# ATTITUDES OF ELEMENTARY TEACHERS TOWARD AFFECTIVE EDUCATION: A GUTTMAN FACET ANALYSIS

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ABSTRACT

ATTITUDES OF ELEMENTARY TEACHERS TOWARD AFFECTIVE EDUCATION: A GUTTMAN FACET ANALYSIS

By

Barbara H. Andersen

The impetus for this study arose from the researcher's knowledge that experiences in teaching affective education over the previous several years had been quite varied in the three adjoining Michigan school districts of Grand Ledge, Lansing, and Waverly. A literature survey of the status of affective education programming among the nation's educational priorities suggested that educators were ambivalent and confused about issues in the affective areas. Conflicting social forces were seen to be operating on the elementary schools both to expand their curricular offerings toward an assortment of affective goals, and to limit and concentrate their efforts in the pursuit of purely cognitive goals.

The major thrust of the present study was to develop a modification of Guttman facet theory for the study of attitudes toward affective education, to apply it in the construction of an attitude-behavior scale for affective education (ABS:AE) as a self-report instrument

for elementary teachers, and to test that construction on the populations of teachers whose experiences in affective education were known to vary from positive to negative.

The final version of the scale consisted of six facets of four items each: curriculum issues, goals, teaching procedures, competency issues, participation issues, and issues of support from systems which have impact on teachers. This basic sub-scale of 24 items was transposed into the definitional statements for three structural levels: normative beliefs (the subject's perception of what his reference group believes ought to be in regard to a specific attribute of affective education), personal beliefs about what ought to be, and personal experience of what happens in practice in regard to those issues. A further 24-item Personal Information Questionnaire was appended to the scale to gather relevant demographic and predictor variables.

The instrument was administered to four "known groups" of subjects: 31 teachers from Grand Ledge schools with affective education programs, 30 teachers from other Grand Ledge schools without affective education programs, 23 Lansing teachers with affective education training, and 29 teachers from Waverly schools where there were negative parent reactions to affective education programs.

The correlation matrix between scores on the three levels of the scale approximated a simplex, as evaluated

by Kaiser's $\underline{Q}^2$, for each of the four groups, in accordance with Guttman's (1959) contiguity hypothesis. These results gave evidence for the construct validity of the ABS:AE. Content validity of the scale can be assumed by reason of the facet analytic approach to the determination of relevant item content and wording.

Other hypotheses concerned the predicted differences between the four groups on the three levels of the scale, assessed by one-way analyses of variance and t-test contrasts between means. On the Normative Beliefs level the Grand Ledge group without affective education training attributed more positive beliefs to their colleagues than did the Grand Ledge group with training or the Waverly group. Contrary to prediction, there were no significant differences between the means of the four groups on the Personal Belief level; all groups were quite positive toward affective education. The hypothesis that scores on the Personal Experience level would differ according to the known differences in affective education training and experiences between the groups was confirmed in the stated direction, providing evidence for the predictive validity of this level of the scale.

Certain substantive hypotheses were also investigated in a post hoc procedure. Among other findings, the pattern of significant correlations for predictor variables with Personal Belief scores suggested that a younger

teacher with less experience who has had training and supervision in affective education and practices it in the classroom with positive results will have a more positive attitude toward it.

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Dedicated to my sons,

Steven and Douglas

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# CHAPTER I

## INTRODUCTION

> The affective domain is, in retrospect, a virtual "Pandora's Box." One finds in it the objectives which were stated confidently at one time and then allowed to disappear from view. One finds in it the objectives on which disagreement is most likely within a school. One finds in it the vital points on which the society itself may be in disagreement (Krathwohl, Bloom, and Masia, 1964, p. 61).

The events of the twentieth century have strained and challenged the accepted values of industrialized society. The human rights movement, women's liberation, changing sexual mores, corruption in high places, the assassination of national leaders, American intervention in Viet Nam, devastating civil wars, inflation, environmental pollution, dwindling energy supplies, drug abuse, rising crime rates and juvenile violence, all contribute to a pervasive sense of turmoil and malaise.

To some observers, the United States appears to be in a dangerous period of moral crisis, and parallels are made between the state of Western civilization and the decline of the Roman Empire. Others view this phase of instability and ferment as the threshold of another age, as we move beyond industrialization to the search

for new values and a new organization of human society. To Lawrence Kohlberg (1975), speaking before the Association for Supervision and Curriculum Development, this is a time, not of moral decay, but of moral transition as our society shifts from a level of conventional morality to the more highly developed autonomous or principled level.

Fundamental cultural changes involve changes in individual values and behavior, and since one of the dominant aims of education as a social institution has always been to prepare the individual to take his place as a functioning member of his society, education then has a major role to play in this era of cultural transition. We hear the call for educators to become "change agents" in society, in order to rectify current ills and to implement a broad array of social objectives. The schools are being held accountable, both by their own leadership and by the community at large, for complex issues of social stability and change.

Writing in the National Society of the Study of Education yearbook on the elementary school in the United States, Cohen (1972) sees an enormous degree of criticism being aimed at elementary schools, but he feels that the critics have wrongly regarded the schools as both the source and the panacea for all social ills. In looking back over twentieth century reforms in elementary school

programs, he identifies two related tendencies, one to adapt curricula to meet the social exigencies of the time (as in the Sputnik era), the other to continually expand the functions of the school to include responsibilities formerly in the realm of other social institutions. With changes in the role and influence in society of the family and the Church, pressure has mounted for elementary schools to provide for the child's emotional and character development, as well as to realize such cultural ideals as integration, citizenship, and world harmony.

In a time of crisis and change, ideological stances tend to become more pronounced and oppositional. Especially in a democratic society which permits the open expression of pluralistic views, educational issues are a source of debate and controversy. There is loud and sometimes violent conflict between those who would have the schools "get back to basics" and those who would agree with Earl C. Kelly (1965) that "how a person feels is more important than what he knows" (p. 455).

## Local Issues in Affective Programming

Ideological conflict has been apparent in Michigan around affective education programs and aspects of psychological services and guidance counseling as well. Bills have been before recent sessions of House and Senate Committees on Education that would, if enacted, seriously

curtail public school curricula and special services. House Bill No. 4951 (April 15, 1975; see Appendix A) stated in part:

> The primary function of a public school is to develop the intellectual capabilities of the child. The school has neither the responsibility nor the right to intervene in areas of personal development and exceeds its authority as a servant of the people paid by public taxes if it attempts to do so (p. 1).

