it provides of the learner in the learning situation.
58. Information which has been obtained about the student by means of tests, questionnaires, inventories, and teacher reports should not be given to the student.
59. A major function of the guidance counselor is to make decisions for those students who are unable to view themselves objectively.
60. A school should attempt a guidance program only if it is willing to allow a specialist to operate within the framework of the school and to delegate authority to the specialist in those areas concerning "behavior problems."
61. The objectives of education center on group relationships; those of guidance center on the individual.
62. In the counseling process, the initial step is to establish counselee dependency upon the counselor.
63. A counselor can be little if any help to a person, since that individual must make his own decisions independently.
64. Personnel work is a term which can be used interchangeably with guidance.
65. In the best guidance programs, referral of students to other agencies is common.

66. A good counselor should tell the student if he has made the right decision.
67. It is now the exception to the rule for a personal whim, a parental prejudice, or pure accident to determine the kind of education a child receives and the choice of his occupation.
68. Group guidance activities often arouse students to a consciousness of the need for individual help.
69. Group guidance can develop the awareness that the problems of an individual student may not be peculiar to him alone but are shared by others.
70. One of the advantages of the school guidance program is that it does not depend for its success with students on the good will of the classroom teachers.
71. In an organizational chart, the guidance program is strictly within the administrative function of the school.
72. The counselor must know just what the client's ability is and just what he needs, if adequate help is to be given.
73. The primary justification for gathering data about students is that it aids the guidance personnel in developing more realistic expectations about them.
74. The vocational guidance service regards the individual as primarily a producer and a consumer.
75. All men are created equal.
76. The many problems encountered in the process of "growing-up" are normal and will work themselves out.
77. In the counseling process, the student becomes increasingly more willing to accept the counselor's judgment and decisions in matters where the counselor is better able to make them.
78. Few children progress in a uniform pattern in all phases of their development.
79. The probability of success in any line of work must take into consideration factors other than ability to do the various kinds of operations required by the job.
80. The "counselor has many hats." If a problem concerns vocational choice, the counselor puts on the "vocational counselor's hat" and deals with that category.

81. The counselor deals with each of the individual's problems separately.
82. The guidance program should encompass all schools and all grade levels.
83. A good public relations practice for the guidance counselor would be the sending of a weekly bulletin to all classroom teachers describing accepted techniques on how to deal with current discipline problems.
84. Vocational guidance indicates to a person the best occupation for him to follow.
85. Curriculum materials and teaching procedures should be divorced from the guidance program within the school.
86. The counselor must make some moral judgments in order to direct the counselee toward acceptable social behavior.
87. The ultimate goal of guidance is to resolve the student's problem.
88. Just as all students are required to take English and history, so should they be required to consult with the guidance counselor.
89. One method used to improve the quality of guidance services has been the adoption by many states of certification plans for guidance workers.
90. Training in morals and conformity to the behavior standards of society is a recognized area in which the guidance program should function.
91. The present controversies centered on moral and religious beliefs force the school guidance program to set standards of good conduct.
92. The objectives of guidance and instructional programs are closely related and often the services overlap.
93. In guidance, the counselor is assured of success only if the client recognizes that the training of the counselor allows him to direct procedures toward the solution of a problem.
94. The concept of guidance as a unitary function directs that all guidance offered a given individual should be given by one person.
95. Guidance is determining for the individual at each stop just what he should or should not do.

96. Vocational guidance consists of the evaluation of basic aptitudes of the individual in an effort to redirect his interests along new lines.
97. Rapport implies counselor neutrality.
98. Guidance is a personal service given to an individual; it must be given to him alone; it cannot be given in a group situation.
99. The success of the guidance program should be evaluated in terms of the reflected attitudes and the displayed behavior of all those who are associated with it -- guiders and guidees alike.
100. The principles surrounding privileged information are as much a part of the counselor's code of ethics as they are of the lawyer's.
101. There is a necessity for a well-developed guidance program for out-of-school youth.
102. The counselor should concern himself predominately with the abnormal or deviant student; the classroom teacher, with the "normal" student.
103. For the modern secondary school, guidance serves its most useful function in giving aid to "problem children" and the emotionally disturbed.
104. Vocational guidance is of little value for college freshmen, since most of the critical decisions have been made previously.
105. The point of reference in the guidance worker's concern with a student's behavior is in terms of how it affects the discipline of the classroom.
106. Guidance should be incorporated in the educational program beginning with the kindergarten.
107. If a student persists in making an unwise choice, the guidance counselor should step aside and allow him to proceed with it.
108. The focus of guidance is the individual, not the problem.
109. Guidance refers to the work of the counselor advising individuals in the solution of their problems.
110. The chief aim of vocational guidance is to steer people into jobs where they can do their best work.

111. Community resources are thoroughly investigated by the guidance director before any student is referred.
112. The guidance program can be considered a community service.
113. The secondary school has the opportunity and duty for aiding students in obtaining an understanding of their own abilities and characteristics; how they apply this understanding is a moral question and a responsibility of other community institutions.
114. The placement service in the guidance program is primarily concerned with helping the student find a suitable job, either part-time while in school or permanent after graduation.
115. Certain guidance activities should be undertaken only by guidance specialists.
116. Guidance cannot be imposed upon the individual.
117. No two organized guidance programs should be exactly alike.
118. The job of guidance is to find what the specific ability and capability of each individual is.
119. Without systematic evaluation, the tendency is for the guidance staff to engage in those activities which may be unimportant but which give tangible results.
120. The counselor cannot and should not try to keep the various aspects of guidance entirely distinct and separate.
121. The success of the guidance program is best evaluated in terms of the results displayed by the testing program.
122. Interest does not necessarily predict success in the occupation.
123. Many school administrators fail to recognize that guidance objectives can usually be accomplished with a short period of concentrated analytical and diagnostic work if adequate staff is provided.
124. The testing program is an essential part of successful guidance work.
125. A student should be allowed to decide his own course of action, even if failure is clearly indicated.

126. A good counselor will tell the client the best vocation for him to choose.
127. It must be realized that in the effective guidance program, the student must have the freedom to accept or reject any proposed course of action.
128. Guidance is most successful in the field of vocational counseling.
129. When students are to work with their own mental maturity scores, percentiles, not I.Q.'s, are recommended.
130. It is preferable to report the operational significance of a test score, rather than the score itself, because of the extent to which the I.Q. is misinterpreted by students, by parents, and frequently by teachers.
131. Rapport is a term describing the emotional dependence or "crushes" of an adolescent toward his counselor.
132. Few, if any, traits are always harmful or always useful.
133. The school faculty's respect and recognition of the counselor's specialized training give the guidance worker the prerogative of deciding who needs the counseling service.
134. The counselor's primary contribution to the guidance program is with mental and physical health.
135. Guidance should be compulsory for every student within the school program.
136. It has been found that the various forms of student clubs and school activities contribute very little to the choice of leisure time activities in adulthood.
137. Vocational choices cannot be separated from educational, social, or emotional problems.
138. Evaluating the kind of adjustments which students make to part-time, summer, and permanent jobs is a function of the follow-up service of the guidance program.
139. Single problems are rare and are usually related to other maladjustments.
140. Guidance may be extended to individuals in a group or directly to individuals alone.

APPENDIX C

AN INVENTORY TO ASSESS FAMILIARITY WITH THE GENERAL PRINCIPLES OF GUIDANCE

FORM A

Directions: Below are given a number of statements based on principles of guidance. Read each statement and indicate whether you agree with, disagree with, or are uncertain about it. If you agree with the statement, place an X in column A on your answer sheet. If you disagree with the statement, place an X in column D on your answer sheet. If you are uncertain as to whether you are in agreement or disagreement with the statement, place an X in column U on your answer sheet. Do not write on the inventory; place all your answers on the answer sheet. Do not omit any items. There is no time limit.

Example:

A	D	U
☐	☐	☐

O. It is impossible for the school to do its work well unless it knows something about home conditions and the general social life of the students.

1. The guidance program is based on the principle that all students have the same basic interests.
2. Teachers should expect mature behavior on the basis of physical maturity.
3. Being "all absorbed in your job" is the ideal or the goal of the vocational guidance service.
4. The primary purpose for gathering data and information about students is to help individuals understand themselves.
5. The modern school guidance program is eclectic in that it belongs to no one discipline, draws upon no one body of knowledge, nor gives allegiance to any one "school" of theory.
6. The school and community can be more assured of an effective guidance program if the counselor directs the student toward the right choices.
7. The guidance counselor's role as a disciplinarian is dictated by the relaxed and liberal training most students receive in the home.

8. Guidance is synonymous with counseling.
9. If the guidance program is to improve its effectiveness, it must be evaluated systematically by a group of qualified specialists in the measurement field.
10. The counselor is better able to understand and direct the student than is the student himself.
11. Since they constitute the extreme deviates on the intelligence scale, the gifted must be considered a discrete category of individuals.
12. Freshman Orientation, offered during the first few days of the college year, is a type of guidance service.
13. It is not possible for schools to carry on a guidance program simply by using the classroom teacher without the assistance of more specially trained persons.
14. Individuals are endowed by nature with specialized abilities and they will not be vocationally successful unless they find the specific occupations in which these specific abilities are dominant.
15. The vocational guidance program is primarily concerned with providing the student with occupational information, work experiences, and the inclusion of units on vocational opportunities in the curriculum.
16. While indispensable, getting facts is not guidance.
17. Those individuals with maladjustment problems of their own make the best counselors because they can quickly diagnose those same problems in others.
18. In the effective guidance program, the student's first introduction to the services offered is usually the result of a discipline problem.
19. A counselor should believe that the student can solve his own problem.
20. Maladjusted students are the prime target of the organized guidance program.
21. Guidance programs should be developed from the vocational approach to a student's problem.
22. The average student is a nonentity.
23. The gifted do not constitute a discrete category of individuals. They differ from others only relatively.

