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THE DEVELOPMENT OF AN INSTRUMENT TO DIFFERENTIATE AMONG PUBLIC SCHOOL TEACHERS ON THE BASIS OF ATTITUDES TOWARD PROFESSIONALISM

by
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APPROVAL SHEET

Title Thesis: The Development of an Instrument to Differentiate Among Public School Teachers on the Basis of Attitudes Toward Professionalism

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ABSTRACT

Title of Thesis: The Development of an Instrument to Differentiate Among Public School Teachers on the Basis of Attitudes Toward Professionalism

Eugene Arthur Uhlan, Doctor of Philosophy, 1978

Thesis directed by: Associate Professor Harvey Goldman

Purpose

The purpose of this study was to develop an instrument which would measure the level of professionalism attained by public school teachers. The development of such an instrument is based upon the assumption that there are degrees of professionalism rather than a simple dichotomy between the professional and the nonprofessional.

Procedures

A review of the literature revealed that the characteristics of a profession are of two basic types. First are those characteristics which are part of the structure of the occupation including such things as formal education and entrance requirements, the formation of a professional organization and the adopting of a code of ethics. The second type is attitudinal. These attributes of professionalism reflect the way in which the practitioners view their work. If the occupation has met the structural prerequisites of a profession, the approach taken in practice determines the level of professionalism reached.

In order to determine the extent to which the approach taken by public school teachers toward their work approximates the professional model, the researcher developed an initial pool of 104 items for a

Teacher Attitude Scale based upon the following six attitudinal attributes of a profession:

1. The use of the professional organization as a major reference.
2. Involvement of the individual in the professional culture.
3. A belief in service to the public.
4. A belief in the right to self-regulation.
5. A sense of calling to the field.
6. A belief in autonomy.

The initial pool of items was submitted to three professionally trained teachers who were provided full definitions of each attribute above and were asked to match each item with the attribute it was intended to measure. The work of this group indicated that the six attributes should be collapsed into three. Thus, use of the professional organization as a major reference and involvement in the professional culture were combined. A belief in service to the public and a sense of calling to the field were combined and autonomy was combined with a belief in the right to self-regulation.

A second panel examined the items for clarity and unnecessary duplication. This process resulted in the selection of sixty (60) items, twenty designed to measure each of the three combined attributes.

The sixty item Teacher Attitude Scale was then sent to a total of 500 randomly selected teachers in eight different county school systems in Maryland. The statistical analysis was based upon 408 usable responses or just over an eighty percent return.

Twenty-two items were selected for use on a field test version of the Teacher Attitude Scale. Responses from 100 randomly selected

teachers in Cecil County, Maryland, resulted in the selection of nineteen items for the final instrument.

Findings

The research indicates that there are two factors contributing to the professionalism of public school teachers which can be measured through the use of a self-report instrument. These factors relate to the use of the professional organization as a major reference and a belief in commitment to the profession including a sense of calling to the field.

Implications

The score a subject obtains on the instrument developed through this study should be considered an attitude score. In general, the interpretation of an attitude score on a summated-rating scale cannot be made independently of the distribution of scores of some defined group. This should present no problem since the purpose of using the instrument is to place the attitude of each subject in relation to the attitudes of other subjects. Scores on summated rating scales can be interpreted in this relative sense.

In terms of further research, the purpose will be to compare the mean change in attitude scores as a result of introducing some experimental variable.

A study of the teachers exhibiting the more professional attitudes, according to the instrument, may reveal training and/or organizational differences which relate to this professionalism. Administrators and teacher educators could then encourage the use of those training techniques which enhance professionalism.

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TABLE OF CONTENTS

		Page
ACKNOWLEDGEMENTS		ii
LIST OF TABLES		v
LIST OF FIGURES		vi
Chapter		
I	INTRODUCTION	1
	Statement of the Problem	3
	Definitions of Terms Used	6
	Research Question	7
	Methodology	8
	Significance of the Study	8
	Limitations of the Study	10
	Organization of the Study	11
II	RELATED LITERATURE	13
	Toward A Definition of Profession	13
	The Process of Professionalization	20
	Research Related to Professionalism	23
	Summary	28
III	METHODOLOGY	30
	Item Development Procedures	30
	Item Selection Using A Panel of Judges	32
	Selection of Subjects	36
	The Need for Further Instrument Refinement	40

Chapter Page

Data Analyses 41

Field Test of Selected Items 48

Summary 49

IV RESULTS 51

The Teacher Attitude Scale: Items Selected for the Major Phase of the Study 51

Characteristics of the Subjects: Major Phase of the Study 56

Analysis of the Data from the Major Phase of the Study 62

Field Test of the Twenty-Two Selected Items 71

V SUMMARY, CONCLUSIONS AND RECOMMENDATIONS 77

Summary 77

Conclusions 80

Recommendations for Further Research 89

APPENDICES

A CORRESPONDENCE 91

Letter Sent to the Superintendents 92

Sample of Second Letter to Superintendents who Agreed to Participate 93

Cover Letter to Participants 94

Sample of Letter to Participating Superintendents Regarding Non-Responders 95

Follow-up Letter to Non-Responders 96

B INITIAL ITEM POOL, INSTRUCTIONS TO PANEL MEMBERS A, B AND C AND RESULTS OF THEIR WORK 97

Initial Item Pool 98

Instructions to Panel Members A, B and C 104

APPENDICES Page

B Definitions Given to Panel Members A, B and C 106

Criteria for Editing Attitude Scale Statements 107

Designation of the Attributes Measured by each Proposed Item According to Independent Panel Members A, B and C 108

Value Assigned to Proposed Items by Panel Members A, B and C 109

C NINETY-FOUR ITEM TEACHER ATTITUDE SCALE, INSTRUCTIONS TO PANEL MEMBERS D, E AND F AND RESULTS OF THEIR WORK 110

Ninety-Four Item Teacher Attitude Scale 111

Instructions to Panel Members D, E and F 117

Results of the Examination of Items for Excess Repetition by the Writer and Panel Members D, E and F 118

D SIXTY-ITEM TEACHER ATTITUDE SCALE WITH SCORING FORMAT AND DISTRIBUTION OF ITEM RESPONSES 119

Sixty-Item Teacher Attitude Scale 120

Background Information 124

Scoring Format, Sixty-Item Teacher Attitude Scale ... 125

Distribution of Item Responses for Scale 1 - Belief in the Use of Professional Colleagues as a Major Reference 126

Distribution of Item Responses for Scale 2 - Belief in Service to the Public and A Sense of Calling to the Field 127

Distribution of Item Responses for Scale 3 - Belief in the Right to Self-Regulation, Autonomy 128

E TWENTY-TWO ITEM TEACHER ATTITUDE SCALE WITH SCORING FORMAT 129

Twenty-Two Item Teacher Attitude Scale 130

Background Information 132

APPENDICES

Page

E Scoring Format, Twenty-Two Item Teacher Attitude Scale 133

F FINAL INSTRUMENT WITH SCORING FORMAT 134

Final Teacher Attitude Scale 135

Background Information 137

Scoring Format, Nineteen Item Teacher Attitude Scale 138

SELECTED BIBLIOGRAPHY 139

LIST OF TABLES

Table		Page
1	NUMBER OF RESPONDENTS BY COUNTY	39
2	SEX OF THE PARTICIPANTS	56
3	AGE OF PARTICIPANTS	57
4	CURRENT POSITION OF PARTICIPANTS	58
5	YEARS IN CURRENT POSITION	59
6	OTHER AREAS FOR WHICH PARTICIPANTS WERE CERTIFIED	60
7	HIGHEST DEGREE EARNED BY PARTICIPANTS	61
8	PROFESSIONAL ORGANIZATION MEMBERSHIP OF THE PARTICIPANTS	62
9	SELECTION CRITERIA DATA FOR SCALE 1 - BELIEF IN USE OF PROFESSIONAL COLLEAGUES AS A MAJOR REFERENCE	65
10	SELECTION CRITERIA DATA FOR SCALE 2 - BELIEF IN SERVICE TO THE PUBLIC AND A SENSE OF CALLING TO THE FIELD ...	67
11	SELECTION CRITERIA DATA FOR SCALE 3 - BELIEF IN THE RIGHT TO SELF-REGULATION, AUTONOMY	69
12	RELIABILITY OF FIELD TEST INSTRUMENT BASED UPON THE RESPONDENT GROUP (N=50)	73
13	RELIABILITY OF FIELD TEST INSTRUMENT BASED UPON THE COLLEAGUE GROUP (N=50)	74
14	RELIABILITY OF FIELD TEST INSTRUMENT BASED UPON RESPONDENT GROUP WITH SCALE 3 DROPPED (N=50)	75
15	RELIABILITY OF FIELD TEST INSTRUMENT BASED UPON COLLEAGUE GROUP WITH SCALE 3 DROPPED (N=50)	75
16	PEARSON CORRELATION COEFFICIENTS FOR RESPONDENT AND COLLEAGUE SCORES (N=50)	76

LIST OF FIGURES

Figure		Page
1	SAMPLE ITEM DISPLAYING ACCEPTABLE RESPONSE PATTERN	47
2	SAMPLE ITEM DISPLAYING UNACCEPTABLE RESPONSE PATTERN ..	47

CHAPTER I

INTRODUCTION

The question "What is a profession?" has been debated for a long time. While many definitions have been proposed, disagreement continues over the fine points and complete agreement has not been reached as to what the term specifies.

> Abraham Flexner set forth six criteria for distinguishing professions from other kinds of work. In his view, professional activity was basically intellectual, carrying with it great personal responsibility; it was learned, being based on great knowledge and not merely routine; it was practical, rather than academic or theoretic; its technique could be taught, this being the basis of professional education; it was strongly organized internally; and it was motivated by altruism, the professionals viewing themselves as working for some aspect of the good of society.[1]

After an exhaustive review of the literature, Cogan developed the following definition of a profession.

> A profession is a vocation whose practice is founded upon an understanding of the theoretical structure of some department of learning or science, and upon the abilities accompanying such understanding. This understanding and these abilities are applied to the vital practical affairs of man. The practices of the profession are modified by knowledge of a generalized nature and by the accumulated wisdom and experience of mankind, which serve to correct the errors of specialism.

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[1]Abraham Flexner, "Is Social Work A Profession?" in Proceedings of the National Conference of Charities and Correction (Chicago: Hildman Printing Co., 1915), pp. 576-590, cited by Howard S. Becker, "The Nature of A Profession," Education for the Professions, ed. Nelson B. Henry (Chicago: The University of Chicago Press, 1962), pp. 27-28.

> The profession, serving the vital needs of man, considers its first ethical imperative to be altruistic service to the client.[2]

Greenwood indicates that his review of the sociological literature on occupations revealed five distinguishing attributes of a profession upon which there seemed to be consensus among students of the subject. The five attributes are: (1) systematic theory, (2) authority, (3) community sanction, (4) ethical codes, and (5) a culture.[3]

It is clear that there is some overlap in these three definitions of a profession. More will be said about the attributes which help to define a profession in the review of the literature in Chapter II, but before leaving the topic the writer must present one caution that is repeated in much of the literature on professions. That is, there is no absolute difference between professional and other kinds of occupational behavior, but only relative differences with respect to certain attributes common to all occupational behavior.[4]

Public school teaching, nursing and social work have been classified as "semi-professions" by Amitai Etzioni.[5] It seems fair to say that, historically at least, public school teaching has not qualified as a full profession in terms of the criteria presented herein.

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[2]Morris L. Cogan, "Toward A Definition of Profession," Harvard Educational Review, Vol. 23 (Winter, 1953), pp. 48-49.

[3]Ernest Greenwood, "Attributes of A Profession," Social Work, Vol. 2, No. 3 (July, 1957), p. 45.

[4]Bernard Barber, "Some Problems in the Sociology of the Professions," The Professions in America, ed. Kenneth S. Lynn and the editors of Daedalus (Boston: Houghton Mifflin Co., 1965), p. 17.

[5]Amitai Etzioni, ed., The Semi-Professions and Their Organization (New York: The Free Press, 1969), p. v.

However, within the last ten years there has been mounting evidence that teachers are aspiring to professional status.[6] The question immediately arises as to how successful teachers have been in reaching their aspirations. This study may make some contribution toward the development of an answer to that question.

Statement of the Problem

The purpose of this study was to develop an instrument which would make it possible to approximate the position of individuals or groups of public school teachers on the professional continuum to the extent that such position is determined by attitudes which are thought to reflect a professional orientation toward one's work.

The development of such an instrument is based upon the assumption that there are degrees of professionalism rather than a simple dichotomy between professionalism and nonprofessionalism. Position on the professional continuum depends not only on the number of professional characteristics an occupation possesses, but also on the degree to which it has each characteristic. For example, the position of social work is moving closer to the professional end of the continuum. It is neither an established nor a new profession, because it lacks some professional characteristics and others, that it does possess, are not well developed.[7] Using appropriate criteria it may be possible to say that physicians display more professional attitudes than teachers, and that teachers display more professional attitudes than real estate

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[6]A. Ray Helsel and Stefan P. Krchniak, "Socialization in a Heteronomous Profession: Public School Teaching," The Journal of Educational Research, Vol. 66, No. 2 (October, 1972), pp. 89-93.

[7]George Ritzer, Man and His Work, Conflict and Change, (New York: Appleton-Century-Crofts, 1972), p. 49.

agents. Or, taking the process one step further, that teacher A displays a more professional orientation than teacher B. Where an individual or group is located on the professional continuum depends upon the extent to which they possess each of the professional characteristics.

The characteristics of a profession are of two basic types. First are those characteristics which are part of the structure of the occupation (generally determined by the professional group acting as a body), including such things as formal education and entrance requirements, the formation of a professional organization and the adopting of a functional code of ethics. The second aspect is attitudinal or, stated another way, this aspect is reflective of the orientation of the practitioners toward their work.[8]

A professional attribute that is both structural and attitudinal is professional autonomy. This attribute is structural to the extent that, having been granted the legal right to practice, the professional in determining how and when the needs of his client might best be served is expected to use his own judgment which may be questioned only by his professional colleagues. This attribute is attitudinal to the extent that the practitioner is committed to the belief that he is able to make his own decisions without external pressures from clients, those who are not members of his profession, or from his employing organization.

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[8]Richard H. Hall, "Professionalization and Bureaucratization," American Sociological Review, Vol. 33, No. 1 (February, 1968), pp. 92-104.

The attitudinal attributes of professionalism reflect the way in which the practitioners view their work. If the occupation has met the structural prerequisites of a profession, the approach taken in practice determines the level of professionalism reached.[9] For purposes of this study, the attitudinal attributes of a profession are defined as follows:

A. Belief in the use of professional colleagues as a major reference -- this includes membership in the professional association and a belief that the services provided by the association are important to the continued functioning of the profession. It includes both the formal and informal colleague groupings as a major source of ideas and judgments for the professional in his work.

B. Belief in service to the public and a sense of calling to the field -- this includes the idea of indispensability of the profession and the view that the work benefits both the public and the practitioner. The profession has a unique, definite, and essential social service to perform. It also reflects the dedication of the professional to his work and the feeling that he would probably want to do the work even if fewer extrinsic rewards were available.

C. Belief in the right to self-regulation - autonomy -- this involves the belief that the person best qualified to judge the work of a professional is a fellow professional. It is a belief in colleague control and acceptance

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[9]Ibid., p. 93.

of the code of ethics. It further involves the right of the practitioner to make his own decisions without external pressures from clients, those who are not members of his profession, or from his employing organization.

This study was designed to develop an instrument which would measure the extent to which teachers have developed these attitudinal characteristics of a profession. The writer assumed that it was relatively easy to determine whether or not an occupation had met the structural prerequisites of a profession and therefore confined himself to the more difficult question: To what degree do the practitioners possess professional attitudes about the work they are doing?

Definitions of Terms Used

The following terms, when used in this study, are defined as indicated:

Profession

An occupation possessing the following characteristics:

1. General, systematic knowledge
2. Authority over clients
3. Community rather than self-interest
4. Self-regulation through professional associations, only colleagues qualified to judge one's work
5. A sense of calling on the part of its practitioners

Professionalization

A dynamic process whereby an occupational group or an individual moves toward correspondence with the professional model in one or more of its attributes.

Professionalism

The main characteristics of professionalism include an area of exclusive technical competence, requiring long, specialized training, the development of a colleague consciousness, including an allegiance to a comprehensive self-governing organization, autonomy which includes professional control but excludes outside control, and the ideal of life-long service to the community rather than self-interest. This research is confined to the attitudinal as opposed to structural attributes of professionalism.

Public School Teachers

As used in this research, the term "public school teacher" will include all certificated employees of eight public school systems in Maryland. This includes primarily classroom teachers, but it may include others who are certified to teach, but currently hold non-teaching positions such as principal or instructional supervisor.

Research Questions

The writer proposed to develop responses to the following research question as a result of this study:

> Are there factors contributing to the professionalism of public school teachers which can be determined through the use of a self-report instrument? If so, what are these factors?

Methodology

The development of a Teacher Attitude Scale designed to measure the professional attitudes of the subjects involved several steps. From an initial pool of 104 items, two panels assisted the writer in selecting sixty items for inclusion on the Likert style instrument. The major phase of the study involved sending this sixty-item Teacher Attitude Scale to 500 randomly selected teachers in eight local school systems in Maryland. The analysis of the responses resulted in the selection of twenty-two items which were then subjected to a field test to determine reliability. These field tests resulted in the final nineteen item Teacher Attitude Scale (see Appendix F). For a complete explanation of the methodology, see Chapter III (page 30).

Significance of the Study

The instrument developed through this study is intended to deal with the attitudinal characteristics of professionalism. Thus, the score a subject obtains on the instrument should be considered an attitude score. In general, the interpretation of an attitude score on a summated-rating scale cannot be made independently of the distribution of scores of some defined group.[10] This should present no problem since the purpose of using the instrument is to determine the placement of each subject on the professional attitude continuum in relation to the placement of other subjects. Scores on summated-rating scales can be interpreted in this relative sense.

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[10]Allen L. Edwards, Techniques of Attitude Scale Construction, (Englewood Cliffs, N. J.: Prentice-Hall, Inc. 1957), p. 156.

In terms of subsequent research, the instrument may be used to compare the mean change in attitude scores of some group as a result of introducing an experimental variable. The fact that the summated-rating scale does not produce a zero point on the continuum of professionalism should not be any hindrance. The relative ordering of subjects can be obtained which should satisfy the research needs.

A number of implications for school administrators might emerge from the development of a reliable instrument for the measurement of professionalism.

1. Further study of the teachers exhibiting more professional behavior, according to the instrument, may reveal training and/or organizational differences which seem to be highly correlated with this professionalism. Administrators and teacher educators could then make use of these training techniques and organizational patterns in controlled ways to help determine whether or not they do indeed encourage a higher level of professionalism.
2. Administrators may need to learn new techniques for evaluating the instructional process when working with more professional teachers. Provision may need to be made to make use of the opportunities for colleague control rather than hierarchial control.
3. Administrators may need to be prepared to release greater decision-making authority to teachers who demonstrate high levels of professionalism.

4. Administrators may need to develop a new set of relationships with teachers who do exhibit a greater degree of professionalism.

Limitations of the Study

The population for this study was limited to the certificated instructional personnel in eight Maryland counties. As a result of the recent passage of the Federal "Privacy Act", it is almost impossible to obtain lists of teachers from anyone for the purpose of making a random selection of subjects for a study such as this. In fact, the researcher was unable to obtain such lists and consequently had to depend on a staff person in each participating school system to make the random selection of subjects and to forward both the initial survey instrument and the follow-up letter, where this was needed, to the subjects. Originally there were to have been nine systems involved, but when the staff of the ninth system fully understood the requirements of random selection and distribution placed upon them, it withdrew from the study.

Assessment of the teachers' attitudes was restricted to the responses of the subjects to the items on the Teacher Attitude Scale. Subjects had no opportunity to display their attitudes beyond choosing one of the five Likert type responses for each item in the scale.

Since eighty-one persons failed to return the instrument, it could be argued that the results are biased on this basis of an incomplete return. The researcher recognizes this possibility, but an eighty-two percent return should be high enough to make the results meaningful. All survey studies must recognize some limitation due to the failure of all selected subjects to participate.