While the bill was not voted out of committee, it served its purpose, as it received wide attention and concern from various professional groups in the state.

Similar wording to that of the House bill has appeared in a "Resolution to Protect Parental Rights" that was recently presented to the board of the local Waverly School District. A group known as the "Waverly Adults for Good Schools" has conducted an active campaign against "humanistic" programs such as Values Clarification, Career Education, and Guided Group Interaction, and has been successful in banishing the Human Development Program, a sequential affective curriculum, from Waverly elementary schools. This group of parents has been engaged in a public struggle with proponents of a more open curriculum, a battle which has been waged in school board elections and meetings, and in the "Letters to the Editor" column in the local daily newspaper. School personnel express concern about the climate within which they now function,

and there has been frequent turnover of top administrators in the district.

By contrast, the adjoining school districts of Lansing and Grand Ledge have had very positive school and community response to an all-out effort at programming in the affective domain. The effort is directed by the staff of the Focus Project.

## Project Focus: An Exemplary Program in Affective Education

The Clinton-Eaton-Ingham Community Mental Health Board in collaboration with the Grand Ledge and Lansing School Districts embarked in 1972 upon a program for the implementation of an affective education curriculum. Project Focus is described in detail in Appendix B. The project provides consultants and teaching materials to aid cooperating elementary schools in providing a properly sequenced curriculum in affective education for a specified class period each day in grades K-5. Each year the program is expanded to another school, so that at the time of this study one school had had the project for three years, one for two years, and three other schools were in their first year.

Affective education is broadly defined for the purposes of the project as problem-solving. Three main levels of objectives from Krathwohl's taxonomy are

utilized: awareness, responding, and valuing. Awareness objectives are implemented in kindergarten through second grade; responding objectives in third and fourth grade; and valuing in the latter part of fourth and in fifth grade.

The consultants, who are employees of the Community Mental Health Board, provide training sessions for the teaching staff, consultation to individual teachers and administrators, and programs for parent and community groups. The emphasis has been on generating acceptance in the total home-school-community system, and on ensuring that the project is seen as "owned" by the school. The agreement between the mental health and school boards calls for a great deal of support and guidance from the mental health consultants initially, with a gradual transfer of responsibility, so that the school system is committed to providing supervision for the program from within the system when the mental health personnel withdraw.

To date the program has had excellent success and acceptance from pupils, teachers and community. Informal observation shows that disciplinary referrals to the principals have been reduced by half. Following upon a feature article on the program, the Lansing State Journal (December 28, 1973) published an editorial commending Project Focus as "a hopeful step in a world where children

too often find fear, frustration, and no one who will listen." In 1975 the project was recognized by the Michigan Department of Mental Health as the outstanding mental health program in the state.

## Purpose of the Investigation

From this overview of the current educational scene, it appears that conflicting social forces are operating on the elementary schools both to expand their curricular offerings towards an assortment of affective goals, and to limit and concentrate their efforts in pursuit of purely cognitive goals. Society itself is vastly ambivalent and confused about issues in the affective areas, a state which is mirrored in the attitudes of educators themselves.

What is the role of education in this era of moral transition? How do educators themselves perceive the issues; what mandate do they feel they have been given to pursue affective goals in their classrooms; and what objectives in affective education are they prepared to implement?

In short, are elementary teachers ready to deal with attitudes, values, and feelings in the classroom? Rather than looking for guidelines from educational leaders, it is more pertinent to examine the attitudes and behavior of teachers themselves.

The immediate need is for instrumentation to describe and compare teachers' beliefs and behavior in the affective domain. Attitudes toward education in general have been explored by very few investigators, and there is no instrument for assessing attitudes toward affective education. Such scales as do exist are at the level of stereotypic beliefs about educational practices or classroom climate, and there has been no attempt to relate teacher behavior to teacher attitudes within the same scale.

Guttman's facet theory approach to attitude scaling (Guttman, 1959; Jordan & Guttman, 1976) provides a rationale for analysis of cognitive-affective-conative components, and is therefore very applicable for research in the affective domain. Jordan's elaboration of this theory in the development of multidimensional attitude-behavior scales (Jordan, 1971; Harrelson, Jordan, & Horn, 1972; Hamersma, Paige, & Jordan, 1973) provides a paradigm for the construction and testing of a scale to measure attitude-behaviors of elementary teachers toward affective education.

## Statement of Purpose

The purpose of the present study was to construct an attitude-behavior scale for affective education (ABS:AE)[1] employment Guttman facet design and analysis; to test that

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[1]The Attitude-Behavior Scale for Affective Education is hereafter referred to as the ABS:AE.

construction using teacher populations whose experiences in affective education were known to differ in nature and extent; to test differences between the groups on each of the three levels of the scale; and to check certain substantive hypotheses concerning possible correlates of teacher attitude-behaviors at leach level.

Four groups of elementary teachers were used in the study: three Grand Ledge schools involved in Project Focus for one, two, and three years, respectively; three Grand Ledge schools which had not had Project Focus and which were matched to the first three schools on indicators of socioeconomic status; two groups of Lansing teachers who had a year of training with Project Focus; and three Waverly schools chosen as being closest to the median for this district in socioeconomic indicators.

From facet analysis it was postulated that attitudes toward affective education of elementary education teachers in the school systems selected would differ where there was already a definite affective curriculum with accepted goals and appropriate teaching procedures, where issues of competency and participation had been dealt with, and where there was support from the social systems which have impact on the teacher.

## Definition of Terms

A Guttman attitude-behavior scale is a self-report instrument to assess an individual's beliefs and

experiences in a given attitude domain. "Attitude" is defined in Guttman's (1950) terms as "a delimited totality of behavior with respect to something" (p. 51). Attitudes toward affective education were explored by means of the Attitude-Behavior Scale for Affective Education constructed for the purpose of the study and based on a facet analysis of teacher behavior with regard to affective education.

The term "affective education" is a concept which could be defined by a whole array of sometimes inconsistent usages. It was not the task of this study to define the concept in a concise statement, but to delimit attitude-behaviors implicit in the term for the population studied. Thus the only clue given in the scale itself to the intended meaning of "affective education" was a sample item which suggested that "affective education deals with attitudes, values, and feelings." Affective education was, in effect, defined by the "elements" or items of the scale, and by the sets of elements known as "facets," which can be seen as analogous to factors.