24. The guidance counselor should concern himself predominately with the severely maladjusted instead of those with the normal problems involved in "growing-up."
25. The focal point of guidance is concerned with choosing and preparing for an occupation and getting a job.
26. Guidance is primarily vocationally and educationally oriented.
27. The value of testing is proportional to the understanding it provides of the learner in the learning situation.
28. A major function of the guidance counselor is to make decisions for those students who are unable to view themselves objectively.
29. A school should attempt a guidance program only if it is willing to allow a specialist to operate within the framework of the school and to delegate authority to the specialist in those areas concerning "behavior problems."
30. A counselor can be little if any help to a person, since that individual must make his own decisions independently.
31. Personnel work is a term which can be used interchangeably with guidance.
32. In the best guidance programs, referral of students to other agencies is common.
33. A good counselor should tell the student if he has made the right decision.
34. Group guidance can develop the awareness that the problems of an individual student may not be peculiar to him alone but are shared by others.
35. The counselor must know just what the client's ability is and just what he needs if adequate help is to be given.
36. In the counseling process, the student becomes increasingly more willing to accept the counselor's judgment and decisions in matters where the counselor is better able to make them.
37. The "counselor has many hats." If a problem concerns vocational choice, the counselor puts on the "vocational counselor's hat" and deals with that category.
38. Vocational guidance indicates to the person the best occupation for him to follow.

39. Curriculum materials and teaching procedures should be divorced from the guidance program within the school.
40. The ultimate goal of guidance is to resolve the student's problem.
41. One method used to improve the quality of guidance services has been the adoption by many states of certification plans for guidance workers.
42. The present controversies centered on moral and religious beliefs force the school guidance program to set standards of good conduct.
43. The objectives of guidance and instructional programs are closely related and often the services overlap.
44. In guidance, the counselor is assured of success only if the client recognizes that the training of the counselor allows him to direct procedures toward the solution of a problem.
45. Guidance is a personal service given to an individual: it must be given to him alone; it cannot be given in a group situation.
46. The success of the guidance program should be evaluated in terms of the reflected attitudes and the displayed behavior of all those who are associated with it--guiders and guidees alike.
47. There is a necessity for a well-developed guidance program for out-of-school youth.
48. The counselor should concern himself predominately with the abnormal or deviant student; the classroom teacher, with the "normal" student.
49. For the modern secondary school, guidance serves its most useful function in giving aid to "problem children" and the emotionally disturbed.
50. The point of reference in the guidance worker's concern with a student's behavior is in terms of how it affects the discipline of the classroom.
51. Guidance should be incorporated in the educational program beginning with the kindergarten.
52. If a student persists in making an unwise choice, the guidance counselor should step aside and allow him to proceed with it.

53. Guidance refers to the work of the counselor advising individuals in the solution of their problems.
54. The guidance program can be considered a community service.
55. The secondary school has the opportunity and duty for aiding students in obtaining an understanding of their own abilities and characteristics; how they apply this understanding is a moral question and a responsibility of other community institutions.
56. The placement service in the guidance program is primarily concerned with helping the student find a suitable job, either part-time while in school or a permanent position after graduation.
57. Certain guidance activities should be undertaken only by guidance specialists.
58. Without systematic evaluation, the guidance staff tends to engage in those activities which may be unimportant but which give tangible results.
59. Interest does not necessarily predict success in an occupation.
60. Many school administrators fail to recognize that guidance objectives can usually be accomplished with a short period of concentrated analytical and diagnostic work if adequate staff is provided.
61. The testing program is an essential part of successful guidance work.
62. A student should be allowed to decide his own course of action, even if failure is clearly indicated.
63. A good counselor will tell the client the best vocation for him to choose.
64. Guidance is most successful in the field of vocational counseling.
65. When students are to work with their own mental maturity scores, percentiles, not I.Q.'s, are recommended.
66. Rapport is a term describing the emotional dependence or "crushes" of an adolescent toward his counselor.
67. Few, if any, traits are always harmful or always useful.

68. The counselor's primary contribution to the guidance program is with mental and physical health.
69. Evaluating the kind of adjustments which students make to part-time, summer, and permanent jobs is a function of the follow-up service of the guidance program.
70. Single problems are rare and are usually related to other maladjustments.

**AN INVENTORY TO ASSESS FAMILIARITY WITH
THE GENERAL PRINCIPLES OF GUIDANCE**

Name _____ Date _____ Test Form _____

Degree Held _____ Major { Undergraduate _____
Graduate _____

The following guidance courses have been completed: (Check the appropriate boxes, or if presently enrolled, mark with an E).

☐ Principles of Guidance ☐ Techniques of Counseling
☐ Vocational and/or Educational Information ☐ Guidance Practicum
☐ Educational and/or Psychological Measurements

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**AN INVENTORY TO ASSESS FAMILIARITY WITH
GENERAL PRINCIPLES OF GUIDANCE**

Name _____ Date _____ Test Form A

Degree Held _____ Major { Undergraduate _____
Graduate _____

The following guidance courses have been completed: (Check the appropriate boxes, or if presently enrolled, mark with an E).

☐ Principles of Guidance ☐ Techniques of Counseling
☐ Vocational and/or Educational Information ☐ Guidance Practicum
☐ Educational and/or Psychological Measurements

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APPENDIX D

AN INVENTORY TO ASSESS FAMILIARITY WITH THE GENERAL PRINCIPLES OF GUIDANCE

FORM B

Directions: Below are given a number of statements based on principles of guidance. Read each statement and indicate whether you agree with, disagree with, or are uncertain about it. If you agree with the statement, place an X in column A on your answer sheet. If you disagree with the statement, place an X in column D on your answer sheet. If you are uncertain as to whether you are in agreement or disagreement with the statement, place an X in column U on your answer sheet. Do not write on the inventory; place all your answers on the answer sheet. Do not omit any items. There is no time limit.

Example:

A	D	U	O.
☐	☐	☐	It is impossible for the school to do its work well unless it knows something about home conditions and the general social life of the students.

1. Guidance should be made available to anyone who can profit from it.
2. Guidance is most concerned with assisting those individuals who are handicapped physically, mentally, or emotionally.
3. It is the job of the guidance worker to investigate and examine the mental qualifications and capabilities of young persons in order to choose that profession which would be most in harmony with their intellectual make-up.
4. The major emphasis in counseling should be emotive and therapeutic in nature.
5. Guidance programs should be primarily preventative in nature.
6. Handwriting analysis and physiognomy are recognized procedures for diagnosis in the guidance program.

7. Guidance must be accepted as a specialized part of education.
8. The core-study plan of curriculum organization eliminates the need for the school counselor.
9. The focus of guidance is on the student's problem and the ways and means by which it can be solved.
10. One of the basic objective purposes of the guidance program is remedial in that advice is given on correcting undesirable habits.
11. Guidance programs must be expanded to include all who teach and to reach all who learn.
12. The American ideals of busyness and thrift are no longer adequate as personal guidelines in today's society.
13. Students are often willing to discuss in a group problems that they are unwilling to discuss in private interviews.
14. Courses in occupational exploration and information insure adequate vocational guidance for those students enrolled in those courses.
15. The guidance worker should tell the above-average student entering high school to take the college preparatory course.
16. The use of sociometric devices is one of the specialized functions of the guidance specialist and should be so recognized by the classroom teacher.
17. Making available educational and occupational information is the service around which the guidance program must revolve.
18. Guidance is a function of the whole school -- administrators, teachers, and students.
19. All measures of human capacity and achievement are indirect.
20. Generally, guidance is a service which begins and terminates at a specific time or place, given at critical points in the school career of the student.
21. Vocational guidance means getting jobs for young people or distributing young people to jobs according to their ability.
22. One is born with certain interests that remain throughout life.

23. Anyone can become anything he chooses. All he needs is proper assistance, training, and the "will to do."
24. Guidance works on the premise that society is under no obligation to help the individual, that the individual helps himself.
25. Most individuals have abilities, as far as native endowment is concerned, that will make it possible for them to be equally successful in any one of several related occupations.
26. Guidance services are directed toward those students displaying atypical behavior.
27. Since guidance is defined as the process of helping individuals make choices and solve problems, a person would need these services only during critical periods in his life.
28. The guidance program is based upon the hypothesis that a well-trained guidance officer will eliminate pupil maladjustments.
29. Because of the complexity of the problems with which students are faced, the organization of the guidance program is a complicated affair.
30. To be effective, guidance counselors must first be disciplinarians.
31. Information which has been obtained about the student by means of tests, questionnaires, inventories, and teacher reports should not be given to the student.
32. The objectives of education center on group relationships; those of guidance center on the individual.
33. In the counseling process, the initial step is to establish counselee-dependency upon the counselor.
34. It is now the exception to the rule for a personal whim, a parental prejudice, or pure accident to determine the kind of education a child receives and the choice of his occupation.
35. Group guidance activities often arouse students to a consciousness of the need for individual help.
36. One of the advantages of the school guidance program is that it does not depend for its success with students on the good will of the classroom teachers.