A final limitation of the study is based upon the ability of the subjects to understand the intended meaning of items on the scale. Six persons helped the researcher to minimize the effect of this limitation by suggesting changes in the wording which helped to clarify certain items and by suggesting the elimination of items which could not be adequately clarified.

Organization of the Study

Chapter I sets forth the major purpose of the study. The difficulties encountered in defining the term "profession" are highlighted. Several of the attributes which characterize a profession are listed and defined for purposes of the study. Other terms are defined and the significance, limitations and organization of the study are presented.

Chapter II consists of a review of the literature with particular emphasis on attempts to define the term "profession". The definitions include both structural and attitudinal attributes of the professional model. A brief review of related research is included. The remaining portion of this chapter deals with the process of professionalization and indicates that while public school teaching is engaged in this process, it has not reached full correspondence with the professional model, at least in the eyes of several writers.

Chapter III describes the procedures undertaken in this study. It deals with item development and the concern for content validity of the selected items. The definition of the sample, the statistical procedures used to analyze the data and to determine reliability are presented.

Chapter IV presents the results of the procedures used to develop the Teacher Attitude Scale. Demographic data describe the participants in the study. Analysis of the data with particular attention to validity of the selected items and reliability of the scales is covered in this chapter.

Chapter V contains the summary, conclusions and recommendations of the study.

CHAPTER II

RELATED LITERATURE

In the first section of this chapter, the writer reviews various efforts of others to define the term "profession". These definitions include both structural and attitudinal attributes of the professional model. The writer then deals with the process of professionalization and indicates that while public school teaching may well have met some of the structural prerequisites of the professional model and may well be in the process of professionalization, this process is by no means complete. The writer concludes this chapter with a brief review of related research and a summary.

Toward A Definition of Profession

> The earliest recorded use of profession to mean a learned vocation was in 1541, and as early as 1576 its meaning had already been generalized to indicate "any calling or occupation by which a person habitually earns his living".[1]

This very early definition of "profession" does include what is often given today as the first structural characteristic of a profession, namely that it is a full-time occupation. Although this characteristic will not distinguish profession from other full-time occupations, it does help separate the professional from the amateur.

Cogan points out the difficulty of defining "profession", when he states in the opening portion of his paper that "some observers of profession, having made a demonstrably adequate search of the relevant

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[1]Morris L. Cogan, "Toward a Definition of Profession," Harvard Educational Review, Vol. 23 (Winter, 1953), pp. 33-50.

literature, flatly deny the possibility of formulating a satisfactory definition of profession".[2] Profession is, without doubt, a difficult concept to define. It is composed of many parts or characteristics or attributes. In the case of those who consider definition impossible, the impracticability of defining seems to derive from an inability to measure the degree to which traits must be present for profession to exist rather than from the impossibility of identifying those traits.[3]

As Barber states, "there is no absolute difference between professional and other kinds of occupational behavior but only relative differences with respect to certain attributes common to all occupational behavior".[4] Barber goes on to indicate that "professionalism is a matter of degree". He concludes that "professional behavior", as contrasted with just any occupational behavior, may be defined in terms of four essential attributes, namely:

> A high degree of generalized and systematic knowledge; primary orientation to the community interest rather than to individual self-interest; a high degree of self-control of behavior through codes of ethics internalized in the process of work socialization and through voluntary associations organized and operated by the work specialists themselves; and a system of rewards that is primarily a set of symbols of work achievement and thus ends in themselves, not means to some end of individual self-interest.[5]

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[2]Ibid., p. 34.

[3]Ibid., p. 47.

[4]Bernard Barber, "Some Problems in the Sociology of the Professions," The Professions in America, ed. Kenneth S. Lynn and the editors of Daedalus (Boston: Houghton Mifflin Co., 1965), p. 17.

[5]Ibid., p. 18.

By specifying four distinguishing attributes of a profession, Barber's definition is about average with respect to the number of attributes which should be considered or measured in determining the extent to which an occupation qualifies as a profession. Some writers rely on fewer attributes to distinguish a profession while some require the consideration of more attributes.

Goode's list of the "traits" of a profession includes ten distinguishing characteristics including high income, prestige, and influence; high educational requirements; professional autonomy; licensure; commitment of members to the profession; desire of members to remain in the profession; code of ethics; cohesion of the professional community; monopoly over a task; and intensive adult socialization experience for recruits.[6] Goode believes that all of these rest upon two central or core traits which are "(1) a basic body of abstract knowledge, and (2) the ideal of service".[7] Each of these core traits contain many sub-dimensions, but they help one focus on the key elements of "profession".

Hughes states that "profession" has come to mean:

> The occupation which one professes to be skilled in and to follow...A vocation in which professed knowledge of some branch of learning is used in its application to the affairs of others, or in the practice of an art based upon it.[8]

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[6]William J. Goode, "The Theoretical Limits of Professionalization," The Semi-Professions and Their Organization, ed. Amitai Etzioni (New York: The Free Press, 1969), p. 276.

[7]Ibid., p. 277.

[8]Everett C. Hughes, "Professions," The Professions in America, ed. Kenneth S. Lynn and the editors of Daedalus (Boston: Houghton Mifflin Co., 1965), p. 2.

Having accepted this brief definition of profession, Hughes goes on to enumerate many of the sub-dimensions.

Myron Lieberman indicates that a profession is an occupation which possesses the following eight characteristics:

1. A unique, definite, and essential social service. A profession must have a unique social service to perform.

2. An emphasis upon intellectual techniques in performing its services. A profession depends to a very high degree upon intellectual rather than physical techniques in carrying on its work. Professional work emphasizes such intellectual techniques as defining problems, searching for relevant data, and formulating possible solutions. Proficiency in physical techniques may or may not be required.

3. A long period of specialized training. This professional training is primarily intellectual in character.

4. A broad range of autonomy for both the individual practitioners and for the occupational group as a whole. Individuals and groups have autonomy to the extent that they are free to exercise their own best judgment.

5. An acceptance by the practitioners of broad personal responsibility for judgments made and acts performed within the scope of professional autonomy. A large measure of autonomy implies a correspondingly large measure of responsibility.

6. An emphasis upon the service rendered, rather than the economic gain to the practitioners, as the basis for the organization and performance of the social service delegated by the society to the occupational group.

7. A comprehensive self-governing organization of practitioners. Groups as large as professions must have some kind of orderly procedure to set the standards for entry into and exclusion from the profession, to promote high standards of practice, and to raise the social and economic status of the group.

8. A code of ethics which has been clarified and interpreted in ambiguous and doubtful points by concrete cases. One of the reasons for the formation of professional organizations is that some definite machinery is needed to enforce high standards of professional conduct.[9]

Instead of these eight characteristics suggested by Lieberman, Ritzer presents the following six:

1. General systematic knowledge. Intellectually, the professions are differentiated from other occupations by general, systematic knowledge which is acquired through a long period of training in a professional school and informally in relationships with established professionals. Professionals have knowledge about their speciality which no one outside the occupation could acquire.

2. Authority over clients. This characteristic actually has two aspects: existence of a clearly defined client and authority over him. The more professional the occupation, the greater the authority, but his authority is rarely absolute.

3. Community rather than self-interest. Professionals ideally emphasize helping others. Professionals are more altruistic.

4. Self-control rather than outside control. Only one professional can train or judge another.

5. Recognition by the community and law that the occupation is a profession. In the main, the powers and privileges a profession seeks are the right to self-control, authority over clients, and the security of income which allows it to be interested in the good of the community. It is the goal of formal and informal community recognition which is the primary concern of occupations nearing professional standing. Once they have achieved this recognition, monopoly within their area of expertise is secure.

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[9]Myron Lieberman, Education As A Profession, (Englewood Cliffs, N. J.: Prentice-Hall, Inc., 1956), pp. 1-6.

> 6. A distinctive culture. A profession which has the preceding characteristics will inevitably develop a distinctive occupational culture. The culture which develops is composed of a number of distinctive values, norms, and symbols. Training in a profession is concerned with transmitting this culture to the neophyte through formal training schools or informal devices such as sponsorship.[10]

Wilensky suggests that any occupation wishing to exercise professional authority must find a technical basis for it, assert an exclusive jurisdiction, link both skill and jurisdiction to standards of training, and convince the public that its services are uniquely trustworthy.[11] According to Wilensky, the two criteria which set professions apart from other occupations are: (1) The job of the professional is technical - based on systematic knowledge or doctrine acquired only through long prescribed training, and (2) the professional man adheres to a set of professional norms.[12]

Greenwood determined that there were five common attributes professional occupations possess which distinguish them from the non-professional ones. He found that all professions seem to possess: (1) systematic theory, (2) authority, (3) community sanction, (4) ethical codes, and (5) a culture.[13]

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[10]George Ritzer, Man and and His Work, Conflict and Change, (New York: Appleton-Century-Crofts, 1972), p. 49.

[11]Harold L. Wilensky, "The Professionalization of Everyone?" The American Journal of Sociology, Vol. 70, No. 2 (September, 1964), pp. 137-158.

[12]Ibid, p. 139.

[13]Ernest Greenwood, "Attributes of A Profession," Social Work, Vol. 2, No. 3 (July, 1957), pp. 45-55.

In summary, the attributes of a profession seem to be of two basic types. The first type includes those characteristics which are part of the structure of the occupation while the second type includes those which deal with the way in which the practitioners view their work, that is, their attitudes about their work.

Wilensky includes the following attributes in the structural side of the professional model:

1. Creation of a full-time occupation.

2. The establishment of a training school. Affiliation of the school(s) with established universities is considered essential to the full-fledged profession.

3. Formation of professional associations. Local associations unite into national associations and carry on political action to secure licensing laws and protection from competing occupations.

4. Formation of a code of ethics. These codes are concerned with both colleague and client relations. They are designed to be enforced by the associations and ideally are given legal support.[14]

The attitudinal attributes of the professional model, upon which this study is based, are as follows:

1. The use of the professional organization as a major reference -- this includes membership in the professional association and a belief that the services provided by the association are important to the continued functioning of the profession.

2. Involvement in the professional culture -- this includes both the formal and informal colleague groupings (other than the professional association) as a major source of ideas and judgments for the professional in his work.

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[14]Wilensky, op. cit., pp. 142-146.

3. A belief in service to the public -- this includes the idea of indispensability of the profession and the view that the work benefits both the public and the practitioner. The profession has a unique definite, and essential social service to perform.

4. A belief in the right to self-regulation -- this involves the belief that the person best qualified to judge the work of a professional is a fellow professional. It is a belief in colleague control and acceptance of the code of ethics.

5. A sense of calling to the field -- this reflects the dedication of the professional to his work and the feeling that he would probably want to do the work even if fewer extrinsic rewards were available.

6. Autonomy -- this involves the right of the practitioner to make his own decisions without external pressures from clients, those who are not members of his profession, or from his employing organization.[15]

The Process of Professionalization

> To have one's occupational status accepted as professional or to have one's occupational conduct judged as professional is highly regarded in all post-industrial societies and in at least the modernizing sectors of others.[16]

Professionalization may be considered as a drive for status. Wilensky points out that occupations pass through a rather consistent sequence of stages on their way to becoming professions. As indicated earlier, Wilensky has restricted his work to an examination of the structural attributes of the professional model. His research, based

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[15]Richard H. Hall, "Professionalization and Bureaucratization," American Sociological Review, Vol. 33, No. 1 (February, 1968), pp. 92-104.

[16]Wilbert E. Moore, The Professions: Roles and Rules, (New York: Russell Sage Foundation, 1970), p. 3.

on the history of eighteen occupations, documents the sequential steps in the development of the "established professions" in the United States. Although the sequence is not totally without variation, only 32 of the 126 crucial events were out of the typical sequence for the entire 18 occupations. The seven events in the professionalization of an occupation's structure, from this historical perspective, in their anticipated order, are: (1) became a full-time occupation, (2) established first training school, (3) first university school, (4) first local professional association formed, (5) first national professional association, (6) first state license law and (7) formal code of ethics adopted. Wilensky includes school teaching among those occupations which are in the process of professionalizing and his documentation gives the year in which school teaching met each of his prescribed sequential steps.[17]

While Anderson states that, "teaching has long been numbered among the professional occupations", he is quick to add that "teaching has developed the characteristic features of a profession very slowly and is still in the process of achieving equal status with other professions".[18]

As this writer suggested in Chapter I, professionalization is a dynamic process whereby an occupational group or individual moves toward correspondence with the professional model in one or more of its

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[17]Wilensky, op. cit., pp. 141-146.

[18]Archibald W. Anderson, "The Teaching Profession: An Example of Diversity in Training and Function," Education for the Professions, ed. Nelson B. Henry (Chicago: The National Society for the Study of Education, 1962), p. 140.

attributes. Anderson clearly indicates then, that while teaching is in the process of professionalizing, it has not reached full correspondence with the professional model.

Goode indicates that many aspiring semi-professions, school teaching included, will never reach the levels of knowledge and dedication to service the society considers necessary for a profession.[19] With respect to the knowledge base upon which a profession must rest, Goode feels that the content of pedagogic knowledge is relatively small in amount, shallow intellectually and not likely to grow much over the next generation.[20]

Corwin indicates that professionalization is a militant process. He believes that to monopolize a type of work, a vocation in the process of professionalization will seek to wrest power from those groups which traditionally have controlled the vocation.[21] Lortie indicates that he does not believe teachers are even making a concerted effort to move in the direction of professionalism with respect to autonomy let alone doing so in a militant manner. He states that:

> The current situation reflects the centuries during which teachers were defined solely as employees. It is interesting that teachers have not challenged their formal subordination, unlike most who claim professional status, teachers have not contested the right of persons outside the occupation to govern their

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[19]Goode, op. cit., p. 267.

[20]Ibid., p. 286.

[21]Ronald G. Corwin, "Militant Professionalism, Initiative and Compliance in Public Education," Sociology of Education, Vol. 38, No. 4 (Summer, 1965), pp. 310-331.

> technical affairs....Whatever the ideology of professionalism among teachers may be, it does not currently constitute a direct challenge to public, lay control over school affairs.[22]

Both of these gentlemen are pointing out the need for further professionalization of the teaching "profession".

Lieberman says much the same thing when he states that there must be changes in the hierarchial administrative structure of the public schools if teachers are to achieve professional status.[23]

Wittlin supports Lieberman's conclusion that the professional status of the school teacher is questioned on the grounds of limited autonomy, of restrictions in decision-making concerning the what and how of teaching, and the teacher's position as a supervised employee.[24]

Research Related to Professionalism

Research dealing with professionalism seems to be rather limited and that which has been done tends, more often than not, to deal with professional attitudes. An exception to this is Wilensky's historically based research which concerns the structural attributes of the professional model.[25]

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[22]Dan C. Lortie, "The Balance of Control and Autonomy in Elementary School Teaching," The Semi-Professions and Their Organization, ed. Amitai Etzioni (New York: The Free Press, 1969), p. 19.

[23]Lieberman, op. cit., p. 487.

[24]Alma S. Wittlin, "The Teacher," The Professions in America, ed. Kenneth S. Lynn and the editors of Daedalus (Boston: Houghton-Mifflin Co., 1965), p. 93.

[25]Wilensky, op. cit., pp. 141-146.

Hall's research considered both the structural and attitudinal attributes of eleven occupations in order to test the assumption that these two kinds of attributes are linked positively so that they vary together. The eleven occupations were each classified into one of Wilensky's three categories as either "established", or in the "process" of professionalizing, or in the "doubtful" group. Scales developed by Hall to assess the attitudinal attributes of a profession were administered to groups of physicians, nurses, accountants, teachers, lawyers, social workers, stockbrokers, librarians, engineers, personnel managers, and advertising executives. The results of the study suggest that the assumption that the structural and attitudinal components of professionalization are linked in such a way that they will always vary together is incorrect. With respect to the use of the professional group as a major reference, the assumption seems to be correct. That is, the occupations in the "established" group have the highest professional attitudes, the occupations in the "process" group have next highest attitude scores and those occupations in the "doubtful" group have the lowest professional attitude scores. This anticipated pattern is not demonstrated with respect to the other four attitudinal attributes tested.[26]

William Snizek did a follow-up study on the attitude scales developed by Hall for the above study, by subjecting Hall's original attitude data, as well as additional data compiled by Snizek, to a factor analysis. Hall's data were based on 328 subjects and Snizek's data were based on responses from 566 nautical, nuclear and chemical

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[26]Richard H. Hall, Occupations and the Social Structure, (Englewood Cliffs, N. J.: Prentice-Hall, Inc., 1969), pp. 81-90.

engineers, physicists, and chemists. His study suggested that approximately half the items formulated by Hall had less than an acceptable factor loading on the attitudinal dimension which they were designed to assess. Snizek's analysis further indicated that total reliability dropped by only two points when the best five items from each ten item scale were used (a drop from .86 to .84 using Hall's data or from .80 to .78 using Snizek's). Snizek summarized his study by stating his belief that Hall's scale would benefit from extensive item modifications.[27]

In a study involving the administration of a ten item attitude inventory and a seventy item value scale to 442 education students at Paterson State College, Weil and Weil found that 18.3 percent of the students fell into a low professionalism classification, 62.7 percent into the medium and 19.0 percent into the high. Weil and Weil based their professionalism inventory on eleven characteristics of a profession. In addition to the distribution of students, the results of the study indicated that women students who have a limited commitment to their careers because of home-making possibilities will have a lower degree of professional orientation than those with a permanent commitment. The degree of professionalism exhibited by subjects in their study was independent of the sex of the individuals (360 females and 82 males were involved). The data indicated that those who made the decision to become a teacher during the period of seventh through tenth grade tended to exhibit a higher degree of professionalism.

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[27]William E. Snizek, "Hall's Professionalism Scale: An Empirical Reassessment," American Sociological Review, Vol. 37 (February, 1972), pp. 109-114.

Practically the entire sample recognized the necessity for belonging to a teachers' organization. Weil and Weil concluded that although students may have different attitudes from those of persons already teaching, some of the students will certainly hold on to their professional orientation. While the researchers admit that the study, in part, supports the idea that contingent career commitments of some women may tend to impede the professionalization of teaching, the large majority of women in the sample were classified as having a professional orientation. They suggest that there is a need to reduce the conflict between occupational and family responsibilities.[28]

In a study which could be considered complementary to that of Weil and Weil, Helsel and Krchniak found that there were no significant differences between experienced teachers and education students in professional orientation. This finding remains constant regardless of teaching level or sex. Two Likert-type scales developed by Corwin were employed to measure professional and bureaucratic role orientations of the subjects. The professional orientation scale contained sixteen items while the bureaucratic scale contained twenty items. The analysis is based on the responses of 133 education students and eighty-eight experienced teachers. The results of the study do not support the hypothesis of some that male teachers are more professionally oriented than female teachers.[29]

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[28]Phillip E. and Mildred Weil, "Professionalism: A Study of Attitudes and Values," The Journal of Teacher Education, Vol. 22, No. 3 (Fall, 1971), pp. 314-318.

[29]A. Ray Helsel and Stefan P. Krchniak, "Socialization in a Heteronomous Profession: Public School Teaching," The Journal of Educational Research, Vol. 66, No. 2 (October, 1972), pp. 89-93.

During the spring of 1963, Corwin used the scales mentioned above with a sample of teachers from seven high schools in Ohio and Michigan. Two-thirds of the faculties returned questionnaires of which 257 were usable. In addition, 146 teachers were interviewed. The data suggest that a more professional orientation contributes to militancy primarily when it is accompanied by a less bureaucratic orientation. Corwin concludes that professional employees differ from other militant employees in that the cause they champion concerns more than self-interest; their cause is the defense of the role of experts within the complex organization. In organizations with a substantial segment of professionally oriented employees, conflict is produced by the organization itself as professional principles oppose bureaucratic principles of organization.[30]

John Colombotos constructed an index of professionalism based on answers to four items. Two of these items relate to technical competence, one to autonomy and one to the service ideal. These four items are part of a very long questionnaire, the directions of which indicate that it would take one hour to complete. His sample consisted of 545 secondary school teachers. The data show that women teachers are more professionally oriented than men, which is in contrast to his initial hypotheses. He concludes that where men need participation in

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[30]Ronald G. Corwin, "Militant Professionalism, Initiative and Compliance in Public Education," Sociology of Education, Vol. 38, No. 4 (Summer, 1965), pp. 310-331.

professional activities, social contact with colleagues, and academic subject matter to support a high level of professionalism, women do not.[31]

The research done in this field has generally relied on a Likert-type instrument to examine professional attitudes. In some cases the use of a professionalism scale is combined with some other type of scale for purposes of comparison or contrast such as that between professional attitudes and values or that between professional and bureaucratic orientation.