# CHAPTER II

## THE STATUS OF AFFECTIVE EDUCATION

American classrooms today are showing the impact of divergent philosophical trends. The movement that is more entrenched in the schools, because of its compatibility with traditional goals and values, is the scientific-technological approach with its emphasis on behavioral objectives, performance-referenced programs, and technological innovations in media and materials. Meanwhile, a powerful force for change has been emerging in the last two decades in the school of thought known as the "new humanism," which encompasses the trends of affective education, moral development, confluent education, values clarification, character education, British infant schools, alternative education, and open classrooms.

The contrasting goals of the two movements were highlighted by Abraham Maslow (1970), regarded as the founder of humanistic psychology:

> The key concepts in the newer dynamic psychology are spontaneity, release, naturalness, self-choice, self-acceptance, impulse-awareness, gratification of basic needs. They used to be control, inhibition, discipline, training, shaping, on the principle that the depths of human nature were dangerous, evil, predatory, and ravenous (p. 279).

Affective education is a major manifestation of the humanistic movement in education. The term may be found loosely used in the literature to cover a spectrum of activities that range from the incidental learnings of conventional instruction to the peak experiences and encounters of Gestalt psychology. Its most credible usage, however, links it with the well-known Taxonomy of Objectives in the Affective Domain (Krathwohl, Bloom, & Masia, 1964).

## Impact of the Taxonomy of Objectives in the Affective Domain

The term "affective education" was popularized by Krathwohl, Bloom, and Masia in the second of three taxonomies of educational objectives. The wide influence and acceptance of the first taxonomy for the cognitive domain gave viability also the affective domain as being a natural and proper realm of educational objectives.

Unlike the cognitive domain, or the subsequent taxonomy for the physical-motor domain, the objectives of the affective domain were difficult to specify. In introducing their work, the authors attested to their reservations as to the success of their classification task, pointing to the lack at that time of evaluation techniques in the affective area. In contrast to the immediacy of outcomes in cognitive learning, affective objectives can

often be attained only in slow and complex ways, difficult to assess.

In spite of these obstacles to defining and classifying objectives in the affective domain, Krathwohl, Bloom, and Masia derived a hierarchically ordered taxonomy of five levels: (a) Receiving, (b) Responding, (c) Valuing, (d) Organizing, and (e) Characterization. Each level contained a set of behavioral descriptors to provide an operational definition of the terms: attitudes, values, and interests.

The taxonomy generated interest and productive inquiry in the affective area. It provided a mechanism for curriculum development, assessment, and research. The taxonomy, however, while influential in its way, did not have the far-reaching impact of the earlier volume on the cognitive domain, perhaps because its rigorous logical analysis was not germane to the more "romantic" style of many humanistic educators.

The lasting importance of the taxonomy lies in its power to mediate between the technological and humanistic schools in forging a curricular amalgam which is open to wider acceptance. As the authors noted more than once, it is not possible in reality to separate cognitive and affective aspects of learning behavior. There is a long tradition of philosophical opinion which denies dualism between thought and feeling. The aim of the

taxonomy is purely to simplify analysis, and while humanists might place greater value on synthesis than analysis, the fact that behavioral objectives can now more readily be written for the affective domain is a vital key to their implementation in the climate of accountability in today's schools.

## Progress in Adoption of Affective Education Programs

Books and articles on the merits and methods of affective education are appearing in increasing volume (Aspy, 1972; Valett, 1974; Weinstein & Fantini, 1970). There is now available a variety of teaching aids and materials, such as the DUSO (Developing Understanding of Self and Others) multimedia kit from American Guidance Service; or the Inside/Out series of thirty films dealing with social-emotional themes, produced by the National Instructional Television Center. Efforts have been made to specify performance objectives for affective instruction in various content areas (Eiss & Harbeck, 1969; Glass, 1971). Demonstration projects have been funded to implement programs in the schools (Wight, Doxsey, & Mathiesen, 1974). Training programs in humanistic education draw a wide audience, as do the workshops in values clarification (Simon & Kirschenbaum, 1972) sponsored by the National Humanistic Education Center.

In all of this activity, however, there is little in the way of organized, sequenced curricula with planned objectives and evaluation methods. Valett (1974) claims that while programs have been designed to teach selected social and affective objectives, even these are markedly few in number. After an intensive survey of American schools, John Goodlad (1969) observed that traditional educational practices were still the norm in most schools, and there was little consideration of individual needs, attainments, or interests of pupils. In a later report Goodlad (1974) noted that the school system lacks an effective mechanism for adopting new models for educational practices. He also commented that, from his observations, "teachers appeared to be bound to a common conception of what school is and should be" (p. 98). Further corroboration of the dearth of humanistic goals in American classrooms came from a three and a half year study by Charles Silberman (1970), supported by the Carnegie Foundation. Silberman visited more than a hundred schools, and concluded that even the best schools were so concerned about order and discipline that real education was lacking.

Bernier and Williams (1973) also characterized the educational system in the United States as having "an uncanny degree of uniformity" (p. 11). They felt that this homogeneity, as well as the resistance to change of

programs based on outmoded ideological assumptions, inflates educational concerns into major social issues.

## Problems in the Implementation of Affective Education

Complex social dynamics underlie the confusion and hesitancy of the educational system about the development of affective programs. The slowness of an elaborate social institution to effect innovations is well known. The behavior of the individual teacher is subject to the constraints of his particular system, and to those of the larger community. As Krathwohl et al. point out:

> While the psychologist and the philosopher may have views on what is desirable and even necessary in the affective domain, there is still the question of what affective objectives society will permit and even encourage. Our own society has fluctuated as to the affective objectives it will permit the school to develop. Political and social forces are constantly at work, pressing the schools for some affective objectives and just as constantly placing restrictions on the school with regard to others. The play of these forces has, in many instances, made teachers and school administrators wary of expressing these objectives and all too frequently has led school staffs to retreat to the somewhat less dangerous cognitive domain (1964, p. 90).