37. In an organizational chart, the guidance program is strictly within the administrative function of the school.
38. The primary justification for gathering data about students is that it aids the guidance personnel in developing more realistic expectations about them.
39. The vocational guidance service regards the individual as primarily a producer and a consumer.
40. All men are created equal.
41. The many problems encountered in the process of "growing-up" are normal and will work themselves out.
42. Few children progress in a uniform pattern in all phases of their development.
43. The probability of success in any line of work must take into consideration factors other than ability to do the various kinds of operations required by the job.
44. The counselor deals with each of the individual's problems separately.
45. The guidance program should encompass all schools and all grade levels.
46. A good public relations practice for the guidance counselor would be the sending of a weekly bulletin to all classroom teachers describing accepted techniques on how to deal with current discipline problems.
47. The counselor must make some moral judgments in order to direct the counselee toward acceptable social behavior.
48. Just as all students are required to take English and history, so should they be required to consult with the guidance counselor.
49. Training in morals and in conformity to the behavior standards of society is a recognized area in which the guidance program should function.
50. The concept of guidance as a unitary function directs that all guidance offered a given individual should be given by one person.
51. Guidance is determining for the individual at each step just what he should or should not do.

52. Vocational guidance consists of the evaluation of basic aptitudes of the individual in an effort to redirect his interests along new lines.
53. Rapport implies counselor neutrality.
54. The principles surrounding privileged information are as much a part of the counselor's code of ethics as they are of the lawyer's.
55. Vocational guidance is of little value for college freshmen, since most of the critical decisions have been made previously.
56. The focus of guidance is the individual, not the problem.
57. The chief aim of vocational guidance is to steer people into jobs where they can do their best work.
58. Community resources are thoroughly investigated by the guidance director before any student is referred.
59. Guidance cannot be imposed upon the individual.
60. No two organized guidance programs should be exactly alike.
61. The job of guidance is to determine the specific ability and capability of each individual.
62. The counselor cannot and should not try to keep the various aspects of guidance entirely distinct and separate.
63. The success of the guidance program is best evaluated in terms of the result displayed by the testing program.
64. It must be realized that in the effective guidance program the student must have the freedom to accept or reject any proposed course of action.
65. It is preferable to report the operational significance of a test score rather than the score itself because of the extent to which the I.Q. is misinterpreted by students, by parents, and frequently by teachers.
66. The school faculty's respect and recognition of the counselor's specialized training give the guidance worker the prerogative of deciding who needs the counseling service.
67. Guidance should be compulsory for every student within the school program.

68. It has been found that the various forms of student clubs and school activities contribute very little to the choice of leisure time activities in adulthood.
69. Vocational choices cannot be separated from educational, social, or emotional problems.
70. Guidance may be extended to individuals in a group or directly to individuals alone.

AN INVENTORY TO ASSESS FAMILIARITY WITH
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Graduate _____

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☐ Vocational and/or Educational Information ☐ Guidance Practicum
☐ Educational and/or Psychological Measurements

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**AN INVENTORY TO ASSESS FAMILIARITY WITH
THE GENERAL PRINCIPLES OF GUIDANCE**

Name _____ Date _____ Test Form B

Degree Held _____ Major { Undergraduate _____
Graduate _____

The following guidance courses have been completed: (Check the appropriate boxes, or if presently enrolled, mark with an E).

☐ Principles of Guidance ☐ Techniques of Counseling
☐ Vocational and/or Educational Information ☐ Guidance Practicum
☐ Educational and/or Psychological Measurements

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4.	()	☒	()	22.	()	☒	()	40.	()	☒	()	58.	☒	()	()
5.	☒	()	()	23.	()	☒	()	41.	()	☒	()	59.	☒	()	()
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APPENDIX E

PRINCIPLES OF GUIDANCE AS ESTABLISHED BY ADKINS¹

1. Guidance respects individual worth, dignity, and variation; therefore, it should be flexible.

2. Guidance should not be limited only to those who give observable evidence of its need, but rather it should be extended to all persons who can benefit from the services.

3. Guidance is a unified process which considers the student as a whole. It touches every phase of an individual's life.

4. Guidance is a continuous process.

5. Guidance is fundamentally a preventive function. It has limits and must not undertake to be all things to all people.

6. Guidance employs scientific methods for studying behavior. Guidance is effective only to the degree that pertinent, scientifically gathered information and data are utilized to help pupils in the solution of their problems.

7. Guidance is an integral part of the total program of education.

8. Guidance seeks to assist the individual to become progressively more able to help himself. Ultimate decision rests with the student.

9. Guidance is a function in which many people participate. The cooperation of the home, the school, the church, and the community is essential. Guidance is most successful under some type of organization and leadership.

10. Guidance is counsel -- not compulsion. It is democratic and cannot be imposed upon anyone with the assurance that it will be effective.

11. Guidance requires the services of adequately trained guidance personnel.

12. Guidance refers to the process of putting into effect guidance and personnel services. The guidance program should be under constant planned evaluation.

¹Adkins, "Analysis of Textbooks on Principles of Guidance," pp. 13-14.

APPENDIX F

LIST OF AUTHORS, ANALYZED BY ADKINS, FROM WHICH PRINCIPLES OF GUIDANCE DERIVED¹

- Arbuckle, Dugald S. Guidance and Counseling in the Classroom.
Boston: Allyn and Bacon, Inc., 1957.
- Chisholm, Leslie L. Guiding Youth in the Secondary School.
New York: American Book Company, 1945.
- Cox, Philip W. L., Duff, John Carr, and McNamara, Marie.
Basic Principles of Guidance. New York: Prentice-
Hall, Inc., 1948.
- Crow, Lester D., and Crow, Alice. An Introduction to Guidance.
New York: American Book Company, 1960.
- Erickson, Clifford E., and Smith, Glenn E. Organization and
Administration of Guidance Services. New York:
McGraw-Hill Book Company, Inc., 1947.
- Hatch, Raymond N., and Dressel, Paul L. Guidance Services in
the Secondary School. Dubuque, Iowa: Wm. C. Brown
Company, 1953.
- Humphreys, J. Anthony, Traxler, Arthur E., and North, Robert
D. Guidance Services. Chicago: Science Research
Associates, Inc., 1960.
- Jones, Arthur J. Principles of Guidance and Pupil Personnel
Work. New York: McGraw-Hill Book Company, Inc., 1951.
- Lefever, D. Welty, Turrell, Archie M., and Weitzel, Henry I.
Principles and Techniques of Guidance. New York: The
Ronald Press Company, 1950.
- Little, Wilson, and Chapman, A. L. Developmental Guidance in
Secondary School. New York: McGraw-Hill Book Company,
Inc., 1953.
- Miller, Carroll H. Foundations of Guidance. New York:
Harper and Brothers, 1961.
- Mortensen, Donald G., and Schmuller, Allen M. Guidance in
Today's Schools. New York: John Wiley and Sons,
Inc., 1960.
- Reed, Anna Y. Guidance and Personnel Services in Education.
New York: Cornell University Press, 1944.

- Rosecrance, Francis C., and Hayden, Velma D. School Guidance and Personnel Services. Boston: Allyn and Bacon, Inc., 1960.
- Smith, Glenn E. Principles and Practices of the Guidance Program. New York: The Macmillan Company, 1951.
- Strang, Ruth. The Role of the Teacher in Personnel Work. New York: Bureau of Publications, Teachers College, 1953.
- Warters, Jane. High School Personnel Work Today. New York: McGraw-Hill Book Company, Inc., 1956.
- Willey, R. D., and Andrew, D. C. Modern Methods and Techniques in Guidance. New York: Harper and Brothers, 1955.
- Wrenn, C. Gilbert, and Dugan, Willis E. Guidance Procedures in High School. Minneapolis: The University of Minnesota Press, 1950.

¹Velma Adkins, "An Analysis of Textbooks on Principles of Guidance," pp. 37-38.

APPENDIX G

LIST OF BOOKS AND AUTHORS ANALYZED IN THE STUDY BY PALMS¹

- Arbuckle, Dugald S. Student Personnel Services in Higher Education. New York: McGraw-Hill Book Company, Inc., 1953.
- Brouwer, Paul J. Student Personnel Services in General Education. Washington, D.C.: American Council on Education, 1949.
- Lloyd-Jones, Esther, and Smith, Margaret Ruth. Student Personnel Work as Deeper Teaching. New York: Harper and Brothers, 1954.
- Mueller, Kate Hevner. Student Personnel Work in Higher Education. Boston: Houghton Mifflin Company, 1961.
- Williamson, E. G., and Darley, J. G. Student Personnel Work. New York: McGraw-Hill Book Company, Inc., 1937.
- Williamson, E. G. Student Personnel Services in Colleges and Universities. New York: McGraw-Hill Book Company, Inc., 1961.
- Wrenn, C. Gilbert. Student Personnel Work in Colleges. New York: The Ronald Press Company, 1951.

¹Constance Palms, "An Analysis of Textbooks on Student Personnel Services with Emphasis on Common Core of Topics Treated," p. 97.

APPENDIX H

OKLAHOMA REQUIREMENTS FOR COUNSELOR CERTIFICATION¹

General Regulations of Eligibility

The applicant shall be a citizen of the United States of America or shall submit official evidence of the possession of a valid declaration of intention at the time of application, except this shall not apply to teachers from other countries teaching in the United States on an exchange basis.

The applicant shall be a graduate of an accredited four-year college or university and shall hold the standard baccalaureate degree, the only exceptions being the trade and industrial education teachers and those applying for the temporary or provisional special certificate for distributive education, diversified occupations, and vocational technical education.

One who holds an expired standard certificate is not eligible for a provisional certificate of the same type but is required to meet requirements for its renewal or a new standard certificate.

Anyone who has completed an approved standard certificate program and who meets all other requirements, including having had at least eight semester hours of college credit in the past five years, shall be allowed five years in which to apply for the certificate without having to do additional work, regardless of changes in requirements during that time.