Summary

There seems to be general acceptance of the structural attributes of a profession as outlined by Wilensky, namely:

1. creation of a full-time occupation;
2. the establishment of a training school and its affiliation with an established university. This implies a long period of training covering an extensive body of abstract knowledge;
3. formation of professional associations. These carry on political action to secure licensing laws and protection from competing occupations. A monopoly over the service provided;
4. formation of a code of ethics. These codes govern both colleague and client relations. They are designed to be enforced by the associations and ideally are given legal support.

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[31]John L. Colombotos, "Sources of Professionalism: A Study of High School Teachers" (unpublished Doctor's Dissertation, University of Michigan, 1961), pp. 137-145.

The remaining attributes of a profession are generally agreed to be attitudinal in nature. These include:

1. belief in the use of the professional colleagues as a major reference;
2. belief in service to the public;
3. belief in self-regulation based upon the fact that only members of the profession have the knowledge needed to judge the actions of others in the group;
4. a sense of life-long commitment to the profession;
5. a belief in autonomy, the right of the professional to make decisions based upon his knowledge and not based upon bureaucratic rules and regulations.

Most of the research done on professionalism as it relates to teachers deals with attitudes of the teachers. Generally, Likert-type instruments have been employed in this research. A notable failing in most of the research has been the absence of documentation which would establish the validity of the scales used.

CHAPTER III

METHODOLOGY

The procedures undertaken in this study are described in Chapter III. The basis for item development is presented in section one. The use of a panel to assure content validity of the items is covered in section two. The problems of obtaining a sample of subjects are discussed in section three. In section four, the writer points out why the ninety-four item instrument had to be further reduced to sixty items prior to sending it out to 500 teachers in the major phase of the study. The statistical procedures used to analyze the data obtained in the major phase of the study are presented in section five. The use of a follow-up field test to compile reliability data is covered in the last section of the chapter.

Item Development Procedures

As stated in Chapter I, the purpose of this study was to develop an instrument which would make it possible to approximate the position of individuals or groups of public school teachers on the professional continuum, to the extent that such position is determined by attitudes which are thought to reflect a professional orientation toward one's work. After a review of the literature, as related in Chapter II, it was concluded that there were six attributes or dimensions of a profession which seemed to be attitudinal in nature and which would therefore lend themselves to measurement through use of an

attitude measuring technique. Stated in abbreviated form (see Chapter II, page 19, for complete definitions), these six attitudinal attributes of a profession were determined to be as follows:

A. The use of the professional organization as a major reference.

B. Involvement in the professional culture.

C. Belief in service to the public.

D. Belief in the right to self-regulation.

E. A sense of calling to the field.

F. Belief in autonomy.

Having determined the attributes to be measured, a decision was made to use the Likert method of scale construction generally known as the method of summated ratings.[1] A five alternative response scale ranging from "strong agreement" to "strong disagreement" was chosen. The Likert format was chosen for its simplicity and because it will, for all practical purposes, produce essentially the same ordering of subjects as the more difficult to develop and use equal-appearing interval scale.[2]

The researcher then proceeded to collect an initial pool of items relating to the six attributes outlined above. The earlier work by Hall was particularly helpful in providing a nucleus of items around

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[1]Allen L. Edwards, Techniques of Attitude Scale Construction (Englewood Cliffs, N. J.: Prentice-Hall, Inc., 1957), p. 152.

[2]Ibid., p. 168.

which to build the initial item pool.[3] The goal was to have an item pool sufficiently large so that after elimination of the less desirable items, there would remain approximately ten items per attribute for a total of sixty items to be used in the major phase of the study. It was anticipated that the procedures to be followed in the major phase would further reduce the number of items so that there would be a final instrument of about thirty items or five per attribute. The initial item pool contained one-hundred four items.[4] A conscious effort was made to include negative as well as positive statements so as to minimize possible response sets on the part of the subjects using the instrument.

Item Selection Using A Panel of Judges

In selecting items for the Teacher Attitude Scale, it was considered essential that those items initially selected demonstrate content validity. Content validity is the representativeness or sampling adequacy of the content of a measuring instrument. Content validation is guided by the question: Is the content of this measure representative of the universe of content of the property being measured? Thus, content validation is basically judgmental. Each item must be judged for its relevance to the property being measured. Those judging the

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[3]Permission to utilize some of Hall's items, in whole or in modified form, was granted to the writer. A listing of items in Hall's Professionalism Scale can be found in William E. Snizek's "Hall's Professionalism Scale: An Empirical Reassessment," American Sociological Review, Vol. 37 (February, 1972), pp. 109-114.

[4]See Appendix B for the one-hundred four items.

items must be furnished with specific directions for making judgments and with the specification of the universe with respect to which they are to make judgments.[5]

Following the general practice of calling upon other competent judges to assist in judging the content of the items, the researcher solicited the help of an instructional supervisor, an English teacher, and a reading resource teacher. These three persons are henceforth referred to as "Panel Members A, B and C" by the writer. These panel members were supplied with a set of criteria for editing attitude scale statements (see Appendix B, page 107), a set of instructions, the one-hundred four items from the initial item pool (each one typed on a separate slip of paper) and six envelopes, on the face of which the definitions of the six attitudinal attributes of a profession had been taped (one definition to each envelope). The panel members were asked to study the six definitions carefully, then to read each of the proposed items, determine the attribute measured by the item, and place the item in the envelope labeled with that attribute.

In addition to this major task each panel member was asked to apply the editing criteria to each item and to suggest changes in the wording if appropriate. Each panel member was also asked to apply a rating to each item of one (poor) to five (good) in terms of the clarity of the item and its potential contribution to the measurement of the attribute which the item was intended to assess.[6]

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[5]Fred N. Kerlinger, Foundations of Behavioral Research (New York: Holt, Rinehart and Winston, Inc., 1973), pp. 458-459.

[6]See Appendix B for the complete "Instructions to Panel Members A, B and C" and the "Criteria for Editing Attitude Scale Statements."

The panel members each worked independently and submitted the sorted items to the researcher. Analysis of their work resulted in the designation of ninety-four items which were initially to be used in the major phase of the study. Items eliminated were those which failed to have at least two of the three judges agree with the researcher as to the attribute being measured by the item or where one or more of the judges indicated that the item really didn't seem to measure any of the attributes and he/she had therefore simply assigned it on an arbitrary basis. In either case, it was felt that the item lacked sufficient clarity and was thus eliminated.

Not only did the work of this panel result in the elimination of ten items, but it had a significant impact on the way in which the researcher defined the attitudinal attributes of a profession and consequently the way in which the researcher organized the items for the major phase of the study. The results of the panel's work (see Appendix B, page 108) and comments which they made to the researcher indicated that they had considerable difficulty making a clear distinction between Attribute A - The use of the professional organization as a major reference and Attribute B - Involvement in the professional culture. The panel indicated that a similar problem existed with respect to Attribute C - Belief in service to the public and Attribute E - A sense of calling to the field. Likewise, a problem existed in making a clear distinction between Attribute D - Belief in the right to self-regulation and Attribute F - Belief in autonomy. On the basis of this information a decision was made to combine those attributes which could not be readily distinguished from one another. Thus the original six attitudinal attributes were redefined into the following three:

A. Belief in the use of professional colleagues as a major reference. This includes membership in the professional association and a belief that the services provided by the association are important to the continued functioning of the profession. It includes both the formal and informal colleague groupings as a major source of ideas and judgments for the professional in his work.

B. Belief in service to the public and a sense of calling to the field. This includes the idea of the indispensability of the profession and the view that the work benefits both the public and the practitioner. The profession has a unique, definite, and essential social service to perform. It also reflects the dedication of the professional to his work and the feeling that he would probably want to do the work even if fewer extrinsic rewards were available.

C. Belief in the right to self-regulation - autonomy. This involves the belief that the person best qualified to judge the work of a professional is a fellow professional. It is a belief in colleague control and acceptance of the code of ethics. It further involves the right of the practitioner to make his own decisions without external pressures from clients, those who are not members of his profession, or from his employing organization.

In line with this redefinition of the attributes, the items were arranged on the instrument used in the major phase of the study so that three scale scores, one for each of the three attributes, could

be obtained as well as a total score. In subsequent data analysis, "Score 1" or "Scale 1" will reflect the redefined Attribute A above while "Score 2" or "Scale 2" will reflect Attribute B and "Score 3" or "Scale 3" will reflect Attribute C.

Selection of Subjects

The population for this study was to consist of 500 certificated personnel (teachers, supervisors, principals and others) randomly selected from throughout the State of Maryland. Thus, the researcher first attempted to work through a statewide organization to obtain this broad based sample population. A representative of the Maryland State Teachers' Association informed the researcher that their organization simply would not cooperate in this kind of research. They have many reasons for taking this position, but the primary reason seems to be that they believe the organization would be overwhelmed by requests if they were to cooperate with anyone in providing access to their membership. The researcher recognizes the possible bias in a sample drawn from MSTA membership based upon the fact that the membership is not the total universe of public school teachers in Maryland, but the MSTA did represent a potential statewide source from which to select a sample.

Knowing that the names of all the certificated teachers in the state are on file with the Maryland State Department of Education, the researcher approached the Department with a request for help in selecting a sample population. The reply was simply that the files of the Department had not been developed for that purpose and therefore, under the restrictions of the recently passed Federal "Privacy Act", the Department could not provide any access to these files, no matter how noble the cause. The spokesman for the Maryland State Department of

Education indicated that local systems were under similar restrictions and, therefore, even if the cooperation of the local school systems could be obtained, someone within those systems would have to actually make the random selections and handle the forwarding of the instrument and the follow-up to those selected.

With statewide access to teachers cut off, the researcher wrote to twelve local superintendents requesting their cooperation in the research.[7] Favorable replies were initially received from eight of these local systems. The staff of a ninth system, upon which the researcher was counting to supply thirty-two percent of the subjects, indicated that they would not send out the instrument in its ninety-four item format. This latter system indicated that they would participate if the researcher would shorten the instrument. Since participation of this system was considered crucial to the provision of an adequate population, further work on the instrument prior to using it in the major phase of the study was required.

One of the eight systems which had initially given a favorable response withdrew approval when the researcher insisted that the participants must be selected randomly. While the staff person in that system recognized the value of random selection to the researcher, he felt that this required too much time and effort on the part of his staff and furthermore he felt that the researcher was likely to obtain a higher percentage of return if the instruments were given only to volunteers.

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[7]See Appendix A for samples of all correspondence.

In the end, eight local school systems in Maryland did cooperate with the researcher to distribute 500 instruments to randomly selected teachers within those eight systems. The researcher applied a table of random numbers to faculty lists to select subjects in his home system and asked those cooperating in other systems to use a similar process. In addition to the cover letter and the instrument itself, each participant was provided with a pre-addressed, stamped envelope for use in mailing the instrument back to the researcher. These materials were all supplied to each cooperating superintendent or his designee in individual, unsealed envelopes so that the local superintendent, or his designee, could add his own cover letter indicating the voluntary nature of the project. Such letters were added in two cases. Of the eight systems cooperating in the distribution of the instruments, all but one also distributed a follow-up letter to those who had not responded after a period of ten days. The follow-up was made possible by coding the instruments and having the local superintendent keep a record of who received each instrument. The initial distribution and follow-up took place during the late spring of 1978.

Table 1 summarizes the number of instruments distributed in each county and the number and percent of usable instruments returned in each case. It will be noted that the response rates range from a low of 50.0 percent in Somerset County to a high of 89.4 percent in Cecil County. Factors influencing these response rates may include the fact that in Somerset County the instruments were not distributed to the teachers until May 26 while in most other counties they were distributed by May 11 or 12. By May 26 there was very little time left for follow-up on the non-respondents and teachers were beginning to be

preoccupied with the closing of school activities and the instruments perhaps became lost in the year end confusion. Cecil County, with its 89.4 percent return is the home county of the researcher. Although this may have had some influence on the rate of return, it is interesting to note that only in this county did the researcher have a subject who refused to complete the instrument. Of the 500 instruments sent out, 419 were in fact returned, but ten of these were declared non-usable by the researcher because the subject had, in each case, failed to complete the second page of the instrument which had been printed on the back of page one. With a full page of items simply ignored by the subject, the instrument could not be considered valid in each of these ten cases.

Table 1

NUMBER OF RESPONDENTS BY COUNTY

County	Number of Instruments		Percent of Usable Returns
	Number Sent Out	Number Returned Usable	
Kent	35	31	88.6
Garrett	40	34	85.0
Somerset	40	20	50.0
Queen Anne's	40	24	60.0
Wicomico	50	41	82.0
Baltimore County	160	140	87.5
Cecil	85	76	89.4
Harford	50	43	86.0
TOTALS	500	409	81.8

The Need for Further Instrument Refinement

As noted above, the researcher, with the help of panel members A, B and C had selected ninety-four items for the tentative instrument. However, when this was sent to each local superintendent along with the letter soliciting his cooperation, the research staff of one of the larger local systems rejected the instrument as being too long and containing too many redundant items. The researcher considered participation by this local system crucial to the maintenance of a population that would be adequately representative of all of Maryland's teachers. Therefore, the shortcomings noted in the tentative instrument had to be overcome if the research was to move forward on a sound basis.

A key objection seemed to be the inclusion of many items which were slight variations on other items and were included as an "honesty check". It was pointed out that these could be spotted easily and would tend to "turn off" the respondent and result in discard of the instrument. It was suggested that in this type of research, it was probably better to simply assume that the subjects would respond honestly to a less redundant instrument which was consequently shorter and would take less time to complete.

To help assess the strength of these points, the researcher asked a local teacher volunteer to assume he had been randomly selected as a participant and to complete the instrument following the directions as printed, but with the additional request that he keep track of how long it took him to complete the task and to make any comments he chose about the instrument. His report indicated that it took him twenty minutes to complete the instrument and that the "validity checks were

easy to spot". Obviously the "honesty" checks bothered him and twenty minutes was indeed too long to expect a reasonable response rate from busy teachers.

At this point, the researcher enlisted the aide of a second group of competent judges known as panel members D, E and F. These persons were respectively, a classroom teacher, and two instructional supervisors. These judges were asked to go over the ninety-four item instrument and to indicate which items they felt were unnecessarily repetitious and which items, if any, in their opinions lacked clarity.[8] The judges worked independently of each other and submitted their findings and comments to the researcher. These findings along with further study and cuts made by the researcher produced a sixty-item instrument, including twenty items intended to measure each of the three redefined attitudinal attributes of a profession (See Appendix D, page 119).

The shortened instrument was sent to the objecting research staff and, upon their reexamination, was found to be acceptable for distribution to a random sample of teachers in their system. This cleared the way for the major phase of the study involving duplication of the instrument and distribution in all eight systems.

Although the initial objections caused the researcher great consternation and delayed progress somewhat, there is little doubt that an improved instrument did result from these valid objections.

Data Analyses

In addition to responding to the sixty items designed to measure attitudes, each participant in the major phase of the study was

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[8]See Appendix C for complete instructions to panel members D, E and F and for the results of their work.

asked to supply certain demographic data. This demographic data included sex, age, current position, years in current position, areas of certification held in addition to that required for the current position, the highest degree earned and an indication of membership in various professional organizations. All demographic data were summarized using the SPSS Frequencies Program.[9]

A scoring program was developed which would produce a scale score for each of the three attributes and a total score for each of the 409 subjects. For items that were considered to reflect a professional attitude, the "Strongly Agree" response was given a weight of five points while the "Strongly Disagree" response was given a weight of one point. For negative items, the weighting was just the reverse of this. Thus, the highest score possible for each scale was 100 while the maximum total score was 300.[10] It may be noted in subsequent statistical displays that reference is made to an N of 408. The reason for this is that the scoring program called for the computer to drop out of consideration the total responses for any subject who had skipped more than five items on any given scale. Among the 409, there was apparently one such case, thus the statistical procedures beyond this point include only 408 cases. If a subject skipped five or fewer items, the program used the subject's average response from that scale

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[9]SPSS "Subprogram Frequencies" is part of the Statistical Package for the Social Studies which is available on the Univac 1140 Computer at the University of Maryland Computer Science Center. This computer program and the computer time was provided by the University of Maryland Computer Science Center.

[10]The researcher is indebted to Dr. Clayton L. Stunkard of the University of Maryland who developed this computer scoring program.

for the skipped item(s). The three scale scores and the total scores were then summarized using the SPSS Frequencies Program.

The researcher then used a computer program developed to calculate a discrimination index for each item on the instrument.[11] This discrimination index is based upon a comparison of the responses of the subjects having the highest scores on a given scale with the responses of the subjects having the lowest scores on the same scale. High and low groups were determined for each of the three scales independently.

The high group on each scale is made up of those individuals whose total scores on the given scale fall within approximately the highest twenty-seven percent of scores obtained on that scale. Similarly, the low group is composed of those individuals whose total score on the given scale fall within approximately the lowest twenty-seven percent of all scores on that scale. The discrimination index for a given item is computed by subtracting the grand total score obtained on that item by all persons in the low group from the grand total score obtained on that item by all persons in the high group and dividing this difference by the difference between the highest total the high group could have attained and the lowest total the low group could have attained.

In addition to a discrimination index, the mean and standard deviation was computed for each item on the instrument. Criterion means were calculated for the group of persons giving each possible

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[11]This discrimination index computer program was also developed by Dr. Clayton L. Stunkard of the University of Maryland and the researcher is indebted to Dr. Stunkard for his help in its development and use.

response to each item so that it could be determined whether or not these criterion means displayed a positive increase (monotonic increase) from the response weighted one to the response weighted five.[12]

The items on each scale were subjected to factor analysis and the Pearson Correlation between each item's score and its respective total scale score was calculated.[13] The results of each of these statistical treatments are included in Chapter IV.

Six criteria which could be used to guide the selection of valid items for a "final" Teacher Attitude Scale were developed based upon the above statistical treatments. The six criteria established were:

1. The item response mean had to be equal to or greater than 2.25, but less than 3.75.
2. The standard deviation of the item responses had to be greater than .80.
3. The discrimination index as computed for the item with respect to its own scale score had to be equal to or greater than .25.
4. The correlation coefficient of the item response with the scale score to which it contributed had to be equal to or greater than .387.

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[12]The item mean, standard deviation and the criterion means were all obtained with the computer program developed by Dr. Stunkard to calculate the discrimination index.

[13]The factor analysis and Pearson Correlation programs are each part of the Statistical Package for the Social Studies available on the Univac 1140 Computer at the University of Maryland Computer Science Center.

5. There had to be a monotonic increase in the scale mean for each group of individuals giving each possible response from the response weighted one to the response weighted five.
6. The principal factor loading of the item had to be equal to or greater than .40 with no other loading greater than .40.

An item had to meet five of these six criteria in order to be selected for inclusion on the "final" Teacher Attitude Scale.

The minimum and maximum item mean limits were established on the basis that it is desirable to have a mean near 3.0. Provided there is variability, a mean near 3.0 most likely indicates that there exists a distribution of the subjects' responses throughout the range of response choices. Such a distribution helps to provide the maximum discrimination among the subjects.

The minimum standard deviation was set at .80 on a similar basis. That is, the larger the standard deviation the more disbursed the responses of the subjects tend to be. The more disbursed these responses, the more able an item is to discriminate among the subjects.

The discrimination index is clearly a measure of how well an item differentiates between the responses given by the "high" group and the "low" group on each item. Despite the simplicity of the discrimination index, it has been shown to agree quite closely with other, more elaborate measures of item validity.[14] For purposes of this research,

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[14]Anne Anastasi, Psychological Testing Third Edition (New York: Macmillan Publishing Co., Inc., 1968), p. 172.

it was felt that if the discrimination index fell below .25 the item in question could not adequately contribute to the differentiation of subjects along a continuum. However, if an item failed to meet the discrimination index criterion, but did have a Pearson Correlation with its scale score of .387 or higher, it was considered acceptable because an item is valid to the extent that it measures the same thing as the total score measures.[15]

A monotonic increase in the scale mean for each step embodies a concept which is somewhat more difficult to explain. However, this basically means that the group of subjects who chose the lowest weighted response to a given item should also have the lowest mean scale score among the groups of individuals choosing each possible response. Likewise, the group of subjects choosing the highest weighted response to a given item should have the highest mean scale score among the groups of individuals giving each possible response. If the mean scale score fails to increase from a low obtained by the individuals choosing the response with a weight of one to a high for the individuals choosing the response with a weight of five, then the item would not discriminate accurately among the subjects. Figure 1 illustrates an acceptable monotonic increase pattern for a given item. Figure 2 illustrates a pattern which would result in elimination of the item.