Anthropologist George Spindler (1955, p. 151) diagramed the position of school and community groups on a continuum of transforming values (Figure 1). He placed school boards nearest the traditional end of the continuum as usually representing the status-quo elements of the community; the general public and parent group next

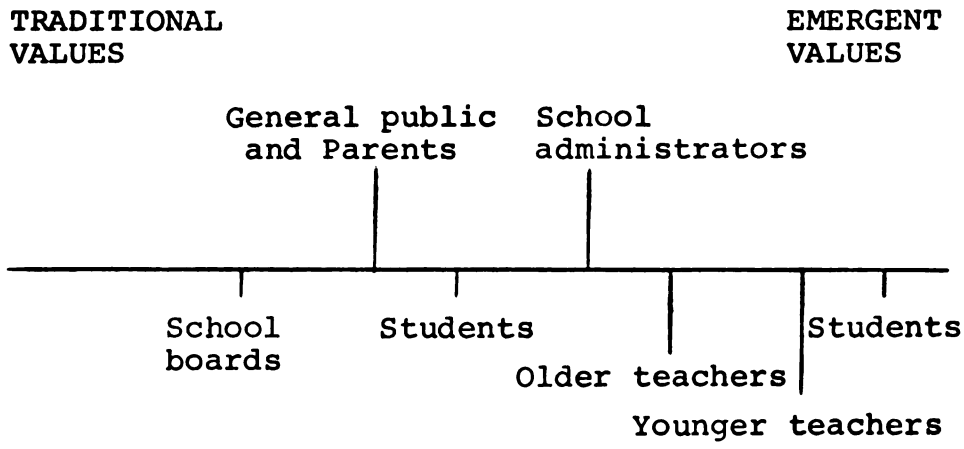


Figure 1. Spindler's continuum of values.

because they tend to be more conservative than educators; then school administrators, older, and younger teachers toward the emergent end of the transformation line; and students at two points to indicate adherence to family values which may be traditional or emergent.

An additional impediment to affective education recognized by Krathwohl et al. is the fact that beliefs and values are commonly regarded as private and personal matters, and that "this public-private status of cognitive vs. affective behaviors is deeply rooted in the Judaeo-Christian religion and is a value highly cherished in the democratic traditions of the Western world" (p. 18).

A further dilemma lies in differing ideological conceptions about freedom and the relationship between education and indoctrination in a democratic nation. The overt or covert instilling of particular beliefs or

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values and the elimination of alternatives is seen as being indoctrination, and therefore subversive of democratic principles. With the racial, cultural, and religious diversity of American society, the imparting of values in school, just as the saying of prayers, has become a controversial activity. To Krathwohl and his associates, "education has come to mean an almost solely cognitive examination of issues," while "indoctrination has come to mean the teaching of affective as well as cognitive behavior" (p. 18). Ideological attacks frequently result; as Spindler observed:

> The traditionalist views the emergentist as "socialistic," "communistic," "spineless and weak-headed," or downright "immoral." The emergentist regards the traditionalist as "hidebound," "reactionary," "selfish," or "neurotically compulsive" (p. 150).

There is another major source of conflicting attitudes toward affective education. The dimensions of affect which lend a negative valence to concepts of feeling are those unpleasant, powerful, and frightening emotions of anger, rage, sorrow, depression, guilt, and shame. Our society retains mythical fears that are still quite prevalent: that thoughts expressed will get out of control, that saying the wrong thing to an emotionally troubled person might cause him to have a "nervous breakdown," that strong men don't cry, that "crazy" people are to be held in superstitious awe. In the face of these

unexamined fears, defenses of repression and denial are invoked by society, so that a taboo is set up that generalizes to all affective matters.

Educators themselves are influenced by this cultural heritage:

> In the field of education, emotions are like the weather; everybody talks about them, but nobody does anything about them. Our culture does not approve of emotions. Not many years ago the prevalent attitude, and it still has influence, was that the emotions are part of our animal nature, and must be overcome if one is to be civilized. Education was seen as the process by which the intelligence could be developed and, thereby, "control" the emotions. With the introduction of Freud's ideas to this country in the early part of the century, those segments of psychology concerned with mental health and therapy have abandoned such notions and have come to embrace the belief that emotional development, including the appropriate expression of emotions, is the key to effective human functioning.
>
> Educators have been slower to accept these ideas . . . . It seems reasonable, at the very least, that every teacher should understand some of the basic facts about emotions and that each has developed some skills at helping children express and understand their feelings (Beatty, 1965, p. 519).

Many teachers, however, have had little experience in the objective understanding of their own feelings. In discussions with a group of prospective teachers, Llewellyn and Cahoon (1965) found that "the majority expressed a lack of confidence in their ability to explore their feelings and distrusted their capacity for coping with the honest expressions of pupils" (p. 472). In other subject areas, teachers are certified on the basis

of their mastery of content and methods, but in the affective area there is little in the way of teacher preparation or in-service education. According to Goodlad (1969):

> It should come as no surprise, then, that comprehensive experiments in schooling are the rarest of all educational phenomena. Small wonder that teachers practice so little individualizing instruction, inductive teaching, non-grading, team teaching, or other recently recommended practices. They have not seen them. If teachers are to change, they must see models of what they are to change to; they must practice under guidance the new behaviors called for in the exemplary models. If teachers are to change, the occupation itself must have built into it the necessary provisions for self-renewal. The creation of these conditions is an important agenda item for the decade ahead (p. 61).

## Theories of Affective Development

The development of teaching strategies to promote the attainment of affective objectives hinges on an understanding of such questions as how do affective behaviors emerge in developmental sequence; are there stages in their appearance; what kinds of learning experiences lead to the acquisition of appropriate affective behaviors; and within what limits can this acquisition be accelerated?

At the present time education lacks a sound theory that will answer such questions. In the absence of a clear and accepted theory of affective development, educational programming is pursued on an empirical basis of

"whatever works" in intuitive or trial-and-error approaches. The result is further confusion about which objectives and methods are appropriate for school purposes.

There are two approaches to theorizing about the development of affect. One is the "illness" model which is carried over from the discipline of psychoanalysis, and owes much to the work of Freud and Erickson in pinpointing critical stages at which the child must undergo the stress of adapting to new life demands resulting from the emergence of new physical capacities. It is a model which has little heuristic value for educational formulations. One of the stumbling blocks for some educators is their confusion of affective education with psychotherapy, which will always be an issue if curriculum is based on theories and practices derived from the treatment of mental illness.

A more positivistic model is displayed in the work of Jean Piaget in his theoretical studies of the mental development of the child. Pointing out that "affectivity and intelligence are indissociable and constitute the two complementary aspects of all human behavior," Piaget (1968) describes the evolution of affectivity in early life as "corresponding fairly closely to the evolution of motor and cognitive functions" (p. 15).