A person who does not apply for the certificate within the allowed five-year period is required to meet existing requirements at the time of application and to have taken an additional eight semester hours of college credit in the past five years.

Experience in an accredited school during the five years just passed may be substituted for the eight semester hours of credit at the rate of three semester hours of credit for each year of such experience.

The applicant shall possess the character and general fitness to be licensed to enter the teaching profession, according to student rating by the preparing institution, to be eligible for the standard or provisional certificate.

The applicant shall present a statement on the regular State Board of Education form, signed by a licensed physician, certifying that the applicant is in good health and free of any communicable disease. Only one such health certificate is required within the same six-month period when more than one certificate is applied for during that period of time.

An applicant for a certificate which requires completion of an approved certificate program shall be recommended by the preparing institution for the certificate desired if work was completed in Oklahoma.

Applicants for the temporary certificate shall present a declaration of intent to employ together with a statement that a fully qualified teacher is not available and a request

for the issuance of a certificate from a local school superintendent.

Evidence of having completed all academic course requirements specified for the certificate desired shall be presented as a part of the application. A statement from the preparing institution, declaring the applicant to have completed an approved teacher-education program of the same type as the certificate sought, will normally be accepted as satisfying this requirement for those seeking a certificate which requires completion of an approved program who did their preparation in an Oklahoma college or university.

A fee of one dollar to the State Board of Education shall accompany all applications.

COUNSELOR (SCHOOL--GRADES 1-12)

This certificate authorizes the holder to serve as a counselor or as a supervisor of counselors either on a part-time or full-time basis.

Standard School Counselor Certificate

The applicant shall satisfy all general regulations of eligibility.

The applicant shall hold a valid Oklahoma standard or life teaching certificate.

The applicant shall have had a minimum of two full years of satisfactory teaching experience.

The applicant shall have had not less than 12 months of work experience; such experience may be cumulative.

Work experience in the armed services or as a teacher or as an employee of one's parents is not acceptable in fulfilling this requirement, either in whole or in part. This requirement shall be waived for any person who has a minimum of three years of experience as a school counselor or who served as a school counselor during the year 1954-55.

The applicant shall have a master's degree from an approved college or university and shall have completed an approved program for the preparation of school counselors if academic work was done in Oklahoma. Out-of-state applicants are required to complete course work which satisfies all academic requirements enumerated by the Minimum Essentials for Approved Teacher-Certificate Programs:

An approved program shall include a minimum of 18 semester hours of graduate work distributed as follows:

1. Basic guidance courses--eight semester hours.
2. Curriculum construction--two semester hours.
3. Educational measurements--three semester hours.

(The major emphasis in this area shall be on the administration and nature of group tests and the use of the results of such tests in helping children.)

¹Oklahoma Department of Education, Teacher Education, Certification, and Assignment Handbook (1961), revised and issued as memorandum, May, 1964, pp. 14-15, 31-38, and 46.

APPENDIX I

DEVELOPMENT OF THE EXPERIMENTAL FORM ON THE BASIS OF ITEM ANALYSIS

Trial Item Number	Diffi- culty Index ¹	Discrimination Index ²						Experimental Form	
		1st run	2nd run	3rd run	4th run	5th run	6th run	Item Number	Discrimi- nation Index
1	.94	.52	.45	.62	.54	.54	.53	1	.48
2	.87	.31	.35	.36	.30	.32			
3	.80	.39	.43	.49	.54	.53	.53	2	.58
4	.52	.40	.39	.46	.56	.55	.55	5	.59
5	.17	.52	.11						
6	.92	.18							
7	.15	.49	.55	.58	.56	.54	.56	11	.60
8	.67	.13							
9	.84	.43	.38	.39	.33				
10	.20	.46	.41	.48	.46	.46	.51	13	.53
11	.65	.46	.51	.46	.35	.37			
12	.52	.50	.53	.56	.56	.56	.57	19	.58
13	.61	.65	.70	.72	.74	.78	.77	20	.77
14	.55	.42	.38	.44	.46	.47	.44	22	.45
15	.17	.12							
16	.51	.15							
17	.50	.46	.49	.49	.46	.45	.40	8	.40
18	.87	.66							
19	.92	.50	.60	.53	.46	.40	.35		
20	.91	.46	.54	.49	.57	.65	.61	3	.61
21	.35	.36	.38	.42	.44	.41	.43	21	.47
22	.55	.11							
23	.54	.13							
24	.88	.34	.29	.25					
25	.84	.42	.35	.33	.24				
26	.30	.23							
27	.85	.62	.41	.43	.42	.46	.38	9	.38
28	.74	.54	.56	.55	.51	.55	.56	10	.54
29	.91	.32	.33						
30	.84	.15							
31	.78	.32							
32	.42	.48	.49	.50	.52	.57	.58	17	.62
33	.31	.20							
34	.93	.29							
35	.46	.23	.27	.27					
36	.57	.53	.58	.60	.64	.64	.61	24	.61
37	.27	.27	.31	.31					
38	.72	.42	.41	.43	.49	.48	.52	18	.53
39	.79	.26							
40	.50	.30							

APPENDIX I--Continued

Trial Item Number	Diffi- culty Index ¹	Discrimination Index ²						Experimental Form	
		1st run	2nd run	3rd run	4th run	5th run	6th run	Item Number	Discrimi- nation Index
41	.61	.39	.47	.51	.52	.46	.47	43	.53
42	.67	.26							
43	.48	.36	.36	.36	.33	.32			
44	.68	.33	.32	.27					
45	.53	.26							
46	.49	.29	.34	.32					
47	.89	.20							
48	.88	.51	.52	.55	.58	.58	.56	12	.55
49	.78	.36	.47	.52	.55	.57	.66	6	.68
50	.12	.34	.35	.36	.34				
51	.72	.29	.33	.30					
52	.71	.51	.56	.55	.56	.60	.61	28	.65
53	.58	.13							
54	.85	.44	.33	.36	.34	.32			
55	.72	.38	.50	.53	.41	.40	.42	15	.40
56	.55	.21							
57	.59	.18							
58	.51	.34	.36	.38	.42	.45	.46	25	.46
59	.41	.37					.30		
60	.90	-.25							
61	.49	.45	.45	.43	.47	.45	.49	7	.49
62	.68	.34	.34	.33					
63	.69	.20							
64	.17	.72	.46	.42	.49	.48	.48	31	.56
65	.47	.33	.40	.35	.39	.39	.40	37	.40
66	.59	.50	.40	.37	.40		.40	67	.43
67	.51	.45	.49	.53	.53	.55	.63	14	.60
68	.83	.61	.59	.56	.60	.58	.54	16	.52
69	.81	.42	.46	.43	.42	.41	.40	27	.41
70	.80	.47	.62	.55	.50	.53	.47	129	.45
71	.56	.36	.40	.41	.43	.43	.43	113	.44
72	.72	.62	.61	.62	.64	.65	.66	23	.67
73	.27	.31	.33	.26					
74	.15	-.06							
75	.85	.12							
76	.89	.19							
77	.82	.80	.82	.85	.88	.93	.93	131	.94
78	.64	.25	.27	.17					
79	.68	.52	.50	.55	.58	.61	.63	29	.65
80	.59	.21							
81	.66	.38	.41	.41	.38	.47	.47	44	.50
82	.83	.11							
83	.90	.64	.54	.56	.69	.69	.77	4	.78

APPENDIX I--Continued

Trial Item Number	Diffi- culty ₁ Index ¹	Discrimination Index ²						Experimental Form	
		1st run	2nd run	3rd run	4th run	5th run	6th run	Item Number	Discrimi- nation Index
84	.88	.70	.71	.76	.72	.76	.74	42	.74
85	.90	.56	.53	.58	.54	.54	.52	101	.48
86	.91	.10							
87	.39	.40	.41	.45	.42		.46	123	.49
88	.41	.21							
89	.64	.45	.48	.50	.44	.44	.40	139	.34
90	.50	.40	.43	.43	.43	.42	.46	58	.48
91	.63	.35	.34	.32	.28	.33	.33		
92	.35	.36	.46	.44	.45	.50	.52	72	.53
93	.44	.32	.44	.46	.49	.48	.54	87	.53
94	.74	.01							
95	.74	.63	.60	.58	.57	.59	.57	65	.55
96	.67	.56	.61	.60	.60	.63	.61	66	.63
97	.58	.39	.38	.41	.45	.44	.46	88	.51
98	.41	.28							
99	.86	.65	.46	.44	.50	.47	.49	98	.48
100	.63	.28	.38	.32	.29	.32	.32		
101	.33	.16							
102	.91	.39	.65	.59	.50	.51	.53	89	.43
103	.61	.36	.26	.26					
104	.63	.24							
105	.91	.80	.84	.83	.70	.75	.61	130	.61
106	.68	.38	.37	.35	.33		.30		
107	.59	.25							
108	.56	.26	.24	.26					
109	.69	.19							
110	.86	.50	.54	.51	.42	.45	.34		
111	.85	.81	.76	.76	.76	.71	.80	121	.80
112	.55	.53	.54	.55	.61	.60	.64	91	.67
113	.95	.29	.39	.47	.52	.42	.40	115	.43
114	.77	.33	.35	.28					
115	.37	.28							
116	.44	.47	.50	.50	.44	.48	.41	107	.39
117	.39	.48	.54	.62	.63	.66	.69	84	.72
118	.62	.56	.46	.48	.36		.32		
119	.42	.27							
120	.33	.20							
121	.88	.83	.77	.70	.81	.81	.82	95	.81
122	.96	.39	.58	.67	.63	.64	.69	69	.67
123	.96	.70	.70	.71	.58	.58	.61	127	.61
124	.89	.67	.70	.69	.71	.71	.80	49	.79
125	.16	.05							