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[15]Kerlinger, op. cit., p. 468.

FIGURE 1

SAMPLE ITEM DISPLAYING ACCEPTABLE RESPONSE PATTERN

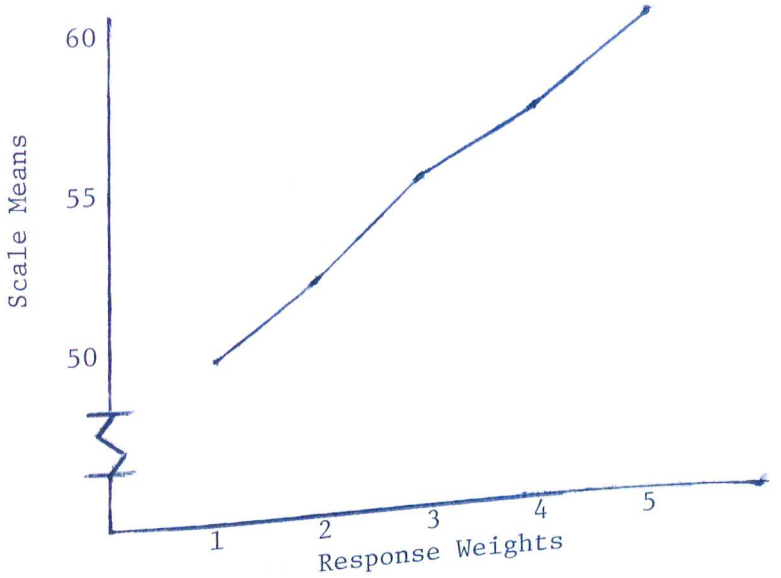
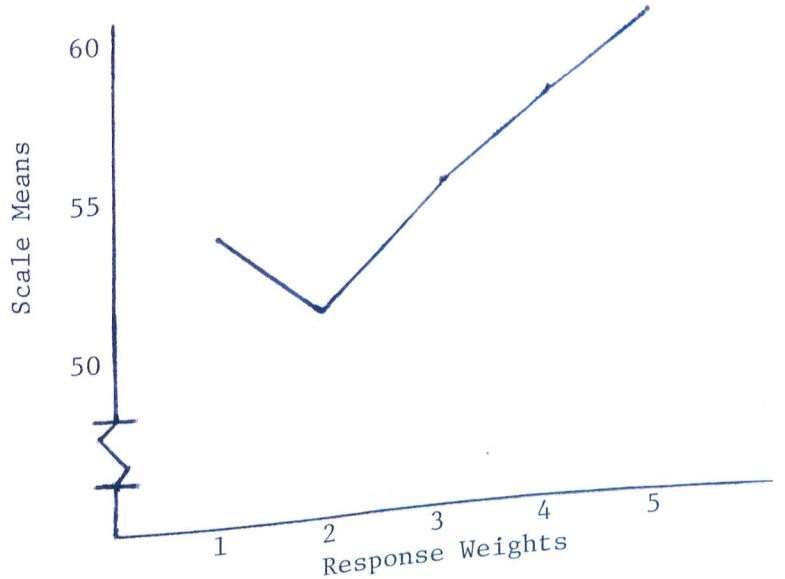


FIGURE 2

SAMPLE ITEM DISPLAYING UNACCEPTABLE RESPONSE PATTERN



The principal factor loading of the item was chosen as a selection criterion because factor analysis is perhaps the most powerful method of construct validation.[16] Factor analysis tells us what tests or measures belong together, which ones virtually measure the same thing and how much they do so. It helps the researcher to identify fundamental properties underlying tests and measures. A factor is a construct, a hypothetical entity that is assumed to underlie tests, scales, items and measures of almost any kind. Factor analysis has been demonstrated to be effective in isolating and identifying attitude factors as well as factors dealing with intelligence, aptitude and personality.[17]

If a test measures only one factor, it is said to be factorially "pure". To the extent that a test measures a factor, it is said to be loaded on the factor, or saturated with the factor. If a test contains more than one factor, it is said to be factorially "complex". In using the method of principal factoring with iteration, the items considered acceptable were those with a loading of .40 or higher on the first factor extracted provided they had no loading higher than that on any other factor.

Field Test of Selected Items

Application of the statistical procedures and criteria outlined above resulted in the selection of twenty-two items for use on an instrument (See Appendix E, page 129) which would be subjected to field testing to determine reliability. To obtain measures of reliability,

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[16]Ibid., p. 468.

[17]Ibid., p. 659.

two copies of this instrument were given to each of fifty randomly selected teachers in Cecil County, Maryland, who had had no previous contact with the research. These fifty subjects were asked to respond to one copy of the instrument following the directions on the instrument. They were asked to give the second copy to a colleague with whom they had taught for at least one year and to ask the colleague to respond to the items in the manner that he/she believed the subject had responded. These instruments were coded in such a way that the researcher was able to match the subject's instrument with the one completed by his colleague. This permitted correlation of the responses of subjects and colleagues and provided two sets of data on which scale and total score reliabilities could be computed.

This field test activity was carried out in September of 1978. All fifty subjects and their colleagues responded to the instrument. The results of this field test are reported in Chapter IV.

Summary

There were several distinct steps to this study involved in the development of a Teacher Attitude Scale designed to measure professional attitudes. An initial item pool of 104 items was compiled and submitted to a panel of judges who were asked to sort them into six predefined groups. The ninety-four items which survived this process were arranged in an instrument which was mailed to twelve local superintendents in Maryland along with a request for their help in getting the instrument to a sample of teachers in their respective systems. Earlier efforts to obtain a sample on a statewide basis had been unsuccessful.

One local system, whose participation was considered crucial to the study, objected to the length of the sample instrument as well as to the repetitiveness of several of its items. With the help of a second panel, the instrument was reduced to sixty items by eliminating those considered to be unclear and/or repetitious. This revised instrument was found to be acceptable and the study could proceed. The major phase of the study involved sending the revised sixty-item Teacher Attitude Scale to 500 teachers in eight local school systems in Maryland. The analysis of the returned instruments resulted in the selection of twenty-two items which were then subjected to a field test to determine reliability. These field tests resulted in the final nineteen item Teacher Attitude Scale (see Appendix F, page 134).

The work of the initial panel not only eliminated ten unacceptable items, but caused the researcher to redefine and combine attitudinal attributes so that the research moved forward based on three scales rather than the six initially anticipated. The final instrument includes only the first two of these three scales. The reasons the third scale dropped out will become evident as the results of the study are examined in Chapter IV.

CHAPTER IV

RESULTS

In Chapter IV, the results of the procedures used to develop the Teacher Attitude Scale are presented. In the first section, the results of the work of two panels in selecting items for the major phase of the study are presented. This is followed by a presentation of the demographic data describing those who participated in the major phase of the study. In section three, the writer presents the data which led to the selection of twenty-two items from the sixty item Teacher Attitude Scale for use on a field test instrument. In section four, the writer presents some very brief demographic data on the field test population so that comparisons can be made with demographic data for the group who participated in the major phase of the study. Reliability data obtained from the field test is also presented in the last section of the chapter.

The Teacher Attitude Scale: Items Selected for the Major Phase of the Study

The purpose of this study was to develop an instrument which would make it possible to approximate the position of individuals or groups of public school teachers on the professional continuum to the extent that such position is determined by attitudes which are thought to reflect a professional orientation toward one's work. In developing such an instrument, the following research question was posed:

Are there factors contributing to the professionalism of public school teachers which can be determined through the use of a self-report instrument?

If so, what are these factors?

A review of the literature seemed to indicate that there were six attitudinal attributes of professionalism which might be measured through the use of a self-report instrument. However, preliminary work with these six attributes on the part of a panel of judges revealed that these six should be combined into three. The three attributes, and the twenty statements (listed with the item numbers used in the major phase of the study) selected as scale items for the measurement of each attribute, are presented below.[1]

Scale 1 - Belief in the use of professional colleagues as a major reference

1. My profession offers exceptional opportunities for making friends.
4. I systematically read the professional journals.
7. I regularly attend the local meetings of my professional association.
10. I regularly attend professional association meetings at the state level.
13. The future of this profession depends upon the guidance provided by our professional association.
16. I enjoy opportunities to talk with my colleagues because of the ideas that are exchanged.

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[1]These items appear on the Teacher Attitude Scale in Appendix D in their proper order along with the five response options of strongly agree to strongly disagree.

19. I spend most of my free time with fellow professionals.

22. I believe that the professional organization(s) should be supported with my time and dues.

25. Most of my personal friends are also members of my professional group.

28. Some of the most stimulating times are those spent with my colleagues.

31. I prefer to be with fellow professionals rather than with those who are not members of the profession.

34. The professional organization doesn't really do too much for the average member.

37. It is difficult to develop friendships outside my fellow professional group.

40. The professional organization provides the real leadership in this profession.

43. The professional organization is really effective in raising the standards of this profession.

46. The professional organization does nothing but collect dues to pay its bureaucrats.

49. I depend upon my colleagues to supply ideas to help solve problems.

52. I consider it a privilege and a responsibility to hold an office in my professional organization when called upon to do so.

55. The material reported in the professional journals is really helpful in carrying out my work.

58. I find it difficult to socialize with persons who are not members of my profession.

Scale 2 - Belief in service to the public and a sense of calling to the field

2. There is no higher calling than that of my profession.

5. Mine is one of the most necessary of professions.

8. A person enters this profession because he likes the work.

11. I believe that mine is the most interesting of the professions.

14. My professional work is inspirational to me.

17. Too many of my colleagues show no real interest in their work.

20. My professional work is just a means of existing.

23. My profession provides one of the best means of serving humanity.

26. Not enough people recognize how important this profession is for the good of society.

29. My profession has more influence on our nation than any other.

32. Although many people talk about their high ideals, very few are really motivated by them.

35. I derive much self-satisfaction from my professional work.

38. Weakening of the profession would be harmful for society.

41. I believe there is very little future in my profession.

44. It is hard to get people to be enthusiastic about their work in this field.

47. Most people would stay in this profession even if their incomes were reduced.

50. If I had the opportunity to do so, I would change to a different profession.

53. My fellow professionals generally place the welfare of the community above that of themselves.

56. Most of the real rewards of my work can't be seen by an outsider.

59. The welfare of my students is more important to me than monetary rewards.

Scale 3 - Belief in the right to self-regulation, autonomy

3. A person who violates professional standards should be judged by his professional peers.

6. I make my own decisions in regard to what is to be done in my work.

9. If the quality of my work must be judged, my colleagues are the people best qualified to judge it.

12. My fellow professionals have a pretty good idea about each other's competence.

15. It is easier when someone else takes responsibility for decision making.

18. My profession's code of ethics helps me to make many decisions.

21. I don't have much opportunity to exercise my own judgment.

24. Professional training itself helps assure that people maintain their high ideals.

27. Members of my profession certainly are in a better position than our students to know what is best for students.

30. A basic problem for our profession is the intrusion of standards other than those which are truly professional.

33. My superiors have very little authority over what I do in my work.

36. The fact that someone checks your decisions makes this work less demanding.

39. Violators of professional standards face fairly severe penalties.

42. If a conflict exists between the needs of my students and the expectations of my employer, my students' needs come first.

45. When problems arise at work, there is little opportunity to use your own creative talents.

48. The real test of how good a person is in his field is the layman's opinion of him.

51. The code of ethics protects our students from incompetent performance by my fellow professionals.

54. My extensive formal training gives me the right to determine what is best for my students without interference from those without this training.

57. My own decisions are subject to review.

60. I don't think my professional organization has enough control over entrance into the profession.

The responses of 408 subjects to these sixty items provided the basis for developing a tentative response to the research question. Scoring of the responses produced a score for each of the three scales and a total scale score. Analysis of the item responses and their relationship to the appropriate scale score resulted in the selection of twenty-two of the sixty items for use on a further field test instrument.

Characteristics of the Subjects: Major Phase of the Study

In addition to responding to the sixty items, each subject was asked to give certain demographic data about himself. It should be noted that the number of cases reported in the demographic data is 409 while the item analysis is based on 408 cases. This was explained in Chapter III, but to reiterate, the scoring program by design dropped one case in which the subject had skipped numerous items.

The first demographic variable reported was the sex of the subjects (Table 2). A total of 409 certificated personnel completed and returned the Teacher Attitude Scale. The females who responded numbered 266 (65 percent) while the males numbered 143 (35 percent).

TABLE 2

SEX OF THE PARTICIPANTS

	Male		Female		Total
	Number	Percent	Number	Percent	
Participants	143	35.0	266	65.0	409

The median age of the respondents (Table 3) fell within the thirty-one to thirty-five year age bracket. The modal age bracket was twenty-six to thirty with 120 participants reporting their age in this bracket.

Ninety percent of the respondents were under the age of fifty, while only two percent were over the age of sixty.

TABLE 3

AGE OF PARTICIPANTS

Age Bracket	Number	Percent	Cumulative Percent
20 to 25	60	14.7	14.7
26 to 30	120	29.3	44.0
31 to 35	82	20.0	64.1
36 to 40	50	12.2	76.3
41 to 45	28	6.8	83.1
46 to 50	27	6.6	89.7
51 to 55	17	4.2	93.9
56 to 60	17	4.2	98.0
over 60	8	2.0	100.0
TOTALS	409	100.0	

The third type of demographic information requested was the identification of the current position held (Table 4). Of the 409 participants, 195 (48 percent) were elementary school classroom teachers. One-hundred fifty-seven (38 percent) were secondary school classroom teachers. Twelve participants (less than 3 percent) were principals, assistant principals or supervisors. Six counselors and four librarians returned completed instruments. Thirty-five participants listed their positions as "other" and specified such things as "special education teacher", "resource room teacher", and "reading teacher".

TABLE 4

CURRENT POSITION OF PARTICIPANTS

Position	Number	Percent
Elementary teacher	195	47.7
Secondary teacher	157	38.4
Counselor	6	1.5
Librarian	4	1.0
Principal	10	2.4
Assistant principal	1	.2
Supervisor	1	.2
Other	35	8.6
TOTALS	409	100.0

The participants were next asked to indicate the number of years they had served in their current positions (Table 5). One-hundred fifty-three (37 percent) of the participants had held their current positions for five years or less. An additional 134 participants (33 percent) had held their current positions for six to ten years. These two groups combined account for over seventy percent of the sample.

TABLE 5

YEARS IN CURRENT POSITION

Years in Position	Number of Participants	Percent of Participants	Cumulative Percent
0 to 5	153	37.4	37.4
6 to 10	134	32.8	70.2
11 to 15	52	12.7	82.9
16 to 20	37	9.0	91.9
21 to 25	19	4.6	96.6
26 to 30	9	2.2	98.8
over 30	5	1.2	100.0
TOTALS	409	100.0	

Since teachers in Maryland may retire on full pension after thirty years of service, it is not surprising to find just one percent of the sample in this "over 30" category. The fact that over seventy percent of the participants have held their current positions for ten years or less is not surprising either in light of the rapid expansion of the teaching corps and the ease of movement which prevailed up until just a few years ago when student enrollments began to shrink.

The participants were next asked to indicate the positions for which they were certified in addition to their current positions (Table 6). The numbers certified for other positions seem to be small and may be underestimates because it is quite possible that a teacher is certified for another position without being aware of this fact. Unless a teacher submits all appropriate course work records to the Maryland State Department of Education and asks that these be evaluated

and that the additional endorsements (areas of certification) be added to his/her teaching certificate, he/she may not be aware of all of the possible endorsements.

Thirty participants indicated that they were certified for the principalship. Thirty also indicated they were certified to be a supervisor. Many of these were the same persons since certification for these two positions is very similar. Just eight participants indicated they were certified to be a counselor and only two held certification as a librarian in addition to their current position certification. Sixty-five checked the "other" category and specified other areas of certification, generally these were for specific subject areas other than the one in which the teacher was currently working.

TABLE 6

OTHER AREAS FOR WHICH PARTICIPANTS WERE CERTIFIED

Other Position for Which Certified	Number of Participants	Percent of Total
Principal	30	7.3
Supervisor	30	7.3
Counselor	8	2.0
Librarian	2	.5
Other	65	15.9

The participants were asked to indicate the highest degree they had earned (Table 7). It was found that nearly fifty percent hold master's degrees and that fifty percent hold bachelor's degrees. One

participant had earned the doctorate and one held an associate of arts degree. (Two failed to respond to the item.)

TABLE 7

HIGHEST DEGREE EARNED BY PARTICIPANTS

Highest Degree Earned	Number	Percent	Cumulative Percent
No response	2	.5	.5
Associate of Arts	1	.2	.7
Bachelor's Degree	205	50.1	50.9
Master's Degree	200	48.9	99.8
Earned Doctorate	1	.2	100.0
TOTALS	409	100.0	

The last item of demographic information requested dealt with membership in various professional organizations (Table 8). The organization claiming the largest share of the participants is the National Education Association (NEA). Of the 409 participants, 331 indicated they were members of the NEA. Only thirteen indicated membership in the American Federation of Teachers (AFT). Only two participants indicated membership in the National Association of Secondary School Principals (NASSP), six in the National Association of Elementary School Principals (NAESP), and three in the American Personnel and Guidance Association (APGA). Two-hundred twenty-three indicated membership in "other" associations, usually specifying the local affiliate of the NEA. On this basis, the researcher questions the accuracy of the count for "other", because the membership in the local affiliates

should equal the NEA membership based upon the "unified membership" concept in effect for the NEA, the MSTA and its local affiliates.

TABLE 8

PROFESSIONAL ORGANIZATION MEMBERSHIP
OF THE PARTICIPANTS

Organization	Number	Percent of Total
NEA	331	80.9
AFT	13	3.2
NASSP	2	.5
NAESP	6	1.5
APGA	3	.7
Other	223	54.5

Analysis of the Data from the Major Phase of the Study

The six criteria which were used to guide the selection of valid items for a "final" Teacher Attitude Scale were presented along with the rationale for each in Chapter III. To review, the six criteria were:

1. The item response mean had to be equal to or greater than 2.25 and less than 3.75.
2. The standard deviation of the item responses had to be greater than .80.
3. The discrimination index as computed for the item with respect to its own scale score had to be equal to or greater than .25.

4. The correlation coefficient of the item response with the scale score to which it contributed had to be equal to or greater than .387.
5. There had to be a monotonic increase in the scale mean for each group of individuals giving each possible response from the response weighted one to the response weighted five.
6. The principal factor loading of the item had to be equal to or greater than .40 with no other loading greater than .40.

Application of these six selection criteria to the items designed to measure Scale 1 - Belief in Use of Professional Colleagues as a Major Reference resulted in the elimination of ten of the twenty items (Table 9). Five items (numbers 1, 10, 16, 37 and 58) failed to meet the response mean criterion and were therefore eliminated from further consideration. Application of the discrimination index criterion and its co-criterion, correlation of the item score with its scale score, eliminated one more item (number 49). Although one item (number 31) failed to meet the discrimination index criterion, it was not eliminated on this basis because an item had to fail to meet both of these criteria before it would be eliminated. However, item number 31 was eliminated by the application of the monotonic increase criterion. The application of the factor analysis criterion eliminated three additional items (numbers 19, 25 and 28). Two of these (numbers 19 and 25) were eliminated because their principal factor loading scores were less than the .40 minimum. One of the items (number 28) was eliminated because it loaded at a higher level on a second factor than it did on the principal factor.

In summarizing the effects of the application of the six selection criteria to the twenty items on Scale 1, it should be noted that ten items (numbers 4, 7, 13, 22, 34, 40, 43, 46, 52 and 55) met all six criteria and were therefore retained in the instrument. There were four cases in which a single criterion eliminated one or more items. A low response mean eliminated one item (number 10) while failure to meet the factor loading criterion eliminated three items (numbers 19, 25 and 28). All other items which were eliminated failed to meet two or more of the criteria. All of the selection criteria were effective as demonstrated by the fact that at least three items failed to meet each of the established criteria.