The most important effort to expand Piaget's formulations in the area of affective behavior is the research by Lawrence Kohlberg on the development of moral judgment. His observations have led him to postulate a hierarchical sequence of stages and levels of moral development with definite implications for character education:

> Level I: Premoral
>
> Stage 1. Obedience and punishment orientation. Egocentric deference to superior power or prestige, or a trouble-avoiding set. Objective responsibility.
>
> Stage 2. Naively egoistic orientation. Right action is that instrumentally satisfying the self's needs and occasionally other's. Awareness of relativism of value to each actor's needs and perspective. Naive egalitarianism and orientation to exchange and reciprocity.
>
> Level II: Conventional Role Conformity
>
> Stage 3. Good-boy orientation. Orientation to approval and to pleasing and helping others. Conformity to stereotypical images of majority or natural role behavior, and judgment of intentions.
>
> Stage 4. Authority and social-order-maintaining orientation. Orientation to "doing duty" and to showing respect for authority and maintaining the given social order for its own sake. Regard for earned expectations of others.
>
> Level III: Self-Accepted Moral Principles
>
> Stage 5. Contractual legalistic orientation. Recognition of an arbitrary element or starting point in rules or expectations for the sake of agreement. Duty defined in terms of contract, general avoidance of violation of the will or rights of others, and majority will and welfare.
>
> Stage 6. Conscience or principle orientation. Orientation not only to actually ordained social rules but to principles of choice involving appeal to logical universality and consistency. Orientation to conscience as a directing agent and to mutual respect and trust (Kohlberg, 1966, p. 7).

Kohlberg's research has shown that the stages must be mastered in sequence; it is not possible for a child to

"skip" a stage, although he may become "fixated" at any stage, and all adults do not reach the highest level of moral behavior. These findings were verified in cross-cultural studies (Kohlberg, 1966). Even more important for education is the finding that it may be possible to stimulate the development of moral values in school by focusing on issues of real moral conflict to the students, introjecting new cognitive elements, and gearing communication about the issue at the next highest stage or at the same stage of moral development as that of the students.

To generate appropriate instructional goals and methods for affective education requires systematic longitudinal and cross-cultural studies on the nature and acquisition of affective behavior in the young child. At present the necessary body of empirical research is partial and incomplete. The dilemma for affective education is posed succinctly by Brandes (1973):

> One can only really teach that which is teachable. A position which I subscribe to is that to be teachable, a behavior must be capable of being analyzed into a specific hierarchy of skills. Because this feat is difficult or impossible for many affective goals, we end up with programs in which there is little relationship between the content of the program and the statement of program goals (p. 2).

## Summary

It is frequently and correctly argued that affect and cognition are integral to the behavior of the learner

and neither can exist independent of the other. Yet the question stands, whether to emphasize the affective component of any learning experience or to leave it as part of the "hidden curriculum," to specify it as a desired outcome or to relegate it to incidental learning.

Attitudes of educators and the general public toward affective education are mixed. The abstract and emotionally laden concepts involved lend to controversial positions in terms of political and religious ideology. There is confusion as to the ultimate goals and purposes of such a curriculum, and the lack of clear objectives makes evaluation difficult. The absence of a cogent theory of affective development leads to uncertainty about appropriate teaching methods and procedures. Without a background of comparable experiences, and with minimal training and supervision, teachers doubt their competence to deal with students' responses to an affective curriculum. Educators must be able to resolve these issues if there is to be, as Weinstein and Fantini (1970) advocate, a curriculum "soundly constructed, effectively taught, properly sequenced, and carefully evaluated" (p. 219).

# CHAPTER III

# THE MEASUREMENT OF EDUCATIONAL ATTITUDES: BACKGROUND OF THEORY AND RESEARCH

The concept of attitude as a psychological construct was adopted from common usage to refer to an individual's psychomotor set or orientation in reaction to a stimulus preliminary to making a response. The term came to refer to a mental process, a hypothetical construct operating as an intervening variable between perception of a situation and behavior in the situation. Attitudes are complex evaluative responses to social objects or issues. They are dynamic states which incorporate cognitive, affective, and behavioral components.

## The Study of Attitudes

Beginning in the 1920s, investigators have been concerned with the development of valid methods for measuring attitudes. At first, the main focus was on the degree to which particular beliefs were expressed by different groups. Much of the later work has concentrated on the development of theoretical models of attitude structure to explain the formation and change of attitudes (Cohen, 1964).

A major problem in attitude research has been the difficulty of measuring such dynamic and qualitative aspects of behavior. Since attitudinal responses are usually verbal, and most easily operationalized in verbal form, most measures depend on paper and pencil, self-report techniques. Thurstone, Likert, and Guttman receive major credit for the development of methodologies for the measurement of attitudes (Ostrom, 1968).

## Attitude Scaling Methods

Attitude assessment has taken various forms, as different researchers concentrated on creating measurement devices to correspond with particular theoretical models of attitude structure.

### Social Distance Scales

In 1925 Bogardus devised a social distance scale which has usually been applied in the study of prejudice. Respondents are asked to which of a range of social situations they would admit various ethnic groups. While this type of scale permits the ordering of individuals or groups with regard to ethnic attitudes, the scale has been criticized for its questionable linearity and the inequality of its distance intervals (Oppenheim, 1966). The type of attitude object for which such a scale can be created is also limited.

## Thurstone Scales

The technique of equal-appearing intervals was used by Thurstone (1929) for the weighting of items in a scale. In this method, judges are asked to grade items along an eleven-point continuum from "most favorable" to "least favorable" toward the attitude object. The intervals between the categories are regarded as subjectively equal. Items are then given weights according to their median values using all the judges' ratings. On the scale constructed, respondents are asked to check only those items to which they agree or disagree.

Thurstone scales are regarded as vulnerable to the biases of the judges selected, and it is necessary to use judges who are similar to the subjects to be used in the research sample (Oppenheim, 1966). The scales are laborious to construct and score. The final score that a person receives could represent several attitude patterns.

## Likert Scales

Scales constructed by the Likert technique are common in attitude research because of the comparative ease with which they can be constructed and scored. A pool of items, both favorable and unfavorable toward the attitude object, is constructed. Subjects are asked to mark their response to each item on an attitude continuum running from "strongly agree" to "strongly disagree."

Usually five categories of agreement are used, though some researchers have varied from this. The five positions are given simple weights of 5 (for "strongly agree"), 4, 3, 2, and 1 (for "strongly disagree"). Items which express negative attitudes are scored in the reverse direction. Pre-testing and item analysis are used to identify the best items for the scale. An individual's score on the scale is the sum of his weighted responses to each item.

Again, the Likert scale can be faulted in that a total score does not indicate the pattern of responses by which it was achieved. The data are ordinal, and can tell us only about the ranking of respondents, and nothing about the intervals between them.