APPENDIX I--Continued

Trial Item Number	Diffi- culty Index ¹	Discrimination Index ²						Experimental Form	
		1st run	2nd run	3rd run	4th run	5th run	6th run	Item Number	Discrimi- nation Index
126	.11	-.13							
127	.89	.44	.49	.53	.63	.60	.61	35	.57
128	.63	.09							
129	.36	.33	.28	.28					
130	.55	-.10							
131	.84	.62	.52	.58	.64	.61	.63	36	.63
132	.58	.26							
133	.75	.27	.34	.31					
134	.79	.56	.57	.65	.63	.66	.70	39	.72
135	.60	.26							
136	.85	.51	.50	.56	.53	.53	.59	51	.58
137	.72	.31	.42	.42	.45	.48	.55	134	.52
138	.42	.36	.41	.40	.42	.43	.48	32	.51
139	.62	.17							
140	.53	.48	.44	.38	.33	.31			
141	.76	.58	.61	.65	.67	.65	.63	41	.65
142	.74	.29	.33	.30					
143	.52	.34							
144	.27	.30	.39	.40	.43	.43	.43	55	.45
145	.42	.01							
146	.27	-.18							
147	.56	.62	.52	.49	.50	.50	.54	45	.56
148	.53	.26	.30	.25					
149	.87	.88	.46	.46	.46	.46	.48	56	.46
150	.53	.07							
151	.28	.31	.36	.32	.39	.38	.49	61	.51
152	.94	.12							
153	.88	.31	.45	.52	.43	.47	.40	116	.42
154	.53	.47	.55	.55	.56	.60	.64	96	.66
155	.68	.46	.50	.61	.61	.58	.65	50	.66
156	.60	.55	.60	.62	.54	.57	.53	132	.53
157	.80	.37	.40	.30					
158	.75	.48	.43	.40	.30				
159	.37	.64	.67	.70	.70	.70	.70	30	.74
160	.78	.60	.56	.60	.55	.48	.48	111	.46
161	.66	.46	.43	.46	.34	.32			
162	.96	.66	.52	.42	.46	.36	.54	26	.54
163	.46	.31	.31	.37	.35	.33			
164	.35	.32	.37	.42	.46		.47	90	.54
165	.87	.40	.43	.39	.40	.33			
166	.92	.76	.65	.65	.64	.64	.59	63	.63
167	.23	.17							
168	.71	.52	.58	.59	.55	.60	.64	97	.68

APPENDIX I--Continued

Trial Item Number	Diffi- culty Index	Discrimination Index ²						Experimental Form	
		1st run	2nd run	3rd run	4th run	5th run	6th run	Item Number	Discrimi- nation Index
169	.94	.18							
170	.32	.19	.38	.41	.33	.34			
171	.53	.49	.54	.55	.48	.51	.43	38	.41
172	.70	.65	.61	.58	.54	.57	.57	133	.61
173	.79	-.39							
174	.81	.69	.64	.64	.50	.47	.45	99	.41
175	.64	.43	.31	.28					
176	.60	.32	.40	.42	.43	.44	.45	76	.45
177	.78	-.02							
178	.47	.60	.59	.61	.63	.62	.68	109	.68
179	.59	.28							
180	.38	.55	.55	.58	.55	.55	.55	46	.60
181	.47	.48	.44	.39	.34	.36	.26		
182	.52	.36	.47	.47	.51	.53	.55	64	.58
183	.82	.54	.59	.56	.57	.52	.54	85	.58
184	.66	.32							
185	.78	.37	.40	.42	.47		.53	52	.58
186	.61	.23							
187	.59	.28	.33	.34					
188	.78	.29	.32	.31					
189	.84	.29	.34	.33	.23	.25			
190	.71	.57	.53	.53	.46	.51	.45	47	.43
191	.16	.12							
192	.35	-.21							
193	.95	.79					.62		
194	.38	.46	.55	.62	.63	.63	.68	110	.70
195	.85	.82	.55	.59	.60	.59	.63	126	.62
196	.84	.50	.29	.33					
197	.38	.44	.60	.64	.66	.68	.68	86	.70
198	.97	.28							
199	.85	.25							
200	.82	.25							
201	.54	.64	.56	.61	.65	.70	.73	93	.75
202	.81	.76	.89	.94	.92	.94	.97	62	.97
203	.76	-.02							
204	.46	.26							
205	.23	.20							
206	.60	.36	.34	.39			.41	135	.43
207	.52	.28							
208	.54	.31							
209	.38	.22							
210	.76	.25							
211	.47	.25							
212	.83	.55	.55	.54	.47	.49	.45	138	.44

APPENDIX I--Continued

Trial Item Number	Diffi- culty Index ¹	Discrimination Index ²						Experimental Form	
		1st run	2nd run	3rd run	4th run	5th run	6th run	Item Number	Discrimi- nation Index
213	.95	.61	.54	.53	.44	.49	.47	140	.47
214	.33	.39	.35	.34					
215	.74	.67	.66	.66	.61	.61	.56	108	.58
216	.22	.50	.40	.40	.39	.40	.38		
217	.49	.10							
218	.70	.53	.49	.50	.49	.56	.50	33	.50
219	.95	.84	.68	.58	.50	.49	.45	34	.42
220	.42	.41	.47	.51	.49	.48	.51	74	.56
221	.12	.13							
222	.90	.38	.49	.48	.36	.34	.36		
223	.80	.19	.36	.33					
224	.59	.49	.46	.46	.37	.41	.38		
225	.59	.49	.51	.53	.53	.56	.57	81	.59
226	.86	.58	.55	.50	.45	.45	.36	92	.34
227	.91	.39	.49	.44	.38	.36	.29		
228	.86	.37	.42	.36	.27				
229	.66	.21							
230	.65	.36	.39	.38	.36	.35	.40	117	.35
231	.74	.64	.66	.69	.65	.68	.71	94	.70
232	.77	.73	.66	.69	.74	.71	.73	103	.74
233	.45	.30	.34	.38	.41		.42	128	.45
234	.60	.34	.35	.34					
235	.86	.32	.37	.36			.17		
236	.89	.50	.58	.56	.57	.57	.60	106	.52
237	.85	.78	.79	.87	.87	.87	.88	59	.88
238	.81	.68	.59	.63	.49	.49	.43	137	.44
239	.53	.01							
240	.66	.63	.56	.60	.65	.65	.65	105	.69
241	.48	.48	.49	.48	.43	.46	.45	125	.42
242	.24	.36	.36	.40	.48	.47	.51	73	.56
243	.42	.47	.37	.39	.46	.43	.47	71	.46
244	.78	.21							
245	.59	.32							
246	.85	.52	.39	.42	.35	.34			
247	.74	.40	.26	.22					
248	.69	.32	.32	.22					
249	.90	.50	.53	.52	.40	.42	.38	136	.37
250	.66	.41	.42	.43	.45	.45	.48	70	.52
251	.75	.46	.52	.56	.56	.54	.60	83	.60
252	.53	.32	.32	.42	.43	.42	.51	60	.53
253	.68	.24	.26	.20					
254	.57	.51	.52	.50	.45	.47	.46	48	.42
255	.86	.55	.52	.53	.36	.47	.43	57	.38
256	.92	.55	.58	.53	.45	.44	.37		

APPENDIX I--Continued

Trial Item Number	Diffi- culty Index ¹	Discrimination Index ²						Experimental Form	
		1st run	2nd run	3rd run	4th run	5th run	6th run	Item Number	Discrimi- nation Index
257	.49	.49	.57	.63	.63	.65	.68	77	.70
258	.57	.51	.55	.53	.46	.49	.44	119	.40
259	.39	.22							
260	.84	-.07							
261	.89	.42	.33	.37	.19				
262	.24	.03							
263	.41	.61	.67	.67	.70	.72	.76	118	.77
264	.75	.40	.49	.49	.44	.51	.51	75	.50
265	.90	.83	.71	.74	.65	.69	.62	100	.62
266	.86	.68	.76	.83	.86	.90	.90	101	.90
267	.83	.38	.52	.56	.47	.58	.48	78	.45
268	.40	.25							
269	.76	.28	.29	.25					
270	.85	.53	.53	.45	.36	.41	.36		
271	.89	.22	.36	.35	.26				
272	.92	.63	.68	.77	.68	.68	.69	68	.68
273	.86	.70	.77	.74	.71	.73	.71	120	.74
274	.94	.36	.44	.35	.33	.33			
275	.59	.09							
276	.59	.22							
277	.87	.67	.70	.64	.59	.57	.59	112	.55
278	.82	-.03							
279	.42	.17							
280	.16	-.09							
281	.87	.60	.45	.45	.46		.53	104	.52
282	.28	.38	.53	.51	.48	.50	.49	114	.48
283	.49	.15							
284	.75	.25	.29	.27					
285	.77	.38	.34	.33	.27	.26			
286	.71	.20							
287	.88	.53	.42	.40	.30	.29			
288	.89	.41	.49	.42	.38	.38	.31	124	.31
289	.75	.31	.35	.29					
290	.68	.55	.56	.60	.57	.60	.62	53	.62
291	.25	.49	.40	.45	.45		.47	80	.46
292	.25	.18							
293	.62	.64	.65	.69	.72	.76	.77	40	.77
294	.92	.68	.59	.59	.58	.56	.60	82	.59
295	.93	.52	.60	.70	.63	.71	.62	122	.62
296	.95	.51	.87	.86	.86	.86	.86	79	.86

APPENDIX I--Continued

Trial Item Number	Diffi- culty Index ¹	Discrimination Index ²						Experimental Form	
		1st run	2nd run	3rd run	4th run	5th run	6th run	Item Number	Discrimi- nation Index
297	.35	.15							
298	.72	.37	.42	.40	.30	.32			
299	.81	.36	.36	.31					
300	.27	.60	.52	.54	.54	.55	.58	54	.59

¹Formula for difficulty index: the proportion of individuals answering the item correctly:

$$p = \frac{R}{N}$$

²Discrimination indexes were computed through use of tetrachoric correlations.