TABLE 9

SELECTION CRITERIA DATA FOR SCALE 1 - BELIEF IN USE OF PROFESSIONAL COLLEAGUES AS A MAJOR REFERENCE

Item Number	Response Mean	Standard Deviation	Discrimination Index	Correlation to Scale Score	Monotonic Increase	Factor Loading
1	3.85[a]	.95	.20[a]	.329[a]	-[a]	.24[a]
4	3.23	1.08	.31	.444	+	.42
7	2.73	1.17	.37	.492	+	.49
10	2.16[a]	1.03	.33	.487	+	.46
13	3.09	1.10	.34	.516	+	.47
16	4.29[a]	.76[a]	.18[b]	.390	+	.33[a]
19	2.45	1.03	.26	.431	+	.30[a]
22	3.65	.85	.30	.605	+	.62
25	3.00	1.12	.32	.462	+	.35[a]
28	3.26	.98	.29	.517	+	.43[c]
31	2.40	.88	.23[b]	.441	-[a]	.35[a]
34	3.25	1.01	.33	.523	+	.56
37	1.76[a]	.80[a]	.12[a]	.196[a]	-[a]	.10[a]
40	2.68	.97	.33	.564	+	.55
43	3.01	.95	.36	.587	+	.62
46	3.68	.93	.29	.553	+	.61
49	2.98	1.06	.14[a]	.220[a]	-[a]	.10[a]
52	2.94	.97	.35	.597	+	.61
55	3.31	.89	.27	.510	+	.52
58	1.53[a]	.65[a]	.11[a]	.247[a]	-[a]	.17[a]

[a]Item failed to meet this selection criterion and was therefore dropped.

[b]Item failed to meet this criterion, but did meet the co-criterion of correlation to scale score.

[c]Item met principal factor criterion, but loaded higher on a second factor and was therefore dropped.

Use of the six selection criteria with the items designed to measure Scale 2 - Belief in Service to the Public and a Sense of Calling to the Field resulted in the elimination of eleven of the twenty items (Table 10). Ten items failed to meet the response mean criterion. However, four of these items (numbers 14, 20, 35 and 41) met all other criteria and on this basis a decision was made to retain them. A high mean alone was considered insufficient reason to drop an otherwise acceptable item. Six items (numbers 5, 8, 23, 26, 38 and 56) failed to meet the response mean and at least one other criterion and were therefore dropped. Application of the discrimination index and its co-criterion, correlation of the item score with its scale score, eliminated an additional four of the Scale 2 items (numbers 17, 29, 32 and 53). One item (number 47) failed to meet the correlation criterion, but it did meet the discrimination index minimum. Application of the factor loading criteria to the Scale 2 items eliminated only one additional item (number 47).

Nine items (numbers 2, 11, 14, 20, 35, 41, 44, 50 and 59) were retained from Scale 2 after applying the selection criteria as modified with respect to the response mean. Five of these had met all of the selection criteria as originally established and four met all except the response mean criterion. Only one item (number 47) was eliminated based on its failure to meet just one criterion, that of principal factor loading. All other items eliminated from Scale 2 failed to meet two or more of the criteria. All selection criteria were effective with this scale as demonstrated by the fact that at least three items failed to meet each of the criteria.

TABLE 10

SELECTION CRITERIA DATA FOR SCALE 2 - BELIEF IN SERVICE TO THE PUBLIC AND A SENSE OF CALLING TO THE FIELD

Item Number	Response Mean	Standard Deviation	Discrimination Index	Correlation to Scale Score	Monotonic Increase	Factor Loading
2	3.03	1.18	.47	.589	+	.56
5	4.54[a]	.67[a]	.18[a]	.347[a]	+	.36[a]
8	3.94[a]	.94	.24[a]	.386[a]	+	.32[a]
11	3.48	1.12	.45	.634	+	.64
14	3.81[c]	.99	.40	.658	+	.69
17	3.25	1.13	.24[a]	.308[a]	+	.14[a]
20	4.29[c]	.85	.31	.623	+	.66
23	4.14[a]	.74[a]	.26	.532	+	.57
26	1.95[a]	1.05	.05[a]	.106[a]	-[a]	.02[a]
29	3.09	1.12	.22[a]	.312[a]	+	.24[a]
32	2.91	.95	.22[a]	.343[a]	+	.28[a]
35	4.24[c]	.82	.29	.600	+	.67
38	4.12[a]	.72[a]	.15[a]	.311[a]	-[a]	.29[a]
41	3.80[c]	1.05	.37	.581	+	.57
44	3.40	1.04	.34	.547	+	.45
47	2.63	1.09	.26	.367[b]	+	.24[a]
50	3.48	1.20	.52	.716	+	.74
53	2.72	.92	.21[a]	.335[a]	-[a]	.21[a]
56	3.85[a]	1.00	.07[a]	.071[a]	-[a]	-.03[a]
59	3.51	1.04	.38	.578	+	.55

[a]Item failed to meet this selection criterion and was therefore dropped.

[b]Item failed to meet this criterion, but did meet the co-criterion of discrimination index.

[c]Item exceeded the maximum response mean criterion, but met all other criteria and was therefore retained.

The application of the selection criteria to the items designed to measure Scale 3 - Belief in the Right to Self-Regulation, Autonomy resulted in the elimination of seventeen of the twenty items (Table 11). Eleven items failed to meet the response mean criterion, but two of these items (numbers 3 and 9) met all other criteria and were therefore retained. As indicated earlier, a high mean alone was considered insufficient reason to drop an otherwise acceptable item. Nine items (numbers 12, 15, 21, 27, 33, 36, 42, 45 and 48) failed to meet the response mean and at least one other criterion and were therefore dropped.

The application of the co-criteria of discrimination index and correlation of the item score with its scale score eliminated five additional items (numbers 30, 39, 51, 57 and 60). Four additional items failed to meet the correlation criterion, but they did meet the discrimination index minimum. The factor loading criterion, when applied to Scale 3, accounted for the elimination of three additional items (numbers 18, 24, and 54).

Only three items (numbers 3, 6 and 9) remained in Scale 3 after the selection criteria had been applied to the data available from the major phase of the study. Just one of these had met all of the selection criteria as originally established while the retention of two depended upon an exception to the high mean criterion. Just three items were eliminated based on their failure to meet just one criterion, principal factor loading. The other fourteen items eliminated from Scale 3 failed to meet two or more of the criteria. All of the selection criteria had some effect on Scale 3 in that, at least two items failed to meet each of the criteria.

TABLE 11

SELECTION CRITERIA DATA FOR SCALE 3 - BELIEF IN THE RIGHT TO SELF-REGULATION, AUTONOMY

Item Number	Response Mean	Standard Deviation	Discrimination Index	Correlation to Scale Score	Monotonic Increase	Factor Loading
3	3.93[c]	.94	.28	.409	+	.51
6	3.53	1.08	.32	.430	+	.40
9	3.76[c]	1.13	.34	.417	+	.56
12	3.90[a]	.88	.22[a]	.274[a]	+	.34[a]
15	3.75[a]	1.00	.22[a]	.246[a]	-[a]	.09[a]
18	3.43	1.00	.26	.359[b]	+	.36[a]
21	3.91[a]	.86	.22[a]	.350[a]	-[a]	.21[a]
24	3.23	1.12	.30	.335[b]	+	.18[a]
27	3.96[a]	.94	.18[a]	.227[a]	+	.22[a]
30	2.44	.87	.07[a]	.048[a]	-[a]	-.23[a]
33	2.10[a]	.75[a]	.10[a]	.177[a]	+	.05[a]
36	3.88[a]	.77[a]	.15[a]	.207[a]	+	.09[a]
39	2.72	.99	.19[a]	.244[a]	+	.05[a]
42	3.77[a]	.99	.28	.383[b]	+	.37[a]
45	3.84[a]	.89	.27	.451	+	.38[a]
48	3.77[a]	.99	.19[a]	.185[a]	-[a]	.02[a]
51	2.44	.91	.21[a]	.278[a]	+	.13[a]
54	3.33	1.15	.30	.364[b]	+	.28[a]
57	2.29	.80	.14[a]	.210[a]	-[a]	.02[a]
60	2.79	.96	.08[a]	.056[a]	-[a]	-.23[a]

[a]Item failed to meet this selection criterion and was therefore dropped.

[b]Item failed to meet this criterion, but did meet the co-criterion of discrimination index.

[c]Item exceeded the maximum response mean criterion, but met all other criteria and was therefore retained.

A total of twenty-two items had survived the application of the six selection criteria to the sixty items which had constituted the three scales on the instrument. Scale 1 had ten items remaining, Scale 2 had nine and Scale 3 had three items remaining for use on the field test instrument. The three scales with their remaining statements (now listed with their field test instrument numbers) are presented below.[6]

Scale 1 - Belief in the use of professional colleagues as a major reference

1. I systematically read the professional journals.

3. I regularly attend the local meetings of my professional association.

6. The future of this profession depends upon the guidance provided by our professional association.

8. I believe that the professional organization(s) should be supported with my time and dues.

11. The professional organization doesn't really do too much for the average member.

13. The professional organization provides the real leadership in this profession.

16. The professional organization is really effective in raising the standards of this profession.

18. The professional organization does nothing but collect dues to pay its bureaucrats.

20. I consider it a privilege and a responsibility to hold an office in my professional organization when called upon to do so.

22. The material reported in the professional journals is really helpful in carrying out my work.

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[6]See Appendix E for the twenty-two item Teacher Attitude Scale in the form actually used in the field test.

Scale 2 - Belief in service to the public and a sense of calling to the field

2. There is no higher calling than that of my profession.

4. I believe that mine is the most interesting of the professions.

7. My professional work is inspirational to me.

9. My professional work is just a means of existing.

12. I derive much self-satisfaction from my professional work.

14. I believe there is very little future in my profession.

17. It is hard to get people to be enthusiastic about their work in this field.

19. If I had the opportunity to do so, I would change to a different profession.

21. The welfare of my students is more important to me than monetary rewards.

Scale 3 - Belief in the right to self-regulation, autonomy

5. A person who violates professional standards should be judged by his professional peers.

10. I make my own decisions in regard to what is to be done in my work.

15. If the quality of my work must be judged, my colleagues are the people best qualified to judge it.

Field Test of the Twenty-Two Selected Items

The Teacher Attitude Scale, now composed of twenty-two items selected on the basis of item analysis of the results from the major phase of the study, was field tested to determine its reliability. The field test involved a sample of 100 teachers divided into two equal groups referred to as the "respondent" group and the "colleague" group.

For purposes of comparison with the subjects in the major phase of the study, the researcher here includes a minimal amount of demographic data for the respondent group of subjects in the field test. Females made up fifty-eight percent of the group and males forty-two percent. Sixty-eight percent of the group was under age thirty-five compared to sixty-four percent for the major phase subject group. Thirty-eight percent of the group were elementary teachers, fifty-two percent were secondary teachers and ten percent held other certificated positions. Sixty-six percent of the field test group had held their current position for ten years or less compared to seventy percent for the major phase group. Eight percent of the group could certify as principals and ten percent could do so as supervisors. Two percent could certify for counselor and two percent for librarian while ten percent could certify in other areas. Fifty-six percent of the field test group held the bachelor's degree and forty-four percent the master's degree.

Membership in the NEA was slightly less for the field test group than for the major phase group, seventy percent compared to eighty-one percent. The field test group contained no AFT members, NAESP members, or APGA members. Membership in the local NEA affiliate was fifty-six percent for the field test group and fifty-five percent for the major phase group. All in all, the field test population was very similar to the major phase population.

Following the procedures outlined in Chapter III, reliability coefficients were developed for each scale based upon the data from the respondent group. A second set of reliability coefficients was developed for each scale based upon data from the colleague group.

In addition to a reliability coefficient for each scale, a total score weighted and unweighted reliability coefficient was developed. These coefficients along with the mean and standard deviation for each scale and each total for the respondent group are given in Table 12. Similar data for the colleague group is given in Table 13.

For the respondent group, the reliability for Scale 1 is .78, for Scale 2 it is .72 and for Scale 3 it drops to .55. The unweighted total reliability for this group is .79 while the reliability based upon the weighted total is .76 (Table 12).

For the colleague group, the reliability for Scale 1 is .89, for Scale 2 it is .78 and for Scale 3 it again drops to .53. The unweighted total reliability for the colleague group is .88 while the reliability based upon the weighted total is .82 (Table 13).

TABLE 12

RELIABILITY OF FIELD TEST INSTRUMENT BASED UPON THE RESPONDENT GROUP (N=50)

Scale	Mean	Standard Deviation	Reliability
1	30.90	6.03	.78
2	33.64	4.67	.72
3	11.54	2.26	.55
Unweighted Total	76.08	9.40	.79
Weighted Total	17.44	2.17	.76

TABLE 13

RELIABILITY OF FIELD TEST INSTRUMENT BASED UPON THE COLLEAGUE GROUP (N=50)

Scale	Mean	Standard Deviation	Reliability
1	29.74	8.16	.89
2	32.92	5.11	.78
3	10.94	2.72	.53
Unweighted Total	73.60	12.90	.88
Weighted Total	14.11	2.29	.82

Since the reliability coefficient for Scale 3 was quite low for both groups, the three items composing this scale were dropped from further consideration and the reliability coefficients were recalculated (Tables 14 and 15). Dropping Scale 3 had no effect on the reliability coefficients for Scale 1 and Scale 2. However, for the respondent group, the unweighted reliability became a .76 and the weighted reliability became .75 (Table 14). For the colleague group, the unweighted reliability became .89 and the weighted reliability .88 (Table 15).[7]

[7]See Appendix F for final instrumentation.

TABLE 14

RELIABILITY OF FIELD TEST INSTRUMENT BASED UPON RESPONDENT GROUP WITH SCALE 3 DROPPED (N=50)

Scale	Mean	Standard Deviation	Reliability
1	30.90	6.03	.78
2	33.64	4.67	.72
Unweighted Total	64.54	8.10	.76
Weighted Total	12.33	1.50	.75

TABLE 15

RELIABILITY OF FIELD TEST INSTRUMENT BASED UPON COLLEAGUE GROUP WITH SCALE 3 DROPPED (N=50)

Scale	Mean	Standard Deviation	Reliability
1	29.74	8.16	.89
2	32.92	5.11	.78
Unweighted Total	62.66	11.57	.89
Weighted Total	10.08	1.73	.88

The Pearson correlation coefficient of .1308 between the Scale 1 and Scale 2 scores for the respondent group as reported in Table 16 is sufficiently low to suggest that these two scales are measuring separate attitudinal attributes for this group of subjects. The computed significance level for this correlation is .183.

TABLE 16

PEARSON CORRELATION COEFFICIENTS FOR RESPONDENT AND COLLEAGUE SCORES (N=50)

	Respondents			Colleagues			
	Scale 2	Total	Weighted Total	Scale 1	Scale 2	Total	Weighted Total
Respondent Scale 1	.1308[a]	.8206	.7519	.5347	.3407	.5277	.5067
Respondent Scale 2		.6739	.7519	.0664	.3222	.1893	.2249
Respondent Total			.9938	.4367	.4396	.5024	.5072
Respondent Weighted Total				.3997	.4408	.4768	.4865
Colleague Scale 1					.4925	.9230	.8638
Colleague Scale 2						.7895	.8638
Colleague Total							.9912

[a]The calculated level of significance for this correlation is .183 suggesting that scales 1 and 2 are measuring separate attitudinal attributes for this group.

CHAPTER V

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

Summary

The purpose of this study was to develop an instrument which would be capable of approximating the position of individuals or groups of public school teachers along the professional continuum to the extent that such position is determined by attitudes which are thought to reflect a professional orientation toward one's work.

The development of such an instrument was based upon the assumption that there are degrees of professionalism rather than a simple dichotomy between professional and nonprofessional. A second assumption underlying this study was that the characteristics of a profession are of two basic types. The first group of characteristics includes those which are part of the structure of the occupation, including such things as formal education and entrance requirements, the formation of a professional organization and the adoption of a viable code of ethics. The second group of characteristics includes those which are attitudinal, reflecting the orientation of the practitioners toward their work.[1] This study was confined to the development of an instrument which would measure the extent to which public school teachers have developed the attitudinal characteristics of professionals.

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[1]Richard H. Hall, "Professionalization and Bureaucratization," American Sociological Review, Vol. 33, No. 1 (February, 1968), pp. 92-104.

There was a single basic research question formulated to guide this study.

Are there factors contributing to the professionalism of public school teachers which can be determined through the use of a self-report instrument? If so, what are these factors?

A review of the literature indicated that there were possibly six attitudinal attributes which contribute to the professionalism of public school teachers which might be determined through the use of a self-report instrument. These six attributes were as follows:

1. The use of the professional organization as a major reference.
2. Involvement in the professional culture.
3. Belief in service to the public.
4. Belief in the right to self-regulation.
5. A sense of calling to the field.
6. Belief in autonomy.

With these six attributes guiding the work, an initial pool of 104 items was collected to measure the attitudinal orientation of the subjects.

Three members of the teaching profession, working independently of each other, were given reasonably complete definitions of the six attributes (see Chapter II, page 19, for the definitions used) and were asked to sort the 104 items into six groups based upon their belief of which attribute the item was intended to measure. This resulted in the elimination of ten items which were not clear to all

three persons and in addition caused the researcher to collapse the six attributes into three. The use of the professional organization and involvement in the professional culture were collapsed into a single attitudinal attribute. A belief in the right to self-regulation and autonomy were collapsed into one. A belief in service to the public was joined with a sense of calling to the field to form a single attribute. Thus six attitudinal attributes became three.

Elimination of the redundant items resulted in an instrument having twenty items designed to measure each of the three attributes. This instrument was sent to 500 randomly selected teachers in eight public school systems in Maryland. The responses of 408 of these teachers provided the data upon which the conclusions in this study are based.

The application of six criteria (see Chapter IV, page 62) resulted in the selection of twenty-two items for use on a field test instrument. Ten of these items formed a scale designed to measure the subject's attitude with respect to attribute one - Belief in the use of professional colleagues as a major reference. Nine items made up the scale to measure attribute two - Belief in service to the public and a sense of calling to the field. Finally, three items remained in scale three to measure attribute three - Belief in the right to self-regulation, autonomy.

This twenty-two item, field test instrument was given to fifty randomly selected teachers and their colleagues in Cecil County, Maryland, in order to establish the reliability of each of the three scales as well as the total test. The reliability of scale three was

determined to be too low for any further use (see Chapter IV) and was therefore dropped.

The final instrument coming out of this study contains nineteen items divided almost evenly between two scales. There are ten items remaining for scale one and nine items for scale two. Just what these nineteen items seem to measure will be examined in the next section of this chapter.

Conclusions

The results presented in Chapter IV seem to support an affirmative response to the research question posed for this study. That is, there are some (perhaps not many) factors contributing to the professionalism of public school teachers which can be determined through the use of a self-report instrument. A cursory examination of the results might lead one to simply state that those factors included in scale one and scale two can indeed be measured by the self-report instrument. However, more careful examination of the individual items remaining in each of the two surviving scales is needed.

A careful examination of the ten items remaining in scale one (all of the odd-numbered items on the final instrument - see Appendix F) reveals that each and every one of them deals with the professional organization. All of those items which dealt with use of professional colleagues in settings other than through the formal organization have dropped out. One might legitimately ask why this informal use of colleagues or involvement in the professional culture has not held up as a measurable attitudinal attribute for the teachers. One response might be that it is not the same factor as use of the professional organization and therefore the factor analysis eliminated all items dealing with the

culture. However, careful examination of the results presented in Chapter IV reveals that only three items were eliminated from this scale by the factor analysis alone. In fact, each of the selection criteria accounted for the elimination of one or more items which were designed to measure involvement in the professional culture.

Examination of the responses to the items which dropped out of scale one leads to the possible conclusion that while teachers do have many friends among their colleagues and while they enjoy exchanging ideas with them, teachers do not have any difficulty making friends outside of the colleague group and they do not uniformly depend upon the colleague group as a source of ideas to help solve problems. This would seem to indicate that the teaching profession has not developed a distinct culture which tends to exclude those who have not been part of the same socialization process.