## Factorial Scales

Researchers have sought ways to ensure that items in an attitude scale were unidimensional, each tapping the postulated construct, with no unrelated items included. Factor analysis, based on intercorrelations of all items with one another, permits the researcher to abstract one or more unidimensional factors that sets of items have in common. The procedure has been applied to attitude scaling, notably by Eysenck (1954) in the study of political attitudes. Factor analysis can be used to select items with a high loading on the attribute to be measured, or to analyze an attitude complex into several

independent factors. When applied to a battery of scales given to the same respondents, it can reveal an underlying attitudinal structure (Oppenheim, 1966). The method of factor analysis is a search for the "simple structure" of a trait configuration in terms of the concept of hierarchical order or proportionality in a correlation matrix.

Guttman (1953) has criticized factor analysis as being designed only for quantitative variables and thus unsuited for qualitative data. Factor analysis is a linear statistical model, and Guttman finds it inappropriate for analyzing the non-linear structure of an attitude complex.

## Guttman Unidimensional Scalogram Analysis

The techniques of scalogram analysis hinge upon the concepts of unidimensionality and reproducibility. Unlike the previous theories which presupposed a latent or underlying continuum to which an item was related, Guttman's theory of attitude scaling requires that the continuum should be obtainable in terms of the ordering of scores in empirical data. He considered an attitude area to be scalable if responses to a set of items formally derived in that area arranged themselves in a predicted way. The items in a Guttman scale are so ordered that, theoretically, all subjects who give a

positive response to a given item would also respond positively to the preceding items, and would consequently have a higher ranking on the scale than persons who gave a negative response. Given a particular subject's rank or scale score, it should then be possible to reproduce the entire pattern of his responses to the scale. The items of a Guttman scale must be cumulative: that is, it must be possible for a person to endorse all items up to a certain position on the scale, representing his attitude level on that issue, and reject all succeeding items. Table 1 illustrates a perfect Guttman scale.

Table 1

A Perfect Guttman Scale

| Subjects | Items | | | | | Scores |
|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | |
| 1 | 1 | 1 | 1 | 1 | 1 | 5 |
| 2 | 1 | 1 | 1 | 1 | 0 | 4 |
| 3 | 1 | 1 | 1 | 0 | 0 | 3 |
| 4 | 1 | 1 | 0 | 0 | 0 | 2 |
| 5 | 1 | 0 | 0 | 0 | 0 | 1 |
| 6 | 0 | 0 | 0 | 0 | 0 | 0 |
| Sum | 5 | 4 | 3 | 2 | 1 | |

NOTE: Items are dichotomous where 1 is a favorable response and 0 is an unfavorable response.

According to Guttman (1944), perfect scales from which a person's response pattern can be reproduced exactly are not to be expected in practice. The deviation from perfection is measured by the coefficient of reproducibility (Rep), which is represented statistically by the formula (Suchman, 1950):

$$\text{Rep} = 1 - \frac{\text{number of errors}}{\text{number of questions} \times \text{number of respondents}}$$

Guttman considers a value for Rep of .90 or better to indicate that the attitude area is indeed scalable and unidimensional.

Scalogram analysis has produced some short, yet highly effective, scales and is considered to be especially useful in examining small changes in attitude (Oppenheim, 1966). However, this earlier work was but the theoretical beginning for Guttman's later developments in multidimensional scaling, out of which emerged the techniques of facet design and analysis which provide the framework for this study.

## Facet Theory of Intergroup Attitude-Behavior

The multidimensional technique of facet design and analysis provides "a tool for the organization of ideas" (Foskett, 1963, p. 111) in order to derive a theoretical model for the structure of intergroup attitudes. As opposed to other attitude scaling methodologies, it

puts emphasis on a rigorous qualitative analysis of behavior in the attitude domain being studied. This is consistent with Guttman's (1959) belief that "proceeding from a semantic structure to a statistical structure appears necessary in order to relate abstract social theory to empirical research" (p. 319).

An attitude is defined by Guttman (1950a) as "a delimited totality of behavior with respect to something" (p. 51). A "universe" of attributes or elements can be postulated to describe all aspects of the attitude area. These elements generate the basic items of the scale, and can be clustered into sets or "facets" of related elements. It is not necessary to write an item to tap every conceivable attribute, but to include a representative sampling of the most relevant aspects. According to Guttman (1944), a sample of attributes can be used to draw inferences about the universe of attributes.

This systematic, rational approach to item generation is one of the valuable products of the facet methodology:

> The facet approach in test construction makes it possible to arrive at items by a systematic a priori design, instead of the usual process of designing test items which is largely based on intuition and on subsequently weeding out inappropriate items by means of statistical analysis of test results (Guttman & Schlesinger, 1967, p. 3).

In analyzing the components of intergroup attitudes, Guttman discovered that there are two logical dimensions that express relationships among facets. One dimension clarifies the interaction between the subject and the object of the attitude-behavior with respect to any given characteristic of the object group. Guttman's term for this dimension is "joint struction." The joint struction provides a universal statement about the relationship among common facets of attitude-behavior.

A second dimension is situation and/or object specific rather than universal. It connects the facets which depict the characteristics of the object group toward which the attitude-behavior of the subject may be directed. This has been termed by Guttman "lateral struction." For the purposes of item construction for an attitude-behavior scale, the lateral struction yields the item content, which varies from item to item; the joint struction produces the item structure, which is held constant for any given level of the scale. This structioning of the universe of attributes of the attitude area into joint and lateral components provides a multidimensional model of attitude-behavior, a model which has recently been empirically obtained by Bedwell (1977).

## Guttman's Four-Level Theory

The significance of the concept of joint struction of attitude universes emerged from Guttman's (1959)

analysis of the research on stereotypes, norms, and interracial behavior reported by Bastide and van den Berghe (1957). He identified three necessary facets involved in any intergroup attitude item: the subject's behavior (belief or overt action), the referent for this behavior (the subject's group or the subject himself), and the referent's intergroup behavior (comparative or interactive). The semantic structure thus described is shown in Table 2. Guttman designated the first of the two elements of each of these facets as the "weaker" element (subscript 1), and the second as the "stronger" element (subscript 2). A given item would be only as strong as the number of strong (subscript 2) elements it contained.

Table 2

Three Facets and Their Corresponding Elements Contained in the Joint Struction of an Attitude Universe

| (A) Subject's Behavior | (B) Referent | (C) Referent's Intergroup Behavior |
|---|---|---|
| $a_1$ belief | $b_1$ subject's group | $c_1$ comparative |
| $a_2$ overt action | $b_2$ subject himself | $c_2$ interactive |

From this formulation it followed that an individual item could have a total of four possible combinations of weak and strong elements: none, one, two, three, or four strong elements, combined with four, three, two, one, or no weak elements, respectively. Guttman therefore postulated that if the elements are correctly ordered within facets, and facets correctly ordered with respect to each other, a semantic analysis of attitude items according to n dichotomous facets would reveal N+1 types or levels of attitude items. There is an inherent order (simplex structure) in which each level has one more strong facet than the preceding one.