APPENDIX J

NORMS FOR FORM A--GROUP I: STUDENTS ENROLLED IN FIRST GUIDANCE COURSE

Raw Score	Z Score	T Score	Percentile	Percentile Band	
25	-2.78	22.18	0.25	0.00	0.92
27	-2.49	25.04	0.75	0.00	2.34
28	-2.35	26.47	1.25	0.41	3.51
29	-2.20	27.91	2.00	0.66	5.26
30	-2.06	29.34	3.00	1.07	7.04
31	-1.92	30.77	4.50	1.74	7.92
32	-1.77	32.20	6.75	2.65	8.75
34	-1.49	35.06	8.50	5.98	12.18
35	-1.35	36.49	9.25	7.32	15.36
36	-1.20	37.92	11.25	8.20	19.53
37	-1.06	39.35	14.00	8.99	23.52
38	-0.92	40.78	18.00	10.56	26.60
39	-0.77	42.21	22.50	13.06	30.11
40	-0.63	43.64	25.50	16.63	34.71
41	-0.49	45.07	28.75	20.96	40.88
42	-0.34	46.50	32.75	24.47	47.80
43	-0.20	47.93	38.50	27.64	54.29
44	-0.06	49.37	45.50	31.38	60.04
45	0.08	50.80	52.25	36.53	65.20
46	0.22	52.23	58.25	43.11	70.20
47	0.36	53.66	63.50	49.94	74.94
48	0.50	55.09	68.50	56.20	78.60
49	0.65	56.52	73.50	61.70	81.35
50	0.79	57.95	77.75	66.79	84.86
51	0.93	59.38	80.25	71.79	88.43
52	1.08	60.81	83.50	76.30	91.44
53	1.22	62.24	87.50	79.39	94.85
54	1.36	63.67	90.25	82.39	97.59
55	1.51	65.10	93.75	86.13	99.09
56	1.65	66.53	97.00	89.31	100.00
57	1.79	67.96	98.75	92.55	100.00
58	1.93	69.39	99.75	95.89	100.00

N = 200

Mean = 44.4

σ = 6.98

SEM = 2.341

APPENDIX K

NORMS FOR FORM A--GROUP II STUDENTS COMPLETING HALF OF THE BASIC GUIDANCE COURSES

Raw Score	Z Score	T Score	Percentile	Percentile Band	
41	-2.09	29.03	0.30	0.00	4.89
42	-1.91	30.86	1.85	0.00	7.98
43	-1.72	32.70	4.93	0.32	9.85
44	-1.54	34.53	8.02	1.89	12.92
45	-1.36	36.37	9.87	4.97	17.83
46	-1.17	38.20	12.96	8.04	22.16
47	-0.99	40.04	17.90	9.91	26.79
48	-0.81	41.87	22.22	13.02	33.24
49	-0.62	43.71	26.85	17.95	40.34
50	-0.44	45.54	33.33	22.28	47.74
51	-0.26	47.38	40.43	26.93	53.93
52	-0.07	49.21	47.83	33.42	59.49
53	0.10	51.05	54.01	40.52	66.87
54	0.28	52.88	59.56	47.91	73.67
55	0.47	54.72	66.97	54.08	79.85
56	0.65	56.55	73.76	59.66	84.50
57	0.83	58.39	79.93	67.06	87.61
58	1.02	60.22	84.56	73.84	91.00
59	1.20	62.06	87.65	79.99	93.48
60	1.39	63.90	91.04	84.60	95.34
61	1.57	65.73	93.51	87.69	96.58
62	1.75	67.57	95.37	91.08	98.12
63	1.94	69.40	96.60	93.54	99.67
64	2.12	71.24	98.14	95.38	100.00
65	2.30	73.07	99.69	96.62	100.00

N = 162

Mean = 52.4

σ = 5.44

SEM = 1.987

APPENDIX L

NORMS FOR FORM A--GROUP III
STUDENTS COMPLETING ALL BASIC GUIDANCE COURSES

Raw Score	Z Score	T Score	Percentile	Percentile Band	
41	-2.77	22.23	0.45	0.00	1.90
42	-2.58	24.10	1.37	0.00	2.66
45	-2.02	29.73	3.66	2.37	6.59
46	-1.83	31.61	5.96	3.14	8.46
47	-1.65	33.49	6.88	4.37	10.75
48	-1.46	35.36	9.17	6.24	13.05
49	-1.27	37.24	11.46	7.58	16.61
50	-1.08	39.11	13.76	9.88	21.69
51	-0.90	40.99	17.88	12.17	26.88
52	-0.71	42.87	23.39	15.03	31.92
53	-0.52	44.74	28.44	19.59	38.24
54	-0.33	46.62	33.48	24.95	45.75
55	-0.14	48.50	40.36	29.99	54.18
56	0.03	50.37	48.16	35.61	61.95
57	0.22	52.25	56.88	42.77	68.34
58	0.41	54.13	64.22	50.85	73.98
59	0.60	56.00	70.18	59.14	79.80
60	0.78	57.88	75.68	66.06	85.77
61	0.97	59.76	81.65	71.88	90.78
62	1.16	61.63	87.61	77.53	94.73
63	1.35	63.51	92.20	83.49	97.45
64	1.53	65.39	95.87	89.03	99.11
65	1.72	67.26	98.16	93.33	100.00

N = 109

Mean = 55.7

σ = 5.32

SEM = 1.69

APPENDIX M

NORMS FOR FORM A--COMBINED SAMPLE: ALL THREE SUB-GROUPS COMBINED

Raw Score	Z Score	T Score	Percentile	Percentile Band	
25	-3.19	18.07	0.10	0.00	0.40
27	-2.93	20.64	0.31	0.00	1.02
28	-2.80	21.93	0.53	0.16	1.53
29	-2.67	23.22	0.84	0.27	2.29
30	-2.54	24.50	1.27	0.44	3.01
31	-2.42	25.79	1.91	0.72	3.38
32	-2.29	27.08	2.86	1.10	3.73
34	-2.03	29.65	3.60	2.47	5.25
35	-1.90	30.94	3.92	3.08	6.63
36	-1.77	32.22	4.77	3.45	8.41
37	-1.64	33.51	5.94	3.79	10.07
38	-1.51	34.80	7.64	4.43	11.47
39	-1.39	36.08	9.55	5.47	13.40
40	-1.26	37.37	10.82	6.95	16.32
41	-1.13	38.65	12.42	8.77	20.10
42	-1.00	39.94	14.86	10.31	24.09
43	-0.87	41.23	18.47	11.77	28.11
44	-0.74	42.51	22.50	13.87	32.25
45	-0.61	43.80	26.43	17.00	36.39
46	-0.49	45.09	30.57	20.87	40.57
47	-0.36	46.37	34.71	24.84	44.94
48	-0.23	47.66	38.85	28.89	49.47
49	-0.10	48.95	43.09	33.03	54.23
50	0.02	50.23	47.66	37.17	59.34
51	0.15	51.52	52.12	41.37	64.03
52	0.28	52.81	57.32	45.81	68.84
53	0.40	54.09	62.31	50.31	74.42
54	0.53	55.38	66.56	55.21	79.68
55	0.66	56.66	72.18	60.29	84.09
56	0.79	57.95	77.70	64.83	87.33
57	0.92	59.24	82.59	69.90	89.84
58	1.05	60.52	86.30	75.46	92.19
59	1.18	61.81	88.85	80.61	94.34
60	1.31	63.10	91.29	84.80	96.14
61	1.43	64.38	93.52	87.82	97.58
62	1.56	65.67	95.54	90.30	98.83
63	1.69	66.96	97.02	92.62	99.64
64	1.82	68.24	98.40	94.72	100.00
65	1.95	69.53	99.46	96.42	100.00
66	2.08	70.82	99.89	97.84	100.00

N = 471

Mean = 49.8

σ = 7.77

SEM = 2.405

APPENDIX N

NORMS FOR FORM B--GROUP I: STUDENTS ENROLLED IN FIRST GUIDANCE COURSE

Raw Score	Z Score	T Score	Percentile	Percentile Band	
23	-3.17	18.25	0.25	0.00	0.53
27	-2.58	24.12	0.75	0.46	2.32
28	-2.44	25.59	1.50	0.58	2.57
29	-2.29	27.06	2.25	0.71	2.96
31	-2.00	29.99	2.75	2.03	5.31
32	-1.85	31.46	3.50	2.42	7.38
33	-1.70	32.93	4.75	2.67	9.77
34	-1.56	34.39	6.75	3.28	12.45
35	-1.41	35.86	9.00	4.39	14.95
36	-1.26	37.33	11.75	6.18	17.95
37	-1.12	38.79	14.25	8.36	21.91
38	-0.97	40.26	16.75	10.97	25.16
39	-0.82	41.73	21.00	13.54	29.12
40	-0.67	43.20	24.25	16.04	34.73
41	-0.53	44.66	27.50	19.79	40.05
42	-0.38	46.13	33.25	23.33	45.76
43	-0.23	47.60	38.50	26.58	52.01
44	-0.09	49.06	44.00	31.62	57.98
45	0.05	50.53	50.25	37.01	63.44
46	0.20	52.00	56.50	42.44	69.37
47	0.34	53.46	61.75	48.48	74.41
48	0.49	54.93	67.75	54.73	77.81
49	0.64	56.40	73.50	60.26	81.70
50	0.78	57.87	76.75	66.05	85.81
51	0.93	59.33	80.50	71.87	89.34
52	1.08	60.80	84.75	75.83	92.34
53	1.22	62.27	88.50	79.43	95.06
54	1.37	63.73	91.50	83.54	96.85
55	1.52	65.20	94.50	87.43	98.17
56	1.66	66.67	96.50	90.65	100.00
57	1.81	68.14	97.75	93.65	100.00
58	1.96	69.60	99.25	95.93	100.00