There may be several possible explanations for this lack of a distinct culture in teaching as compared to the learned professions. The basic period of training is not as long as that of the medical profession for example. Teacher candidates are not subjected to the long hours of concentrated study and internship, virtually cut off from those who are not members of the same profession, as are the medical doctors-in-training. The socialization process for public school teaching is simply not as intense as it is for medicine, some segments of the ministry, law or university teaching.

A second explanation may very well rest upon the fact that teaching has not developed a complete monopoly over its area of expertise. While it is very difficult for the medical doctor to discuss medical procedures intelligently with anyone not trained in those

procedures, the teacher is encouraged to share teaching techniques with parents. The teacher's area of expertise is not so exclusive as to limit his/her ability to discuss certain aspects of teaching with any reasonably intelligent person. In fact, many college graduates in other fields consider themselves just as able to teach as those trained in teaching. It seems that neither the teachers nor others recognize a distinct culture for the teaching profession.

Since all of the items remaining in scale one refer to the professional organization, this scale must be redefined to eliminate the references to the use of the informal colleague groups. Therefore, scale one on the final instrument shall be defined as follows:

> Scale 1 - A belief in the use of the professional organization as a major reference. This includes membership in the professional association and a belief that the services provided by the association are important to the continued functioning of the profession.

This study indicates that there are measurable differences among teachers on this attitudinal attribute. The responses to the ten items remaining in this scale have met all six selection criteria. Thus, the responses to these ten items tend to distribute the subjects along a continuum from favorable to unfavorable attitudes toward the professional organization.

An assumption underlying this attitudinal attribute is that the more professional individual has more favorable attitudes toward the professional organization for two reasons. First, part of the professional training has focused upon developing a favorable attitude toward the professional organization and the more effective that training has been, the more favorable attitude will be developed. Second, the professional organization has itself reached a level which is worthy of

a favorable attitude on the part of the professional person. This study is unable to differentiate between these two elements. The differences in responses to the ten items on this scale may reflect differences in attitudes which were developed (or which failed to develop) as a result of the professional training and consequent orientation of the subjects or these differences in responses may reflect differences in the value placed upon the professional organization regardless of the level and intensity of the professional training of the subject. In all probability, the differences in responses are reflective of both of these dimensions.

Provided the user of the scale is cognizant of these two dimensions and takes both into account in the use and interpretation of the scale, the fact that there are two dimensions should not prevent reasonable use of the scale. For example, the scale might be used to determine which candidates for some position have developed the more professional attitudes. Over a period of time, changes in the professional organization itself may have an effect on the attitude scores of the subjects. Without further research with the instrument, it is difficult to make any precise predictions. Caution should be exercised by those interpreting the responses to these items given the fact that there are two dimensions involved, namely, the cultivation of appropriate professional attitudes toward an organization and changes in the object of that attitude, the organization itself.

Examination of the nine items remaining in scale two reveals that eight of the nine were originally designed to measure the subject's attitude regarding a sense of calling to the field. Only one of the

nine remaining items was originally designed to help reveal the subject's attitude regarding the provision of an indispensable service to the public. As in the case of scale one, the factor analysis alone did not result in this situation because only one item was eliminated on the sole basis that it failed to meet the minimum factor loading criterion. In addition, the one item eliminated on the basis of a low principal factor loading had to do with a sense of calling to the field, just as do eight of the nine remaining items.

Since eight of the nine items remaining in scale two were originally developed to relate to a sense of calling and the ninth item very closely relates to these as supported by its high common factor loading, this scale shall be redefined as follows:

> Scale 2 - A belief in commitment to the profession including a sense of calling to the field. This reflects the dedication of the professional to his work and the feeling that he would probably want to do the work even if fewer extrinsic rewards were available.

The results for scale two indicate that there are measurable differences among teachers on this scale with particular emphasis on those items dealing with a sense of calling to the field. The responses to eight items on this scale tend to distribute the subjects along a continuum from those with a high sense of calling to those with considerably less of this attribute. For example, while a clear majority of the subjects would not change to a different occupation even if given the opportunity to do so, a substantial number (96) would do so while another large number (77) aren't too sure what they would do (Item No. 50 in the major phase instrument). The assumption underlying this particular item is that the true professional has a life-long commitment to his chosen field. When a member of the ministry or the medical profession

leaves the profession, those who trained him/her routinely seek the reasons for the change. They want to know what went wrong in the selection and/or socialization process. They want to know how they turned out a practitioner who did not have life-long commitment to the profession. In teaching, the loss of a member is scarcely noted in the rush to fill the gap with the best qualified candidate available. Obviously public school teaching has not reached the level of the learned professions with respect to this particular dimension of the model.

A second example from the items remaining in scale two perhaps would be sufficient to illustrate how this scale is distributing subjects along a continuum. While a clear majority of subjects (233) indicate that the welfare of their students is more important to them than monetary rewards, a large number (99) aren't too sure about that and another substantial number (76) openly disagree with that concept (Item No. 59 in the major phase instrument). Thus, public school teachers, to the extent they are reflected in this study have not reached the level of altruism expected in the professional model. Some would say that the medical profession has moved away from full acceptance of this concept in recent years. Perhaps only certain segments of the ministry exhibit this professional attribute in full measure today.

Other items remaining in scale two tend to distribute subjects based upon their perceptions of how interesting and inspirational public school teaching is for them.

Careful examination of the items that were dropped out of scale two, along with the response patterns and the analysis of results provided in Chapter IV, reveals that the teacher respondents do believe

that their occupation is one of the most necessary, that teaching provides one of the best means of serving humanity and that any weakening of their standing would be harmful for society. In fact, the subjects are so unanimous in their responses to these items that the items dropped out for failure to provide an adequate basis for discriminating between the high and low groups. Six additional items were dropped from this scale because they failed to discriminate between the high and low groups.

The items designed to measure scale three simply did not survive the research methods employed in this study. Application of the six selection criteria eliminated seventeen of the twenty items. The scale, with its three remaining items simply did not develop a high enough coefficient of reliability in the field test to be considered useful. Edwards found that the reliability coefficients typically reported for scales constructed by the method of summated ratings are above .85, even when fewer than twenty items make up the scale.[2] A reliability of .55 for the respondent group and .53 for the colleague group were considered too low to be acceptable and therefore this scale was dropped entirely from the final instrument.

Scale three had contained twenty items on the version of the instrument used in the major phase of the study. Ten of these items had initially been designed to relate to the concept of self-regulation and ten to the concept of autonomy. Of the three items which made it to the

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[2]Allen L. Edwards, Techniques of Attitude Scale Construction, (Englewood Cliffs, N. J.: Prentice-Hall, Inc., 1957), p. 156.

field test instrument, two related to self-regulation and one to autonomy. Thus, at least for three items, there appeared to be measurable differences between the high and low groups. These three items did appear to distribute the subjects along a continuum related to a belief that only one's colleagues should judge one's work and that a teacher should make his own decisions in regard to what is to be done in his work. While these three items appeared to have some ability to discriminate among the teachers, it may be that three items is too few to develop an acceptable level of reliability.

Examination of the seventeen items which dropped out of scale three reveals that they were taken out on several bases. All seventeen failed to meet the factor loading criterion. Thus, it can be said that if any of them were measuring the same thing as the three items which met the criterion, this test failed to show it. In addition, sixteen of the seventeen items failed to correlate with the scale three score at the minimum acceptable level. Twelve of the seventeen failed to discriminate adequately between the low group and the high group. All that can be concluded relative to scale three is that seventeen of the twenty proposed items failed to adequately measure the attribute related to self-regulation, autonomy and that the three which did failed to do so with sufficient reliability to be considered useful.

In summary, it may be concluded that there are two factors contributing to the professionalism of public school teachers which can be measured through the use of a self-report instrument which have been identified in this study. These two factors have to do with the

professional organization and personal commitment to the profession including a sense of calling to the field. These two factors are represented by scales one and two on the Teacher Attitude Scale and are defined as follows:

> Scale 1 - A belief in the use of the professional organization as a major reference. This includes membership in the professional association and a belief that the services provided by the association are important to the continued functioning of the profession.
>
> Scale 2 - A belief in commitment to the profession including a sense of calling to the field. This reflects the dedication of the professional to his work and the feeling that he would probably want to do the work even if fewer extrinsic rewards were available.

Within the limitations of these two definitions, the professional orientation of public school teachers may be measured using the Teacher Attitude Scale. However, in using the term measured, it must be remembered that the interpretation of an attitude score on a summated rating scale cannot be made independently of the distribution of scores of some defined group.[3] Shaw and Wright further recommend that attitude scales be treated as ordinal scales. That is, there is no reason to assume that the scales have established equality of units. Although this limits the permissible operations that can be performed on the scores, many useful comparisons are still possible. Individuals can be arranged along the attitude continuum, changes in individual attitudes as a function of experimental treatments can be evaluated, and attitudes can be related to other variables.[4]

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[3]Edwards, op. cit., p. 156.

[4]Marvin E. Shaw and Jack M. Wright, Scales for the Measurement of Attitudes, (New York: McGraw-Hill Book Co., 1967), p. 564.

Recommendations for Further Research

The first recommendation is that further research be undertaken in an effort to develop valid scales for the measurement of those attitudinal attributes of a profession where this study did not succeed. Particular attention needs to be given to the attribute which includes self-regulation and autonomy. The partial success in measuring this attribute achieved in this study would seem to indicate that the attribute is measurable.

The second recommendation is that the final form of the Teacher Attitude Scale as developed by this study be used in research studies designed to measure changes in group attitudes as a result of some experimental treatment. The experimental treatments might be designed to change attitudes toward the professional association or they might be designed to increase the subject's sense of commitment to the profession or sense of calling to the field, or to raise the level of altruism among the subjects. While it is possible to use the Teacher Attitude Scale to arrange individuals along the attitude continuum, the researcher would urge caution in this use of the scale since only moderate levels of reliability have been attained for the two scales included and for the total scale.[5]

The Teacher Attitude Scale should be administered to additional groups of teachers to gather data for further analyses. Of particular interest would be whether or not the reliability as determined by a test retest procedure would be any higher than that determined by the

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[5]Ibid., p. 565.

coefficient alpha method used in this study. A sufficiently high reliability coefficient would allow for more individual, as opposed to group, interpretation of the results.

Finally, teacher training institutions might be interested in using the Teacher Attitude Scale to determine the effect of some aspect of their programs on the two attitudes measured.

APPENDIX A

CORRESPONDENCE

(Letter sent to the Superintendents)

EUGENE A. UHLAN
Box 397
Rising Sun, Maryland 21911

April --, 1978

Dear

As a key part of my thesis research at the University of Maryland, I am attempting to develop an instrument which will measure certain aspects of what is commonly called "professionalism". I would appreciate your help in this endeavor.

Specifically, I need your help in reaching a randomly selected sample of teachers. I need to get the instrument into the hands of 500 teachers from all levels from around the state. I do not need to know the names of the participants, but I would ask them to provide certain demographic information which would be used in the analyses of the data. I guarantee that all individual responses will be held in strict confidence.

I have enclosed a copy of the instrument along with a copy of my letter to the participants. Responses of the teachers will be used to determine which of these sixty items will go into the final instrument being developed.

If you decide to assist me, someone on your staff would have to make the random selection of teachers and deliver the survey to those selected. The intermediary must be used so that I will not know the names of the participants. I regret that I need to call upon your staff for this much help, but Dr. McKay of the Maryland State Department of Education advises me that this is the best way to handle research of this type under today's regulations.

Please let me know as soon as possible if I will be able to send the survey to some of your teachers.

Please contact me if you have any questions.

Sincerely,

Eugene A. Uhlan
Home phone: (301) 658-6750
Work phone: (301) 398-0400

(Sample of second letter to Superintendents who agreed to participate)

EUGENE A. UHLAN
Box 397
Rising Sun, Maryland 21911

May 4, 1978

Dr. William H. Buser, Superintendent
Garrett County Public Schools
40 South Fourth Street
Oakland, Maryland 21550

Dear Bill:

Thanks so much for your offer to help me in this research study. I deeply appreciate your help.

I have enclosed forty envelopes in the attached box. These should reach a sample of one in each five teachers. Each envelope contains a letter to the recipient, the survey instrument, and a stamped, self-addressed envelope for use by the recipient in returning the completed instrument to me at College Park. I have included a sample for you and have left the others unsealed for your inspection and/or insertion of your own letter.

I have enclosed with this letter a list of the survey identification numbers assigned to those surveys included. If you will randomly select the participants and record their names on this list, I will let you know after ten days the ID numbers of the unreturned surveys. I will at that time send you a follow-up letter (copy enclosed) to go to the nonresponders. I'd be glad to handle the follow-up directly from here if I had the name and school of the recipients, but I'm not sure that is proper. If the follow-up seems like too much trouble, please let me know. I appreciate what you are doing for me and do not wish to overburden you.

Please do send the materials out in your "pony" system.

When you have sent the surveys to the teachers, please send me the enclosed card so that I will know when to look for the returns.

My deepest thanks for your help.

Sincerely,

Eugene A. Uhlan

(Cover letter to participants)

UNIVERSITY OF MARYLAND
Division of Human and Community Resources
College of Education, College Park 20742

Department of Administration,
Supervision, and Curriculum
(301) 454-5766/67/68

Dear Colleague:

As part of a research project now underway, I am attempting to develop an instrument which will measure some attitudes about teaching. I would appreciate your help in this endeavor.

Would you be so kind as to take a few minutes to complete the enclosed survey instrument and return it to me in the self-addressed envelope? I guarantee that your responses will be held in strict confidence. Individuals responding will in no way be identified. You may note a code number on the instrument - its sole purpose is to help me in follow-up where the survey is not returned within ten days.

Please complete the survey instrument and return it. Only a limited number of persons have been randomly selected to participate in this study and a high rate of return is needed to make the results meaningful.

If you have any questions, you may contact me at home at 301-658-6750 or at work at 301-398-0400.

Thanks in advance for your cooperation.

Sincerely,

Eugene A. Uhlan

(Sample of letter to participating Superintendents regarding non-responders)

EUGENE A. UHLAN
Box 397
Rising Sun, Maryland 21911

May 24, 1978

Dr. William Buser
Superintendent of Schools
Garrett County Board of Education
40 South Fourth Street
Oakland, Maryland 21550

Dear Bill:

I have received all except twelve of the survey instruments sent to Garrett County. I am enclosing a follow-up letter to the recipient of each of the missing surveys. I have placed these in envelopes with the ID number of the missing survey on the outside of the enveolpe. I'd certainly appreciate it if you could forward these follow-up letters to those who received the instrument with the same ID number.

May I once again express my thanks for your help.

Sincerely,

Eugene A. Uhlan

(Follow-up letter to non-responders)

UNIVERSITY OF MARYLAND
Division of Human and Community Resources
College of Education, College Park 20742

Department of Administration,
Supervision, and Curriculum
(301) 454-5766/67/68

Dear Colleague:

I recently sent you a copy of a tentative survey instrument entitled Teacher Attitude Scale which is being developed to measure some attitudes about teaching. I had hoped that you would complete the survey and return it to me within ten days. To date I have not received a response from you.

Your completed questionnaire is essential if the study is to be completed. I guarantee that your responses will be held in strict confidence. Individuals responding will in no way be identified. The code number on the instrument has been used to help me in this follow-up - it has no other purpose.

While your participation is completely voluntary, I would deeply appreciate your help in this study. Only a limited number of persons were selected to participate in this study and a high rate of return is needed to make the results meaningful.

If you have any questions, you may contact me at home at 301-658-6750 or at work at 301-398-0400.

Thanks for your cooperation.

Sincerely,

Eugene A. Uhlan

APPENDIX B

INITIAL ITEM POOL, INSTRUCTIONS TO PANEL MEMBERS A, B AND C AND RESULTS OF THEIR WORK

TEACHER ATTITUDE SCALE

The following questionnaire attempts to measure certain aspects of what is commonly called "professionalism". Each item refers to your own profession. The items are designed to let you indicate the extent to which your attitude and/or behavior agree(s) with the statement. If there is Strong Agreement (SA), circle that response. If there is Agreement (A), Disagreement (D), Strong Disagreement (SD), circle the appropriate response. The middle category (?) is designed to indicate an essentially neutral opinion about the item.

1. I systematically read the professional journals. SA A ? D SD
2. Other professions are more vital to society than mine. SA A ? D SD
3. A person who violates professional standards should be judged by his professional peers. SA A ? D SD
4. A person enters this profession because he likes the work. SA A ? D SD
5. I make my own decisions in regard to what is to be done in my work. SA A ? D SD
6. I regularly attend professional association meetings at the local level. SA A ? D SD
7. I think that my profession, more than any other, is essential for society. SA A ? D SD
8. My fellow professionals have a pretty good idea about each other's competence. SA A ? D SD
9. People in this profession have a real "calling" for their work. SA A ? D SD
10. It is easier when someone else takes responsibility for decision making. SA A ? D SD
11. I enjoy opportunities to talk with my colleagues because of the ideas that are exchanged. SA A ? D SD
12. The importance of my profession is sometimes over-stressed. SA A ? D SD
13. There really aren't any penalties for the person who violates my profession's standards. SA A ? D SD
14. The dedication of people in this field is most gratifying. SA A ? D SD
15. I don't have much opportunity to exercise my own judgment. SA A ? D SD

16. I believe that the professional organization(s) should be supported with my time and dues. SA A ? D SD

17. Some other occupations are actually more important to society than is mine. SA A ? D SD

18. A problem in this profession is that no one really knows what his colleagues are doing. SA A ? D SD

19. Professional training itself helps assure that people maintain their high ideals. SA A ? D SD

20. I know that my own judgment on a matter is on the final judgment. SA A ? D SD

21. Some of the most stimulating times are those spent with my colleagues. SA A ? D SD

22. Not enough people recognize how important this profession is for the good of society. SA A ? D SD

23. A basic problem for the profession is the intrusion of standards other than those which are truly professional. SA A ? D SD

24. It is encouraging to see the high level of idealism which is maintained by people in this field. SA A ? D SD

25. The fact that someone checks your decisions makes this work less demanding. SA A ? D SD

26. The professional organization doesn't really do too much for the average member. SA A ? D SD

27. More occupations should strive to make a real contribution to society as mine does. SA A ? D SD

28. Violators of professional standards face fairly severe penalties. SA A ? D SD

29. Although many people talk about their high ideals, very few are really motivated by them. SA A ? D SD

30. When problems arise at work, there is little opportunity to use your own creative talents. SA A ? D SD

31. The real test of how good a person is in his field is the layman's opinion of him. SA A ? D SD

32. Weakening of the profession would be harmful for society. SA A ? D SD

33. Members of this profession really have no way of judging each other's competence. SA A ? D SD

34. It is hard to get people to be enthusiastic about their work in this field. SA A ? D SD

35. There is little autonomy in this work. SA A ? D SD

36. Although I would like to, I really don't read the journals too often. SA A ? D SD

37. The benefits this profession gives to individuals and society are underestimated. SA A ? D SD

38. The professional organization is really powerless in terms of enforcing rules. SA A ? D SD

39. Most people would stay in the profession even if their incomes were reduced. SA A ? D SD

40. My own decisions are subject to review. SA A ? D SD

41. Most of my personal friends are not fellow professionals. SA A ? D SD

42. It is impossible to say that any occupation is more important than any other. SA A ? D SD

43. There is not much opportunity to judge how another person does his work. SA A ? D SD

44. Most of the real rewards of my work can't be seen by an outsider. SA A ? D SD

45. I am my own boss in almost every work-related situation. SA A ? D SD

46. The profession doesn't really encourage continued training. SA A ? D SD

47. If ever an occupation was indispensable, it is this one. SA A ? D SD

48. My colleagues are good judges of how well we all do in our work. SA A ? D SD

49. Most people really believe in the importance of their work. SA A ? D SD

50. Most of my decisions are reviewed by other people. SA A ? D SD

51. There is no higher calling than that of my profession. SA A ? D SD

52. Mine is one of the most necessary of professions. SA A ? D SD

53. Members of my profession are the nation's leaders. SA A ? D SD

54. I believe that mine is the most interesting of the professions. SA A ? D SD

55. My professional work is inspirational to me. SA A ? D SD

56. My work requires more intelligence than most other professions. SA A ? D SD

57. Members of my profession were, for the most part, just average college students. SA A ? D SD

58. Too many of my colleagues show no real interest in their work. SA A ? D SD

59. The importance of my profession to society is often over-estimated. SA A ? D SD

60. My professional work requires only mediocre ability. SA A ? D SD

61. My professional work is just a means of existing. SA A ? D SD

62. A person who tends to be lazy could handle my job. SA A ? D SD

63. My profession provides one of the best means of serving humanity. SA A ? D SD

64. My profession has more influence on our nation than any other. SA A ? D SD

65. My profession performs more actual good for mankind than any other. SA A ? D SD

66. My profession offers exceptional opportunities for making friends. SA A ? D SD

67. My profession meets an important need of society. SA A ? D SD

68. My profession is one of the oldest and most honored of all the professions. SA A ? D SD

69. I derive much self-satisfaction from my professional work. SA A ? D SD

70. My colleagues do not take enough interest in their work. SA A ? D SD

71. I believe there is very little future in my profession. SA A ? D SD

72. I regularly attend the local meetings of my professional association. SA A ? D SD

73. The future of this profession depends upon the guidance provided by our professional association. SA A ? D SD

74. I spend most of my free time with fellow professionals. SA A ? D SD

75. Most of my personal friends are also members of my professional group. SA A ? D SD

76. I prefer to be with fellow professionals rather than with those who are not members of the profession. SA A ? D SD

77. It is difficult to develop friendships outside my fellow professional group. SA A ? D SD

78. The professional organization provides the real leadership in this profession. SA A ? D SD

79. The professional organization is really effective in raising the standards of this profession. SA A ? D SD

80. The professional organization does nothing but collect dues to pay its bureaucrats. SA A ? D SD

81. I depend upon my colleagues to supply ideas to help solve problems. SA A ? D SD

82. My colleagues are better able to judge my work than anyone else. SA A ? D SD

83. If the quality of my work must be judged, my colleagues are the people best qualified to judge it. SA A ? D SD

84. I really don't read the professional journals too often. SA A ? D SD

85. I was attracted to this profession by the monetary rewards it offers. SA A ? D SD

86. My profession's code of ethics helps me to make many decisions. SA A ? D SD

87. I would want to continue in my profession even if the monetary rewards were to be reduced. SA A ? D SD

88. I consider it a privilege and a responsibility to hold office in my professional organization when called upon to do so. SA A ? D SD