Since facets are sets of related elements, the number of possible combinations or orderings or these elements is given by the mathematics of set theory. In this case, three facets with two elements apiece will yield $2 \times 2 \times 2$ or eight combinations: (1) $a_1b_1c_1$, (2) $a_1b_1c_2$, . . . (8) $a_2b_2c_2$. Guttman used the term "semantic profile" for a combination of elements so formed. Of the eight possible profiles of elements for a joint struction with three facets and two elements in each facet, there is only one set of all-weak elements, three sets with one strong element, three with two strong elements, and one with all-strong elements. That is, there are four levels with five possible "semantic paths" along which elements can successively change from weak to strong. The semantic

path or sequence of four sets, one from each level, that is chosen for the formulation of item wording is the one that makes the best logical sense.

Based on Bastide and van den Berghe's analysis, Guttman defined the following levels of content in interracial attitude-behavior:

1. Stereotype: Belief of a (white subject) that his own group (excels--does not excel) in comparison with Negroes on (desirable traits).
2. Norm: Belief of (a white subject) that his own group (ought--ought not) interact with Negroes in (social ways).
3. Hypothetical Interaction: Belief of (a white subject) that he himself (will--will not) interact with Negroes in (social ways).
4. Personal Interaction: Overt action of (a white subject) himself (to--not to) interact with Negroes in (social ways) (1959, p. 319).

The profile elements for the four levels of attitude items described by Guttman are given in Table 3.

Table 3

Profile Elements and Descriptive Terms for Four Levels of Attitude Struction

| Level | Profile | Descriptive Term |
|---|---|---|
| 1 | $a_1b_1c_1$ | Stereotype |
| 2 | $a_1b_1c_2$ | Norm |
| 3 | $a_1b_2c_2$ | Hypothetical interaction |
| 4 | $a_2b_2c_2$ | Personal interaction |

## Jordan's Six-Level Adaptation of Guttman's Facet Theory

Jordan (1971) expanded Guttman's three-facet, four-level model for the joint struction of intergroup attitude-behaviors by adding two facets to the paradigm so as to further qualify the relationship between the referent and the object of the attitude-behavior (Table 4). In effect, Jordan incorporated affective and conative elements to enhance the descriptive power of the model.

Table 4

Jordan Facets Used to Determine Joint Struction[1] of an Attitude Universe

| (A) Referent | (B) Referent Behavior | (C) Actor | (D) Actor's Intergroup Behavior | (E) Domain of Actor's Behavior |
|---|---|---|---|---|
| $a_1$ others | $b_1$ belief | $c_1$ others | $d_1$ comparison | $e_1$ hypothetical |
| $a_2$ self (I) | $b_2$ experience (overt behavior) | $c_2$ self (mine/my) | $d_2$ interaction | $e_2$ operational |

The impact of the two additional facets is to expand the levels for scale development from four to six, with the addition of two levels at the stronger end of the continuum, namely, Personal Feeling and Personal Action (Table 5). These levels add to the multidimensionality of the scale, and expand its domain into the realms of

Table 5

Profile Elements and Descriptive Terms for Jordan's Six-Level Joint Struction of an Attitude Universe

| Level | Profile[a] | Descriptive Term |
|---|---|---|
| 1 | $a_1\ b_1\ c_1\ d_1\ e_1$ | Societal stereotype |
| 2 | $a_1\ b_1\ c_1\ d_2\ e_1$ | Societal norm |
| 3 | $a_2\ b_1\ c_1\ d_2\ e_1$ | Personal moral evaluation |
| 4 | $a_2\ b_1\ c_2\ d_2\ e_1$ | Personal hypothetical action |
| 5 | $a_2\ b_2\ c_2\ d_2\ e_1$ | Personal feeling |
| 6 | $a_2\ b_2\ c_2\ d_2\ e_2$ | Personal action |

feeling and action, which focus more closely on issues of attitude-behavior prediction and change. Jordan and his associates have empirically tested the expanded model in terms of its applicability to the investigation of such intergroup attitudes as those toward the retarded (Jordan, 1970), the physically disabled (Down, 1974), the deaf (Poulos, 1970), drug abusers (Kaple, 1972; Nicholson, 1972), racial-ethnic groups (Brodwin, 1973; Hamersma, 1969), and women (Jordan, 1975). The same model, without adaptation, has been employed in the assessment of attitudes toward abstract concepts such as technical education (Jordan, 1975), educational change (Jordan, 1975), and open education (Bryant, 1975).

## Scale Development

The procedure of facet analysis enables the researcher to explicate the lateral struction of the attitude content, as well as the joint struction of the attitude-behavior which gives the requisite number of levels in the scale and the formulation of item wording in each level. Guttman (1959) expresses the relationship among the facets so derived by means of a "mapping sentence," and states that "lack of theoretical clarity as to the specification of the facets of the mapping may be the situation that often impedes the connection between abstract theory and empirical work" (p. 323).

An illustration of a mapping sentence for intergroup attitudes is given in Figure 2.

In order to attach a weighted intensity score to each item, responses are marked on a four-point continuum ranging from strongly agree to strongly disagree. Pretesting and item analysis are used to identify the most reliable items for inclusion in the final scale.

## Simplex Approximation Test

When items are written to correspond to each of the prescribed level definitions, then levels on the scale that are closer to each other should be more similar, and therefore scores for these levels should correlate more highly than scores for levels that are more