N = 200

Mean = 44.6

σ = 6.81

SEM = 2.282

APPENDIX O

NORMS FOR FORM B--GROUP II: STUDENTS COMPLETING HALF OF THE BASIC GUIDANCE COURSES

Raw Score	Z Score	T Score	Percentile	Percentile Band	
39	-2.71	22.85	0.30	0.00	0.86
41	-2.30	26.90	0.92	0.37	3.08
42	-2.10	28.93	1.85	0.67	4.37
43	-1.90	30.96	3.39	1.11	7.09
44	-1.70	32.99	4.62	2.16	10.17
45	-1.49	35.02	7.71	3.64	12.77
46	-1.29	37.05	10.80	5.25	18.19
47	-1.09	39.08	13.27	8.34	24.12
48	-0.88	41.10	19.44	11.30	29.24
49	-0.68	43.13	25.30	14.52	37.14
50	-0.48	45.16	30.24	20.63	45.78
51	-0.28	47.19	38.88	26.30	52.70
52	-0.07	49.22	47.53	31.99	60.90
53	0.12	51.25	54.01	40.63	69.05
54	0.32	53.28	62.65	48.84	75.35
55	0.53	55.30	70.67	55.76	80.72
56	0.73	57.33	76.54	64.27	84.74
57	0.93	59.36	81.79	71.86	88.44
58	1.13	61.39	85.49	77.60	92.64
59	1.34	63.42	89.19	82.53	95.73
60	1.54	65.45	93.51	86.24	97.28
61	1.74	67.48	96.29	90.07	98.76
62	1.95	69.51	97.53	94.08	100.00
63	2.15	71.53	99.07	96.54	100.00

N = 162

Mean = 52.3

σ = 4.92

SEM = 1.797

APPENDIX P

NORMS FOR FORM B--GROUP III: STUDENTS COMPLETING ALL BASIC GUIDANCE COURSES

Raw Score	Z Score	T Score	Percentile	Percentile Band	
38	-3.24	17.50	0.45	0.00	1.24
40	-2.87	21.20	1.37	0.58	1.84
45	-1.95	30.45	2.75	2.28	5.90
46	-1.76	32.30	4.58	2.55	7.40
47	-1.58	34.15	6.42	3.27	8.78
48	-1.39	36.00	7.79	5.10	12.12
49	-1.21	37.85	9.17	6.81	16.91
50	-1.02	39.70	13.30	8.18	22.28
51	-0.84	41.55	18.34	10.34	28.77
52	-0.66	43.39	23.85	14.73	35.33
53	-0.47	45.24	30.73	19.91	43.39
54	-0.29	47.09	37.15	25.80	52.10
55	-0.10	48.94	45.87	32.55	57.87
56	0.07	50.79	54.58	39.63	53.44
57	0.26	52.64	59.17	48.34	70.71
58	0.44	54.49	65.13	55.89	77.86
59	0.63	56.34	72.93	60.86	83.42
60	0.81	58.19	79.81	67.35	86.83
61	1.00	60.04	84.86	74.89	89.58
62	1.18	61.89	87.61	81.25	92.00
63	1.37	63.74	90.36	85.64	95.28
64	1.55	65.59	92.66	88.39	98.62
65	1.74	67.44	96.33	91.01	100.00
66	1.92	69.29	99.54	93.70	100.00

N = 109

Mean = 55.5

σ = 5.40

SEM = 1.715

APPENDIX Q

NORMS FOR FORM B--COMBINED TOTAL SAMPLE: ALL THREE SUB-GROUPS

Raw Score	Z Score	T Score	Percentile	Percentile Band	
23	-3.57	14.20	0.10	0.00	0.22
27	-3.04	19.53	0.31	0.19	0.98
28	-2.91	20.87	0.63	0.24	1.09
29	-2.77	22.20	0.95	0.30	1.26
31	-2.51	24.87	1.16	0.85	2.28
32	-2.37	26.21	1.48	1.02	3.17
33	-2.24	27.54	2.01	1.13	4.19
34	-2.11	28.87	2.86	1.38	5.32
35	-1.97	30.21	3.82	1.84	6.42
36	-1.84	31.54	4.98	2.59	7.86
37	-1.71	32.88	6.05	3.51	9.74
38	-1.57	34.21	7.21	4.61	11.33
39	-1.44	35.55	9.23	5.71	13.30
40	-1.31	36.88	10.82	6.84	16.06
41	-1.17	38.21	12.42	8.59	18.82
42	-1.04	39.55	15.18	10.31	21.95
43	-0.91	40.88	17.94	11.91	25.94
44	-0.77	42.22	20.70	14.29	29.88
45	-0.64	43.55	24.62	17.05	33.86
46	-0.51	44.88	28.76	19.81	38.78
47	-0.37	46.22	32.27	23.37	43.32
48	-0.24	47.55	37.26	27.44	47.90
49	-0.11	48.89	42.03	31.15	53.73
50	0.02	50.22	46.07	35.66	59.58
51	0.15	51.56	51.80	40.51	65.09
52	0.28	52.89	57.85	44.78	70.93
53	0.42	54.22	63.26	49.97	76.61
54	0.55	55.56	69.00	55.92	81.02
55	0.68	56.89	75.05	61.54	84.38
56	0.82	58.23	79.93	67.17	87.70
57	0.95	59.56	83.33	73.12	91.00
58	1.09	60.90	86.62	78.37	93.77
59	1.22	62.23	90.02	82.24	95.56
60	1.35	63.56	93.09	85.57	96.65
61	1.49	64.90	95.22	88.93	97.72
62	1.62	66.23	96.28	92.11	98.57
63	1.75	67.57	97.45	94.54	99.38
64	1.89	68.90	98.30	95.94	100.00
65	2.02	70.24	99.15	97.07	100.00
66	2.15	71.57	99.89	98.03	100.00

N - 471
Mean = 49.8
 σ = 7.49
SEM = 2.319

APPENDIX R

NORMS FOR COMBINED A AND B FORMS--GROUP I: STUDENTS ENROLLED IN FIRST GUIDANCE COURSE

Raw Score	Z Score	T Score	Percentile	Percentile Band	
54	-2.63	23.68	0.25	0.00	2.52
55	-2.55	24.43	0.75	0.00	2.71
56	-2.48	25.18	1.50	0.00	2.89
57	-2.40	25.93	2.25	0.00	3.34
61	-2.10	28.93	3.00	1.90	6.16
63	-1.95	30.43	4.25	2.53	6.86
64	-1.88	31.19	5.25	2.72	7.11
66	-1.73	32.69	6.50	3.40	7.96
70	-1.43	35.69	7.50	6.20	13.54
71	-1.35	36.44	8.50	6.63	15.56
72	-1.28	37.19	9.50	6.88	17.19
73	-1.20	37.94	10.75	7.13	19.04
74	-1.13	38.69	12.50	7.38	21.17
75	-1.05	39.44	14.75	8.03	22.94
76	-0.98	40.19	16.50	9.03	24.79
77	-0.90	40.94	18.00	10.16	27.04
78	-0.83	41.69	20.25	11.68	29.17
79	-0.75	42.44	22.25	13.70	31.41
80	-0.68	43.19	23.75	15.68	34.14
81	-0.60	43.94	26.00	17.30	36.91
82	-0.53	44.69	28.25	19.20	39.52
83	-0.45	45.44	30.25	21.32	42.74
84	-0.38	46.19	32.75	23.05	46.26
85	-0.30	46.94	35.75	24.95	49.51
86	-0.23	47.69	38.25	27.20	53.10
87	-0.15	48.44	41.00	29.32	56.76
88	-0.08	49.19	44.75	31.58	59.42
89	0.00	49.94	48.00	34.35	61.89
90	0.06	50.69	51.25	37.08	65.24
91	0.14	51.44	55.25	39.72	68.64
92	0.21	52.19	58.50	43.00	71.17
93	0.29	52.94	60.50	46.48	73.29
94	0.36	53.69	63.50	49.73	75.42
95	0.44	54.44	67.25	53.39	77.31
96	0.51	55.19	70.25	56.98	78.94
97	0.59	55.94	72.25	59.57	80.21
98	0.66	56.69	74.50	62.10	81.56
99	0.74	57.44	76.50	65.50	83.42
100	0.81	58.19	78.25	68.85	85.31
101	0.89	58.94	79.75	71.32	86.94
102	0.96	59.69	80.75	73.45	88.56

APPENDIX R--Continued

Raw Score	Z Score	T Score	Percentile	Percentile Band	
103	1.04	60.44	82.50	75.57	90.08
104	1.11	61.19	84.50	77.43	91.91
105	1.19	61.94	86.25	79.05	94.52
106	1.26	62.69	87.75	80.28	96.46
107	1.34	63.44	89.50	81.68	97.34
108	1.41	64.19	90.75	83.57	98.09
109	1.49	64.94	93.25	85.43	98.84
110	1.56	65.69	96.00	87.05	99.48
111	1.64	66.44	97.00	88.68	100.00
112	1.71	67.19	97.75	90.16	100.00
113	1.79	67.94	98.50	92.08	100.00
114	1.86	68.69	99.25	94.72	100.00
115	1.94	69.44	99.75	96.53	100.00