89. The material reported in the professional journals is really helpful in carrying out my work. SA A ? D SD

90. I believe that a fellow professional can best judge when a fellow professional has made a mistake. SA A ? D SD

91. Members of my profession certainly are in a better position than our clients to know what is best for them. SA A ? D SD

92. I would like to change to a different profession if I had the opportunity to do so. SA A ? D SD

93. One of the rewards of this profession is the prestige which it is accorded by the general public. SA A ? D SD

94. My superiors have very little authority over what I do in my work. SA A ? D SD

95. If a conflict exists between the needs of my clients and the expectations of my employer, my clients' needs come first. SA A ? D SD

96. The code of ethics protects our clients from incompetent performance by my fellow professionals. SA A ? D SD

97. My fellow professionals generally place the welfare of the community above that of themselves. SA A ? D SD

98. I find it difficult to socialize with persons who are not members of my profession. SA A ? D SD

99. The public recognizes my work as professional. SA A ? D SD

100. My extensive formal training gives me the right to determine what is best for my clients without interference from those without this training. SA A ? D SD

101. The welfare of my clients is more important to me than monetary rewards. SA A ? D SD

102. Only those professionals who have had the same kind of training I have had would be in a position to judge my work. SA A ? D SD

103. I don't think my professional organization has enough control over entrance into the profession. SA A ? D SD

104. The professional organization should control the requirements for entrance into the profession. SA A ? D SD

INSTRUCTIONS TO PANEL MEMBERS A, B, AND C

I appreciate your accepting my invitation to assist me in my doctoral research. As a research project, I am attempting to develop an instrument which will measure the degree of professionalism exhibited by individual teachers as determined by their responses to statements of attitude. The instrument will be designed to permit the subject to indicate how well each item agrees with his own attitude and/or behavior. The levels of agreement will be designated as: strongly agree, agree, undecided, disagree or strongly disagree.

The premise of this research is that the position of an individual on the professional continuum depends upon the degree to which certain experiential or structural criteria are met and the degree to which a constellation of attitudes is internalized by the individual. The attitudinal attributes of professionalism reflect the way in which the practitioners view their work. If an occupation has met the structural prerequisites of a profession, the approach taken in practice determines the level of professionalism reached.

Attached is a listing of the attitudinal attributes of a profession. You will note that there are six of these, lettered "A" through "F". Each of the six attributes is briefly defined. I have taken a second copy of this annotated listing, cut it apart and taped one definition to the face of each of six envelopes.

Your major task will be to read each of the proposed items (which are supplied to you on individual slips of paper), determine the attribute which you believe is measured by the item, and place the item in the envelope labeled with that attribute.

In addition to this major task, it would be a great help to me if you would apply the attached "Criteria for Editing Attitude Scale Statements" to each item and make changes in the item or comments on it as you see fit. As you conclude your evaluation of each proposed item would you apply a rating to the item of one (poor item) to five (good item) by placing an appropriate number in the upper left-hand corner of the slip. In rating the items, please give emphasis to the clarity of the item and its potential contribution to the measurement of the attribute which it is intended to assess.

For your information, I have enclosed the directions which will be given to those responding to the questionnaire when it is developed. You may wish to comment on these.

Thanks for your help.

Sincerely,

Gene Uhlan

THE ATTRIBUTES OF A PROFESSION

The characteristics of a profession are of two basic types. First are those characteristics which are part of the structure of the occupation including such things as formal education and entrance requirements, the formation of a professional organization and the adopting of a code of ethics. The second aspect is attitudinal.

A. The use of the professional organization as a major reference -- this includes membership in the professional association and a belief that the services provided by the association are important to the continued functioning of the profession.

B. Involvement in the professional culture -- this includes both the formal and informal colleague groupings (other than the professional association) as a major source of ideas and judgments for the professional in his work.

C. A belief in service to the public -- this includes the idea of indispensability of the profession and the view that the work benefits both the public and the practitioner. The profession has a unique, definite, and essential social service to perform.

D. A belief in the right to self-regulation -- this involves the belief that the person best qualified to judge the work of a professional is a fellow professional. It is a belief in colleague control and acceptance of the code of ethics.

E. A sense of calling to the field -- this reflects the dedication of the professional to his work and the feeling that he would probably want to do the work even if fewer extrinsic rewards were available.

F. Autonomy -- this involves the right of the practitioner to make his own decisions without external pressures from clients, those who are not members of his profession, or from his employing organization.

CRITERIA FOR EDITING ATTITUDE SCALE STATEMENTS

1. Avoid statements that refer to the past rather than to the present.
2. Avoid statements that are factual or capable of being interpreted as factual.
3. Avoid statements that may be interpreted in more than one way.
4. Avoid statements that are irrelevant to the psychological object under consideration.
5. Avoid statements that are likely to be endorsed by almost everyone or by almost no one.
6. Select statements that are believed to cover the entire range of the affective scale of interest.
7. Keep the language of the statements simple, clear, and direct.
8. Statements containing universals such as "all", "always", "none", and "never" often introduce ambiguity and should be avoided.
9. Each statement should contain only one complete thought.
10. Statements should be short, rarely exceeding 20 words.
11. Words such as "only", "just","merely", and others of a similar nature should be used with care and moderation in writing statements.
12. Whenever possible, statements should be in the form of simple sentences rather than in the form of compound or complex sentences.
13. Avoid the use of words that may not be understood by those who are to be given the completed scale.
14. Avoid the use of double negatives.[1]

---

[1]Allen L. Edwards, Techniques of Attitude Scale Construction (Englewood Cliffs, New Jersey: Prentice-Hall, Inc., 1957), pp. 13-14.

DESIGNATION OF THE ATTRIBUTES MEASURED BY EACH PROPOSED ITEM ACCORDING TO INDEPENDENT PANEL MEMBERS A, B AND C

Item	The Writer	Panelists A	B	C	Item	The Writer	Panelists A	B	C	Item	The Writer	Panelists A	B	C
1	A	B	B	A	36	A	A	B	A	71	C	C	C	C
2	C	C	C	C	37	C	C	C	C	72	A	A	A	A
3	D	D	D	D	38	A	A	A	A	73	A	A	A	A
4	E	E	E	E	39	E	E	E	E	74	B	B	B	B
5	F	F	F	F	40	F	F	F	F	75	B	B	B	B
6	A	A	A	A	41	B	B	B	B	76	B	B	B	B
7	C	C	C	C	42	C	C	C	C	77	B	B	B	B
8	D	D	D	D	43[b]	D	D	D	B	78	A	A	A	A
9	E	E	E	E	44	E	E	E	E	79	A	A	A	A
10	F	F	F	F	45	F	F	F	F	80	A	A	A	A
11	B	B	B	B	46[b]	B	B	B	A	81	B	B	B	B
12	C	C	C	C	47	C	C	C	C	82	D	D	D	D
13	D	D	D	D	48	D	D	D	D	83	D	D	D	D
14	E	E	E	E	49	E	E	E	E	84	A	A	B	A
15	F	F	F	F	50	F	F	F	F	85	E	E	E	E
16	A	A	A	A	51	E	E	C	C	86	D	D	D	A
17	C	C	C	C	52	C	C	C	C	87	E	E	E	E
18	D	D	D	B	53	C	C	C	C	88	A	A	A	A
19	D	D	D	D	54	E	E	E	E	89	A	A	B	A
20	F	F	F	F	55	E	E	E	E	90	D	D	D	D
21	B	B	B	B	56[a]	C	C	B	E	91	F	F	D	D
22	C	C	C	C	57[a]	C	B	B	C	92	E	E	E	E
23	D	D	D	F	58	E	B	E	E	93[b]	E	C	C	E
24[a]	E	E	D	B	59	C	C	C	C	94	F	F	F	F
25	F	F	F	F	60[b]	C	C	E	C	95	F	F	F	F
26	A	A	A	A	61	E	E	E	E	96	D	D	D	D
27	C	C	C	C	62[a]	E	C	E	C	97	E	E	C	C
28	D	D	D	D	63	C	C	C	C	98	B	B	B	B
29	E	E	D	E	64	C	C	C	C	99	C	C	C	C
30	F	F	F	F	65	C	C	C	C	100	F	F	F	F
31	D	D	D	D	66	B	B	B	E	101	E	E	E	E
32	C	C	C	C	67	C	C	B	C	102	D	D	D	D
33	D	D	D	D	68	C	C	C	C	103	D	D	A	D
34	E	E	E	E	69	E	E	E	E	104[b]	D	D	A	D
35	F	F	F	F	70[b]	E	B	E	E					

[a]Designates items dropped due to lack of agreement on attribute measured.

[b]Designates items dropped based on a lack of item clarity.

VALUE ASSIGNED TO PROPOSED ITEMS
BY PANEL MEMBERS A, B AND C

Item	Panelists A	B	C	Average	Item	Panelists A	B	C	Average	Item	Panelists A	B	C	Average
1	5	5	5	5.0	36	5	5	5	5.0	71	3	2	2	2.3
2	5	5	5	5.0	37	5	5	5	5.0	72	5	5	5	5.0
3	5	5	5	5.0	38	5	5	3	4.3	73	5	5	5	5.0
4	4	5	5	4.7	39	5	4	5	4.7	74	5	3	5	4.3
5	5	5	5	5.0	40	5	5	5	5.0	75	5	4	5	4.7
6	5	5	5	5.0	41	5	3	5	4.3	76	4	4	5	4.3
7	5	3	4	4.0	42	3	1	3	2.3	77	5	3	4	4.0
8	5	5	3	4.3	43	3	4	4	3.7	78	4	5	5	4.7
9	5	3	5	4.3	44	4	3	5	4.0	79	4	5	4	4.3
10	5	5	4	4.7	45	5	5	5	5.0	80	5	5	2	4.0
11	5	5	4	4.7	46	2	3	3	2.7	81	5	5	5	5.0
12	5	5	3	4.3	47	4	5	4	4.3	82	4	5	5	4.7
13	4	5	3	4.0	48	2	5	3	3.3	83	4	5	4	4.3
14	4	4	5	4.3	49	2	4	4	3.3	84	5	5	2	4.0
15	5	5	4	4.7	50	5	5	4	4.7	85	5	5	4	4.7
16	5	5	5	5.0	51	4	3	4	3.7	86	3	4	5	4.0
17	5	5	3	4.3	52	5	5	4	4.7	87	5	3	5	4.3
18	5	5	4	4.7	53	5	3	4	4.0	88	5	4	5	4.7
19	3	5	4	4.0	54	4	3	5	4.0	89	5	5	3	4.3
20	5	3	3	3.7	55	4	3	5	4.0	90	4	5	2	3.7
21	5	5	3	4.3	56	5	2	4	3.7	91	5	5	4	4.7
22	3	5	3	3.7	57	3	1	4	2.7	92	5	4	4	4.3
23	4	5	4	4.3	58	5	4	4	4.3	93	4	4	4	4.0
24	4	5	5	4.7	59	5	5	4	4.7	94	5	2	4	3.7
25	5	3	5	4.3	60	4	3	2	3.0	95	4	5	4	4.3
26	5	5	5	5.0	61	3	3	3	3.0	96	3	3	4	3.3
27	4	4	4	4.0	62	4	2	2	2.7	97	4	5	5	4.7
28	3	5	4	4.0	63	5	5	3	4.3	98	5	3	3	3.7
29	4	2	4	3.3	64	4	3	3	3.3	99	4	4	5	4.3
30	3	2	4	3.0	65	4	5	4	4.3	100	4	5	3	4.0
31	4	5	3	4.0	66	5	2	5	4.0	101	4	4	5	4.3
32	4	3	3	3.3	67	5	3	5	4.3	102	4	5	4	4.3
33	3	5	2	3.3	68	5	2	3	3.3	103	4	2	5	3.7
34	4	5	5	4.7	69	3	5	5	4.3	104	5	5	5	5.0
35	5	2	5	4.0	70	5	4	4	4.3					

APPENDIX C

NINETY-FOUR ITEM TEACHER ATTITUDE SCALE, INSTRUCTIONS TO PANEL MEMBERS D, E AND F AND RESULTS OF THEIR WORK

TEACHER ATTITUDE SCALE

The following questionnaire attempts to measure certain attitudes about teaching. The items are designed to let you indicate the extent to which your attitude and/or behavior agree(s) with the statement. If there is Strong Agreement (SA), circle that response. If there is Agreement (A), Disagreement (D), Strong Disagreement (SD), circle the appropriate response. The middle category (?) is designed to indicate an essentially neutral opinion about the item.

1. My profession offers exceptional opportunities for making friends. SA A ? D SD
2. There is no higher calling than that of my profession. SA A ? D SD
3. My colleagues are better able to judge my work than anyone else. SA A ? D SD
4. Mine is one of the most necessary of professions. SA A ? D SD
5. A person who violates professional standards should be judged by his professional peers. SA A ? D SD
6. Other professions are more vital to society than mine. SA A ? D SD
7. I systematically read the professional journals. SA A ? D SD
8. Members of my profession are the nation's leaders. SA A ? D SD
9. I make my own decisions in regard to what is to be done in my work. SA A ? D SD
10. A person enters this profession because he likes the work. SA A ? D SD
11. If the quality of my work must be judged, my colleagues are the people best qualified to judge it. SA A ? D SD
12. I believe that mine is the most interesting of the professions. SA A ? D SD
13. I regularly attend the local meetings of my professional association. SA A ? D SD
14. I think that my profession, more than any other, is essential for society. SA A ? D SD
15. My fellow professionals have a pretty good idea about each other's competence.

16. My professional work is inspirational to me. SA A ? D SD

17. It is easier when someone else takes responsibility for decision making. SA A ? D SD

18. People in this profession have a real "calling" for their work. SA A ? D SD

19. I regularly attend professional association meetings at the local level. SA A ? D SD

20. Too many of my colleagues show no real interest in their work. SA A ? D SD

21. My profession's code of ethics helps me to make many decisions. SA A ? D SD

22. The importance of my profession is sometimes overstressed. SA A ? D SD

23. There really aren't any penalties for the person who violates my profession's standards. SA A ? D SD

24. The importance of my profession to society is often over-estimated. SA A ? D SD

25. The future of this profession depends upon the guidance provided by our professional association. SA A ? D SD

26. The dedication of people in this field is most gratifying. SA A ? D SD

27. I don't have much opportunity to exercise my own judgment. SA A ? D SD

28. My professional work is just a means of existing. SA A ? D SD

29. I believe that a fellow professional can best judge when a fellow professional has made a mistake. SA A ? D SD

30. Some other occupations are actually more important to society than is mine. SA A ? D SD

31. I enjoy opportunities to talk with my colleagues because of the ideas that are exchanged. SA A ? D SD

32. My profession provides one of the best means of serving humanity. SA A ? D SD

33. A problem in this profession is that no one really knows what his colleagues are doing. SA A ? D SD

34. Not enough people recognize how important this profession is for the good of society. SA A ? D SD

35. Professional training itself helps assure that people maintain their high ideals. SA A ? D SD

36. My profession has more influence on our nation than any other. SA A ? D SD

37. I spend most of my free time with fellow professionals. SA A ? D SD

38. My profession performs more actual good for mankind than any other. SA A ? D SD

39. Members of my profession certainly are in a better position than our clients to know what is best for them. SA A ? D SD

40. More occupations should strive to make a real contribution to society as mine does. SA A ? D SD

41. I know that my own judgment on a matter is the final judgment. SA A ? D SD

42. My profession meets an important need of society. SA A ? D SD

43. I believe that the professional organization(s) should be supported with my time and dues. SA A ? D SD

44. My profession is one of the oldest and most honored of all the professions. SA A ? D SD

45. A basic problem for the profession is the intrusion of standards other than those which are truly professional. SA A ? D SD

46. Although many people talk about their high ideals, very few are really motivated by them. SA A ? D SD

47. Most of my personal friends are also members of my professional group. SA A ? D SD

48. I derive much self-satisfaction from my professional work. SA A ? D SD

49. My superiors have very little authority over what I do in my work. SA A ? D SD

50. Some of the most stimulating times are those spent with my colleagues. SA A ? D SD

51. Weakening of the profession would be harmful for society. SA A ? D SD

52. The fact that someone checks your decisions makes this work less demanding. SA A ? D SD

53. I prefer to be with fellow professionals rather than with those who are not members of the profession. SA A ? D SD

54. I believe there is very little future in my profession. SA A ? D SD

55. Violators of professional standards face fairly severe penalties. SA A ? D SD

56. The professional organization doesn't really do too much for the average member. SA A ? D SD

57. It is hard to get people to be enthusiastic about their work in this field. SA A ? D SD

58. If a conflict exists between the needs of my clients and the expectations of my employer, my clients' needs come first. SA A ? D SD

59. It is difficult to develop friendships outside my fellow professional group. SA A ? D SD

60. I was attracted to this profession by the monetary rewards it offers. SA A ? D SD

61. When problems arise at work, there is little opportunity to use your own creative talents. SA A ? D SD

62. Although I would like to, I really don't read the journals too often. SA A ? D SD

63. The benefits this profession gives to individuals and society are underestimated. SA A ? D SD

64. The real test of how good a person is in his field is the layman's opinion of him. SA A ? D SD

65. The professional organization provides the real leadership in this profession. SA A ? D SD

66. I would want to continue in my profession even if the monetary rewards were to be reduced. SA A ? D SD

67. The code of ethics protects our clients from incompetent performance by my fellow professionals. SA A ? D SD

68. The professional organization is really powerless in terms of enforcing rules. SA A ? D SD

69. Most people would stay in the profession even if their incomes were reduced. SA A ? D SD

70. Members of this profession really have no way of judging each other's competence. SA A ? D SD

71. The professional organization is really effective in raising the standards of this profession. SA A ? D SD

72. I would like to change to a different profession if I had the opportunity to do so. SA A ? D SD

73. There is little autonomy in this work. SA A ? D SD

74. Most of my personal friends are not fellow professionals. SA A ? D SD

75. It is impossible to say that any occupation is more important than any other. SA A ? D SD

76. My extensive formal training gives me the right to determine what is best for my clients without interference from those without this training. SA A ? D SD

77. The professional organization does nothing but collect dues to pay its bureaucrats. SA A ? D SD

78. My fellow professionals generally place the welfare of the community above that of themselves. SA A ? D SD

79. My own decisions are subject to review. SA A ? D SD

80. I depend upon my colleagues to supply ideas to help solve problems. SA A ? D SD

81. Most of the real rewards of my work can't be seen by an outsider. SA A ? D SD

82. I am my own boss in almost every work-related situation. SA A ? D SD

83. I really don't read the professional journals too often. SA A ? D SD

84. The public recognizes my work as professional. SA A ? D SD

85. Only those professionals who have had the same kind of training I have had would be in a position to judge my work. SA A ? D SD

86. I consider it a privilege and a responsibility to hold office in my professional organization when called upon to do so. SA A ? D SD

87. If ever an occupation was indispensable, it is this one. SA A ? D SD

88. My colleagues are good judges of how well we all do in our work. SA A ? D SD

89. The material reported in the professional journals is really helpful in carrying out my work. SA A ? D SD

90. The welfare of my clients is more important to me than monetary rewards. SA A ? D SD

91. Most of my decisions are reviewed by other people. SA A ? D SD

92. I find it difficult to socialize with persons who are not members of my profession. SA A ? D SD

93. Most people really believe in the importance of their work. SA A ? D SD

94. I don't think my professional organization has enough control over entrance into the profession. SA A ? D SD

INSTRUCTIONS TO PANEL MEMBERS D, E AND F

I appreciate your willingness to help me refine the Teacher Attitude Scale which I am developing as a major part of my doctoral research. Enclosed you will find a copy of the ninety-four item Scale. One major system where I hope to pilot the instrument has indicated that they will not use the scale in its present form because it is too long and has too many repetitious items.