N = 200

Mean = 89

σ = 13.33

SEM = 4.464

APPENDIX S

NORMS FOR COMBINED A AND B FORMS--GROUP II: STUDENTS COMPLETING HALF OF THE BASIC GUIDANCE COURSES

Raw Score	Z Score	T Score	Percentile	Percentile Band	
81	-2.42	25.72	0.30	0.00	1.41
85	-2.01	29.80	1.54	0.43	5.34
86	-1.91	30.82	3.08	0.74	6.39
88	-1.71	32.85	4.62	1.36	9.88
89	-1.61	33.87	5.86	2.19	11.69
90	-1.51	34.89	6.79	3.41	13.05
91	-1.40	35.91	8.64	4.18	15.00
92	-1.30	36.93	10.80	5.15	17.82
93	-1.20	37.95	12.34	6.25	21.09
94	-1.10	38.97	13.58	7.57	24.48
95	-1.00	39.99	16.04	9.55	28.23
96	-0.89	41.01	19.13	11.45	32.42
97	-0.79	42.03	22.53	12.86	36.03
98	-0.69	43.05	25.92	14.62	39.12
99	-0.59	44.07	22.93	17.35	42.03
100	-0.49	45.09	32.25	20.57	44.98
101	-0.38	46.11	37.34	23.96	48.43
102	-0.28	47.13	40.43	27.62	51.77
103	-0.18	48.15	43.20	31.76	55.04
104	-0.08	49.17	46.29	35.56	59.14
105	0.01	50.19	50.00	38.65	63.77
106	0.12	51.21	53.08	41.60	68.40
107	0.22	52.23	56.48	44.51	72.14
108	0.32	53.25	61.11	47.86	75.05
109	0.42	54.27	65.74	51.30	78.19
110	0.52	55.29	70.37	54.52	81.23
111	0.63	56.31	73.45	58.44	83.65
112	0.73	57.33	76.23	63.07	85.10
113	0.83	58.35	79.62	67.70	85.84
114	0.93	59.37	82.40	71.67	86.64
115	1.03	60.39	84.56	74.63	88.63
116	1.14	61.41	85.49	77.67	91.94
117	1.24	62.43	86.11	80.80	94.76
118	1.34	63.45	87.03	83.32	96.21
119	1.44	64.47	89.81	84.96	96.96
120	1.54	65.49	93.51	85.75	97.93
121	1.65	66.51	95.67	86.50	98.63
122	1.75	67.53	96.60	88.21	98.94
123	1.85	68.55	97.22	91.38	99.25
124	1.95	69.57	98.45	94.43	99.56
128	2.36	73.64	99.69	98.58	100.00

N = 162

Mean = 104.8

σ = 9.80

SEM = 3.576

APPENDIX T

NORMS FOR COMBINED A AND B FORMS--GROUP III: STUDENTS COMPLETING ALL BASIC GUIDANCE COURSES

Raw Score	Z Score	T Score	Percentile	Percentile Band	
79	-3.17	18.22	0.45	0.00	0.88
86	-2.48	25.10	1.37	0.95	2.11
90	-2.09	29.02	2.29	1.55	5.25
92	-1.90	30.99	4.12	2.01	6.52
94	-1.70	32.95	5.96	2.99	7.95
96	-1.50	34.91	6.88	4.83	10.02
97	-1.41	35.89	7.79	5.74	13.59
99	-1.21	37.86	9.17	6.77	18.63
100	-1.11	38.84	12.84	7.58	21.84
101	-1.01	39.82	16.05	8.32	24.73
102	-0.91	40.80	17.88	9.01	26.57
103	-0.82	41.78	21.10	11.99	28.83
104	-0.72	42.76	24.31	15.30	32.39
106	-0.52	44.73	27.98	20.35	40.62
107	-0.42	45.71	31.65	23.56	45.13
108	-0.33	46.69	34.86	25.71	47.99
109	-0.23	47.67	39.44	27.55	51.41
110	-0.13	48.65	44.49	30.79	55.54
111	-0.03	49.63	47.24	34.11	59.46
112	0.06	50.62	50.45	38.38	62.56
113	0.16	51.60	54.58	43.32	65.74
114	0.25	52.58	58.71	46.60	70.22
115	0.35	53.56	61.92	49.71	74.24
116	0.45	54.54	64.67	53.62	77.59
117	0.55	55.52	69.26	57.75	79.67
118	0.65	56.51	73.39	61.17	81.16
119	0.74	57.49	77.06	64.03	83.42
120	0.84	58.47	79.35	68.19	86.77
121	0.94	59.45	80.73	72.43	89.06
122	1.04	60.43	82.56	76.21	91.19
123	1.14	61.41	86.23	78.82	92.80
125	1.33	63.38	90.82	82.14	96.65
127	1.53	65.34	94.03	87.99	98.83
128	1.63	66.32	96.33	90.29	100.00
129	1.73	67.30	97.70	92.05	100.00
130	1.82	68.28	98.62	93.66	100.00
131	1.92	69.27	99.54	95.79	100.00

N = 109
 Mean = 111.3
 σ = 10.18
 SEM = 3.232

APPENDIX U

NORMS FOR COMBINED A AND B FORMS--COMBINED TOTAL SAMPLE: ALL THREE SUB-GROUPS

Raw Score	Z Score	T Score	Percentile	Percentile Band	
54	-3.07	19.29	0.10	0.00	1.08
55	-3.00	19.96	0.31	0.00	1.16
56	-2.93	20.63	0.63	0.00	1.24
57	-2.86	21.31	0.95	0.00	1.46
61	-2.59	24.00	1.27	0.76	2.65
62	-2.53	24.67	1.59	0.98	2.82
63	-2.46	25.34	1.80	1.06	2.92
64	-2.39	26.02	2.22	1.14	3.03
66	-2.26	27.36	2.76	1.40	3.43
70	-1.99	30.05	3.18	2.60	5.88
71	-1.92	30.72	3.60	2.80	6.70
72	-1.85	31.40	4.03	2.90	7.38
73	-1.79	32.07	4.56	3.01	8.21
74	-1.72	32.74	5.30	3.12	9.17
75	-1.65	33.42	6.26	3.35	9.99
76	-1.59	34.09	7.00	3.77	10.93
77	-1.52	34.76	7.64	4.24	11.99
78	-1.45	35.43	8.59	4.86	12.92
79	-1.38	36.11	9.55	5.69	13.90
80	-1.32	36.78	10.29	6.56	15.28
81	-1.25	37.45	11.35	7.26	16.94
82	-1.18	38.12	12.42	8.02	18.51
83	-1.11	38.80	13.26	8.98	20.25
84	-1.05	39.47	14.33	9.85	22.10
85	-0.98	40.14	15.92	10.72	23.90
86	-0.91	40.82	17.62	11.78	26.09
87	-0.85	41.49	19.10	12.76	28.53
88	-0.78	42.16	21.01	13.69	30.52
89	-0.71	42.83	22.82	14.96	32.29
90	-0.64	43.51	24.62	16.60	34.54
91	-0.58	44.18	27.07	18.21	37.02
92	-0.51	44.85	29.51	19.87	39.34
93	-0.44	45.52	31.21	21.74	41.57
94	-0.37	46.20	33.01	23.54	43.92
95	-0.31	46.87	35.56	25.60	46.75
96	-0.24	47.54	38.00	28.04	49.44
97	-0.17	48.22	40.23	30.19	51.57
98	-0.11	48.89	42.46	31.93	53.79
99	-0.04	49.56	44.90	34.03	56.36
100	0.02	50.23	47.98	36.54	58.83
101	0.09	50.91	50.42	38.89	61.10
102	0.15	51.58	52.33	41.12	63.65
103	0.22	52.25	54.77	43.44	66.47

APPENDIX U--Continued

Raw Score	Z Score	T Score	Percentile	Percentile Band	
104	0.29	52.92	57.43	46.13	69.84
105	0.36	53.60	59.76	48.96	73.69
106	0.42	54.27	61.99	51.18	76.53
107	0.49	54.94	64.75	53.31	78.59
108	0.56	55.62	67.62	55.83	80.86
109	0.62	56.29	71.33	58.36	83.18
110	0.69	56.96	75.26	60.65	85.09
111	0.76	57.63	77.38	63.10	86.41
112	0.83	58.31	79.40	65.90	87.60
113	0.89	58.98	81.84	69.11	88.87
114	0.96	59.65	84.07	72.91	90.46
115	1.03	60.32	85.77	76.11	92.27
116	1.10	61.00	86.83	78.19	93.63
117	1.16	61.67	88.11	80.38	94.50
118	1.23	62.34	89.38	82.73	95.43
119	1.30	63.02	91.18	84.75	96.49
120	1.36	63.69	92.99	86.20	97.36
121	1.43	64.36	94.05	87.34	97.88
122	1.50	65.03	94.79	88.62	98.25
123	1.57	65.71	95.85	90.10	98.78
124	1.63	66.38	96.92	91.91	99.29
125	1.70	67.05	97.66	93.41	99.59
127	1.84	68.40	98.40	95.22	100.00
128	1.90	69.07	99.04	96.28	100.00
129	1.97	69.74	99.46	97.21	100.00
130	2.04	70.42	99.68	97.81	100.00
131	2.10	71.09	99.89	98.19	100.00

N = 471

Mean = 99.6

 σ = 14.86

SEM = 4.599

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