What I would like you to do is to help me reduce the length of the instrument by indicating which items you feel unnecessarily repeat other items. To the extent possible, as you indicate that an item is a repeat, let me know the item number of numbers of those which you believe it is repeating. This will assist me in determining which items should be kept for the pilot instrument and which should be discarded.

Thanks for your help.

Sincerely,

Eugene A. Uhlan

RESULTS OF THE EXAMINATION OF ITEMS FOR EXCESS REPETITION BY THE WRITER AND PANEL MEMBERS D, E AND F

Item	The Writer	Panelists D	E	F	Item	The Writer	Panelists D	E	F	Item	The Writer	Panelists D	E	F
1					33			?		65				
2					34					66		R		
3		R[a]	?	R	35					67				
4					36					68	R			
5					37		R			69				
6			R	R	38					70			R	
7					39			R	?	71				
8		R	?		40			?		72				
9					41					73		R		
10					42	R				74		R		
11					43		R	?		75		?	?	?
12					44					76				
13					45					77				
14			R	R	46					78				
15					47					79				
16					48					80				
17					49					81				
18		R	?		50					82		R		
19					51					83		R		R
20					52					84	R			
21					53					85		R		?
22		R	R	R	54					86				
23		R	?		55					87			R	
24	R				56					88				?
25					57					89				
26			?		58					90				
27					59					91		R		
28					60	R				92				
29		R		?	61					93				?
30		R		?	62	R				94				
31					63	R								
32					64									

[a]Items marked "R" were considered repetitious. Those marked with the question mark, "?", seemed to lack clarity. All items considered either repetitious and/or lacking clarity were subsequently dropped.

APPENDIX D

SIXTY-ITEM TEACHER ATTITUDE SCALE WITH SCORING FORMAT AND DISTRIBUTION OF ITEM RESPONSES

TEACHER ATTITUDE SCALE

The following questionnaire attempts to measure certain attitudes about teaching. The items are designed to let you indicate the extent to which your attitude and/or behavior agree(s) with the statement. If there is Strong Agreement (SA), circle that response. If there is Agreement (A), Disagreement (D), Strong Disagreement (SD), circle the appropriate response. The middle category (?) is designed to indicate an essentially neutral opinion about the item.

1. My profession offers exceptional opportunities for making friends. SA A ? D SD
2. There is no higher calling than that of my profession. SA A ? D SD
3. A person who violates professional standards should be judged by his professional peers. SA A ? D SD
4. I systematically read the professional journals. SA A ? D SD
5. Mine is one of the most necessary of professions. SA A ? D SD
6. I make my own decisions in regard to what is to be done in my work. SA A ? D SD
7. I regularly attend the local meetings of my professional association. SA A ? D SD
8. A person enters this profession because he likes the work. SA A ? D SD
9. If the quality of my work must be judged, my colleagues are the people best qualified to judge it. SA A ? D SD
10. I regularly attend professional association meetings at the state level. SA A ? D SD
11. I believe that mine is the most interesting of the professions. SA A ? D SD
12. My fellow professionals have a pretty good idea about each other's competence. SA A ? D SD
13. The future of this profession depends upon the guidance provided by our professional association. SA A ? D SD
14. My professional work is inspirational to me. SA A ? D SD
15. It is easier when someone else takes responsibility for decision making. SA A ? D SD
16. I enjoy opportunities to talk with my colleagues because of the ideas that are exchanged.

17. Too many of my colleagues show no real interest in their work. SA A ? D SD

18. My profession's code of ethics helps me to make many decisions. SA A ? D SD

19. I spend most of my free time with fellow professionals. SA A ? D SD

20. My professional work is just a means of existing. SA A ? D SD

21. I don't have much opportunity to exercise my own judgment. SA A ? D SD

22. I believe that the professional organization(s) should be supported with my time and dues. SA A ? D SD

23. My profession provides one of the best means of serving humanity. SA A ? D SD

24. Professional training itself helps assure that people maintain their high ideals. SA A ? D SD

25. Most of my personal friends are also members of my professional group. SA A ? D SD

26. Not enough people recognize how important this profession is for the good of society. SA A ? D SD

27. Members of my profession certainly are in a better position than our students to know what is best for students. SA A ? D SD

28. Some of the most stimulating times are those spent with my colleagues. SA A ? D SD

29. My profession has more influence on our nation than any other. SA A ? D SD

30. A basic problem for our profession is the intrusion of standards other than those which are truly professional. SA A ? D SD

31. I prefer to be with fellow professionals rather than with those who are not members of the profession. SA A ? D SD

32. Although many people talk about their high ideals, very few are really motivated by them. SA A ? D SD

33. My superiors have very little authority over what I do in my work.

34. The professional organization doesn't really do too much for the average member. SA A ? D SD

35. I derive much self-satisfaction from my professional work. SA A ? D SD

36. The fact that someone checks your decisions makes this work less demanding. SA A ? D SD

37. It is difficult to develop friendships outside my fellow professional group. SA A ? D SD

38. Weakening of the profession would be harmful for society. SA A ? D SD

39. Violators of professional standards face fairly severe penalties. SA A ? D SD

40. The professional organization provides the real leadership in this profession. SA A ? D SD

41. I believe there is very little future in my profession. SA A ? D SD

42. If a conflict exists between the needs of my students and the expectations of my employer, my students' needs come first. SA A ? D SD

43. The professional organization is really effective in raising the standards of this profession. SA A ? D SD

44. It is hard to get people to be enthusiastic about their work in this field. SA A ? D SD

45. When problems arise at work, there is little opportunity to use your own creative talents. SA A ? D SD

46. The professional organization does nothing but collect dues to pay its bureaucrats. SA A ? D SD

47. Most people would stay in this profession even if their incomes were reduced. SA A ? D SD

48. The real test of how good a person is in his field is the layman's opinion of him. SA A ? D SD

49. I depend upon my colleagues to supply ideas to help solve problems. SA A ? D SD

50. If I had the opportunity to do so, I would change to a different profession. SA A ? D SD

51. The code of ethics protects our students from incompetent performance by my fellow professionals. SA A ? D SD

52. I consider it a privilege and a responsibility to hold an office in my professional organization when called upon to do so. SA A ? D SD

53. My fellow professionals generally place the welfare of the community above that of themselves. SA A ? D SD

54. My extensive formal training gives me the right to determine what is best for my students without interference from those without this training. SA A ? D SD

55. The material reported in the professional journals is really helpful in carrying out my work. SA A ? D SD

56. Most of the real rewards of my work can't be seen by an outsider. SA A ? D SD

57. My own decisions are subject to review. SA A ? D SD

58. I find it difficult to socialize with persons who are not members of my profession. SA A ? D SD

59. The welfare of my students is more important to me than monetary rewards. SA A ? D SD

60. I don't think my professional organization has enough control over entrance into the profession. SA A ? D SD

BACKGROUND INFORMATION

The following information will be used only for statistical analyses of the data. No individual, school or system will be identifiable in the research report.

Please check the response which is most appropriate for you in each item below:

1. Sex: ___Female ___Male

2. Age:
___20-25
___26-30
___31-35
___36-40
___41-45
___46-50
___51-55
___56-60
___61-65
___66 or over

3. Current position:
___Elementary classroom teacher
___Secondary classroom teacher
___Counselor
___Librarian
___Principal
___Assistant principal
___Supervisor
___Other (specify)_____

4. Years in current position:
___0-5
___6-10
___11-15
___16-20
___21-25
___26-30
___over 30

5. Areas for which you are certified in addition to your current position:
___None
___Principal
___Supervisor
___Counselor
___Librarian
___Other (specify)_____

6. Highest degree earned:
___Associate of Arts
___Bachelor's Degree
___Master's Degree
___Earned Doctorate

7. Member of (check all that apply):
___NEA ___NASSP ___APGA
___AFT ___NAESP
___AASA ___Other(s) (specify)_____
_____

SCORING FORMAT

SIXTY-ITEM TEACHER ATTITUDE SCALE

Item Number	Scale Number	+ or - Scored	Item Number	Scale Number	+ or - Scored
1	1	+	31	1	+
2	2	+	32	2	-
3	3	+	33	3	+
4	1	+	34	1	-
5	2	+	35	2	+
6	3	+	36	3	-
7	1	+	37	1	+
8	2	+	38	2	+
9	3	+	39	3	+
10	1	+	40	1	-
11	2	+	41	2	+
12	3	+	42	3	+
13	1	+	43	1	-
14	2	-	44	2	-
15	3	+	45	3	-
16	1	-	46	1	+
17	2	+	47	2	-
18	3	+	48	3	+
19	1	-	49	1	-
20	2	-	50	2	+
21	3	+	51	3	+
22	1	+	52	1	+
23	2	+	53	2	+
24	3	+	54	3	+
25	1	-	55	1	+
26	2	+	56	2	-
27	3	+	57	3	+
28	1	+	58	1	+
29	2	-	59	2	-
30	3		60	3	

DISTRIBUTION OF ITEM RESPONSES FOR SCALE 1
BELIEF IN THE USE OF PROFESSIONAL
COLLEAGUES AS A MAJOR REFERENCE

Item	Response Weight				
	1	2	3	4	5
1	4	46	57	203	98
4	24	98	78	176	32
7	59	144	79	100	26
10	117	167	73	42	9
13	27	113	100	133	35
16	3	12	21	199	173
19	60	198	68	70	12
22	11	35	73	257	32
25	28	146	55	156	23
28	16	88	97	187	20
31	46	212	93	54	3
34[a]	17	97	81	192	21
37	160	211	14	20	3
40	36	164	107	97	4
43	20	109	139	127	13
46[a]	13	34	85	216	60
49	29	130	84	151	14
52	32	91	172	96	17
55	13	61	138	178	18
58	215	179	6	6	2

[a]These items were negative, therefore, the response "Strongly Disagree" received response weight of five. "Strongly Agree" received response weight of five for all other items.

DISTRIBUTION OF ITEM RESPONSES FOR SCALE 2
BELIEF IN SERVICE TO THE PUBLIC AND
A SENSE OF CALLING TO THE FIELD

Item	Response Weight				
	1	2	3	4	5
2	36	121	97	104	50
5	1	7	14	134	252
8	6	34	54	199	115
11	15	82	80	153	78
14	14	33	64	202	95
17[a]	24	112	47	188	37
20[a]	4	16	34	159	195
23	1	16	33	235	123
26[a]	173	142	34	57	2
29	20	136	79	133	40
32[a]	14	158	90	143	3
35	3	20	22	195	168
38	3	9	38	243	115
41[a]	16	43	47	203	99
44[a]	14	90	60	206	38
47	64	150	74	114	6
50[a]	30	66	77	147	88
53	27	160	129	86	6
56	8	58	18	228	96
59	14	62	99	170	63

[a]These items were negative, therefore, the response "Strongly Disagree" received response weight of five. "Strongly Agree" received response weight of five for all other items.

DISTRIBUTION OF ITEM RESPONSES FOR SCALE 3
BELIEF IN THE RIGHT TO SELF-
REGULATION, AUTONOMY

Item	Response Weight				
	1	2	3	4	5
3	6	36	50	206	110
6	14	84	45	203	62
9	15	60	49	168	116
12	5	36	43	235	89
15[a]	3	65	56	193	91
18	11	75	94	184	44
21[a]	10	27	29	265	77
24	23	109	67	168	41
27		38	73	164	133
30[a]	46	194	115	50	3
33	61	282	32	31	2
36[a]		28	64	247	69
39	28	177	97	94	12
42	8	45	74	188	93
45[a]	8	41	30	260	69
48[a]	6	55	56	202	89
51	46	206	90	63	3
54	11	122	65	142	68
57[a]	37	263	65	39	4
60[a]	36	116	168	74	14

[a]These items were negative, therefore, the response "Strongly Disagree" received response weight of five. "Strongly Agree" received response weight of five for all other items.

APPENDIX E

TWENTY-TWO ITEM TEACHER ATTITUDE SCALE

WITH SCORING FORMAT

TEACHER ATTITUDE SCALE

The following questionnaire attempts to measure certain attitudes about teaching. The items are designed to let you indicate the extent to which your attitude and/or behavior agree(s) with the statement. If there is Strong Agreement (SA), circle that response. If there is Agreement (A), Disagreement (D), Strong Disagreement (SD), circle the appropriate response. The middle category (?) is designed to indicate an essentially neutral opinion about the item.

1. I systematically read the professional journals. SA A ? D SD
2. There is no higher calling than that of my profession. SA A ? D SD
3. I regularly attend the local meetings of my professional association. SA A ? D SD
4. I believe that mine is the most interesting of the professions. SA A ? D SD
5. A person who violates professional standards should be judged by his professional peers. SA A ? D SD
6. The future of this profession depends upon the guidance provided by our professional association. SA A ? D SD
7. My professional work is inspirational to me. SA A ? D SD
8. I believe that the professional organization(s) should be supported with my time and dues. SA A ? D SD
9. My professional work is just a means of existing. SA A ? D SD
10. I make my own decisions in regard to what is to be done in my work. SA A ? D SD
11. The professional organization doesn't really do too much for the average member. SA A ? D SD
12. I derive much self-satisfaction from my professional work. SA A ? D SD
13. The professional organization provides the real leadership in this profession. SA A ? D SD
14. I believe there is very little future in my profession. SA A ? D SD
15. If the quality of my work must be judged, my colleagues are the people best qualified to judge it. SA A ? D SD

16. The professional organization is really effective in raising the standards of this profession. SA A ? D SD

17. It is hard to get people to be enthusiastic about their work in this field. SA A ? D SD

18. The professional organization does nothing but collect dues to pay its bureaucrats. SA A ? D SD

19. If I had the opportunity to do so, I would change to a different profession. SA A ? D SD

20. I consider it a privilege and a responsibility to hold an office in my professional organization when called upon to do so. SA A ? D SD

21. The welfare of my students is more important to me than monetary rewards. SA A ? D SD

22. The material reported in the professional journals is really helpful in carrying out my work. SA A ? D SD

BACKGROUND INFORMATION

The following information will be used only for statistical analyses of the data. No individual, school or system will be identifiable in the research report.

Please check the response which is most appropriate for you in each item below:

1. Sex: ___Female ___Male

2. Age:
___20-25
___26-30
___31-35
___36-40
___41-45
___46-50
___51-55
___56-60
___61-65
___66 or over

3. Current position:
___Elementary classroom teacher
___Secondary classroom teacher
___Counselor
___Librarian
___Principal
___Assistant principal
___Supervisor
___Other (specify)_____

4. Years in current position:
___0-5
___6-10
___11-15
___16-20
___21-25
___26-30
___over 30

5. Areas for which you are certified in addition to your current position:
___None
___Principal
___Supervisor
___Counselor
___Librarian
___Other (specify)_____

6. Highest degree earned:
___Associate of Arts
___Bachelor's Degree
___Master's Degree
___Earned Doctorate

7. Member of (check all that apply):
___NEA ___NASSP ___APGA
___AFT ___NAESP
___AASA ___Other(s) (specify)_____
_____

SCORING FORMAT

TWENTY-TWO ITEM TEACHER ATTITUDE SCALE

Item Number	Scale Number	+ or - Scored
1	1	+
2	2	+
3	1	+
4	2	+
5	3	+
6	1	+
7	2	+
8	1	+
9	2	-
10	3	+
11	1	-
12	2	+
13	1	+
14	2	-
15	3	+
16	1	+
17	2	-
18	1	-
19	2	-
20	1	+
21	2	+
22	1	+

APPENDIX F

FINAL INSTRUMENT WITH SCORING FORMAT

TEACHER ATTITUDE SCALE

The following questionnaire attempts to measure certain attitudes about teaching. The items are designed to let you indicate the extent to which your attitude and/or behavior agree(s) with the statement. If there is Strong Agreement (SA), circle that response. If there is Agreement (A), Disagreement (D), Strong Disagreement (SD), circle the appropriate response. The middle category (?) is designed to indicate an essentially neutral opinion about the item.

1. I systematically read the professional journals. SA A ? D SD
2. There is no higher calling than that of my profession. SA A ? D SD
3. I regularly attend the local meetings of my professional association. SA A ? D SD
4. I believe that mine is the most interesting of the professions. SA A ? D SD
5. The future of this profession depends upon the guidance provided by our professional association. SA A ? D SD
6. My professional work is inspirational to me. SA A ? D SD
7. I believe that the professional organization(s) should be supported with my time and dues. SA A ? D SD
8. My professional work is just a means of existing. SA A ? D SD
9. The professional organization doesn't really do too much for the average member. SA A ? D SD
10. I derive much self-satisfaction from my professional work. SA A ? D SD
11. The professional organization provides the real leadership in this profession. SA A ? D SD
12. I believe there is very little future in my profession. SA A ? D SD
13. The professional organization is really effective in raising the standards of this profession. SA A ? D SD
14. It is hard to get people to be enthusiastic about their work in this field. SA A ? D SD
15. The professional organization does nothing but collect dues to pay its bureaucrats. SA A ? D SD
16. If I had the opportunity to do so, I would change to a different profession. SA A ? D SD

17. I consider it a privilege and a responsibility to hold an office in my professional organization when called upon to do so. SA A ? D SD

18. The welfare of my students is more important to me than monetary rewards. SA A ? D SD

19. The material reported in the professional journals is really helpful in carrying out my work. SA A ? D SD

BACKGROUND INFORMATION

The following information will be used only for statistical analyses of the data. No individual, school or system will be identifiable in the research report.

Please check the response which is most appropriate for you in each item below:

1. Sex: ___Female ___Male

2. Age:
___20-25
___26-30
___31-35
___36-40
___41-45
___46-50
___51-55
___56-60
___61-65
___66 or over

3. Current position:
___Elementary classroom teacher
___Secondary classroom teacher
___Counselor
___Librarian
___Principal
___Assistant Principal
___Supervisor
___Other (specify)_____

3. Years in current position:
___0-5
___6-10
___11-15
___16-20
___21-25
___26-30
___over 30

5. Areas for which you are certified in addition to your current position:
___None
___Principal
___Supervisor
___Counselor
___Librarian
___Other (specify)_____

6. Highest degree earned:
___Associate of Arts
___Bachelor's Degree
___Master's Degree
___Earned Doctorate

7. Member of (check all that apply):
___NEA ___NASSP ___APGA
___AFT ___NAESP
___AASA ___Other(s) (specify)_____
_____

SCORING FORMAT

NINETEEN ITEM TEACHER ATTITUDE SCALE

Item Number	Scale Number	+ or - Scored
1	1	+
2	2	+
3	1	+
4	2	+
5	1	+
6	2	+
7	1	+
8	2	-
9	1	-
10	2	+
11	1	+
12	2	-
13	1	+
14	2	-
15	1	-
16	2	-
17	1	+
18	2	+
19	1	+

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