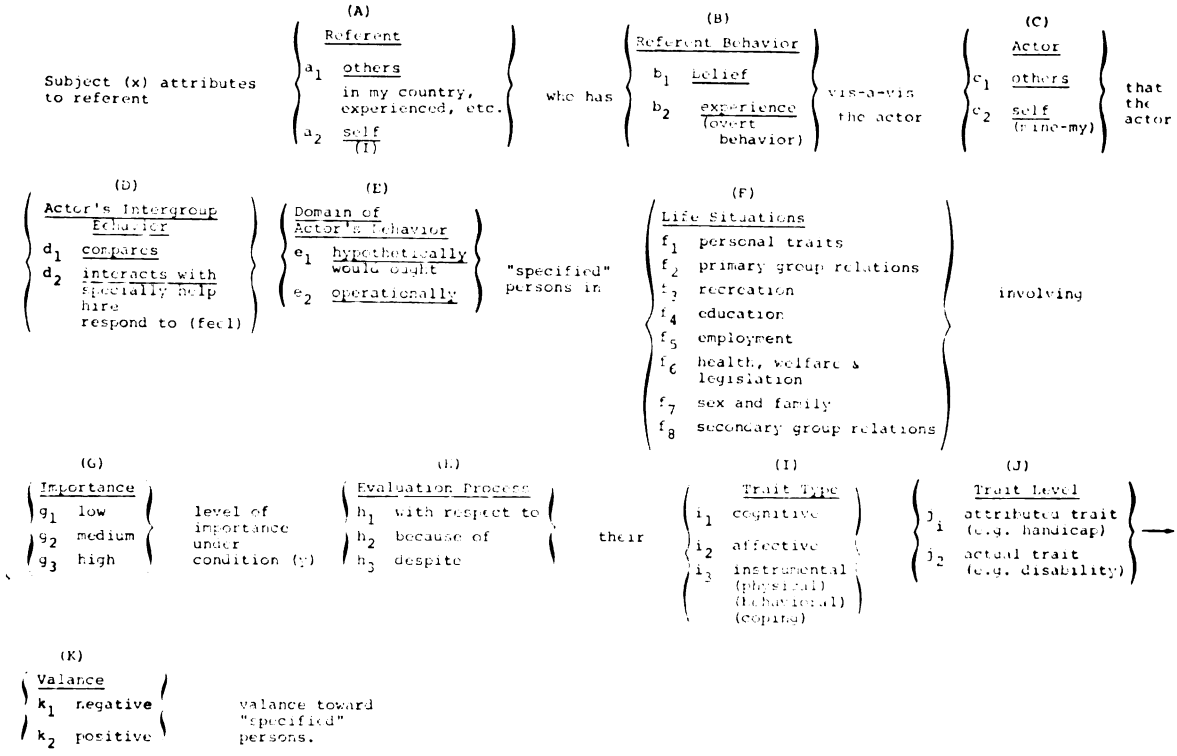


Figure 2.--A mapping sentence for the facet analysis of joint[a] and lateral[b] struction of attitudes toward specified[c] persons.

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[a]Facets A through E denote Joint Struction or level.

[b]Facets F through J denote attitude content or Lateral Struction.

[c]Any person or social group such as aged, blind, alcoholic, drug user, Negro, national, or ethnic group may be substituted for "specified" persons.

distant. Guttman and Schlesinger (1966) term this the "principle of contiguity," and require that items which are close semantically should be close statistically. It can be deduced from this that correlations between two levels should decrease the more steps there are between them. This provides a theoretical basis for predicting the structure of an intercorrelation matrix among empirical scores on the levels of a facet-designed scale.

A correlation matrix which exhibits the relationship predicted by the contiguity hypothesis is called a "simplex." Guttman (1954) defines a simplex as "sets of scores that have an implicit order from 'least complex' to 'most complex'" (p. 400). It is not necessary to predict the magnitude of the correlations, merely the order of increments. Table 6 illustrates a hypothetical matrix with a simplex structure (Hamersma, 1969, p. 73).

A simplex is characterized by (a) ascending correlations starting from the zero point at the intersection of the coordinates, and (b) closer correlations between adjacent levels than between levels further removed.

A statistical procedure to evaluate the goodness of fit of an empirically derived matrix to the hypothesized "best-ordered" matrix was given by Kaiser (1962). Kaiser's technique involves the sorting and rearranging of all adjacent pairs of correlation coefficients so as to generate the best possible simplex approximation, and

Table 6

Hypothetical Matrix of Level-by-Level Correlations Illustrating the Simplex Structure

| Level | 1 | 2 | 3 | 4 |
|---|---|---|---|---|
| 1 | -- | | | |
| 2 | .60 | -- | | |
| 3 | .50 | .60 | -- | |
| 4 | .40 | .50 | .60 | -- |

NOTE: One does not attempt to predict the magnitude of each correlation coefficient. The simplex requirements do not necessitate either identical mathematical differences among various correlations or identical correlations between sets or adjacent levels; so that the bottom row of the matrix reading from left to right could contain such figures as .10, .32, and .49.

assigning the descriptive statistic, $\underline{Q}^2$ to the original and rearranged matrices. The value of $\underline{Q}^2$ can range from 0.00 to 1.00. Jordan and his co-workers (Hamersma, 1969) have empirically tested the $\underline{Q}^2$ statistic by applying it to matrices of artificial data. Their conclusion was that a value of .70 or better is required to accept a 6 × 6 matrix as approximating a simplex.

The attainment of a simplex in the empirical data can be taken as evidence for the construct validity of the scale. It is confirmation that the items were operating as designed, and that the facets employed were "necessary if not sufficient" to define the intergroup attitude.

In assessing the contribution of Guttman's facet analysis to the field of attitude scaling, Jordan (1971) has commented that

> . . . the Guttman structural facet theory approach (a) to the definition of a research problem, (b) the selection of the variables for study, and (c) the structioning of relationships between the dependent and independent variables--is necessary if one is to do research on attitudes that is both socially relevant and methodologically rigorous (p. 6).

## Scales to Measure Attitudes Toward Education

In spite of the popularity of the attitude scale as a research instument, and the furor of public opinion over educational policy, very little methodologically rigorous work has been done in the area of attitudes toward education. Only a handful of related studies were located through an ERIC search of the literature since July, 1964, using the descriptors "teacher attitudes," "affective behavior," and "affective objectives." Most of these used the concept of "attitudes" very loosely as opinion statements, or were directed toward narrow school issues, or to subject matter areas such as elementary school science or social studies courses. Other sources of information were surveyed, including Scales for the Measurement of Attitudes (Shaw & Wright, 1967) and A Sourcebook for Mental Health Measures (Comrey et al., 1973). No scales were found for the assessment of

attitudes toward affective education per se. Of the studies reviewed, only a half-dozen scales were judged to be significant contributions to the field of educational attitudes in general.

The earliest attempt to define educational attitudes was made by Peterson (1933), who developed a self-report scale of 79 items, divided a priori into seven areas of content to represent controversial educational issues of the day. The instrument was used in a survey of staff members from 25 teacher training institutions. The scale was able to differentiate liberal and conservative thinking, which, in a broad sense, parallels progressivism and traditionalism in education. Younger staff, those with higher degrees, and those who had recently taken courses in the general theory of education tended to cluster at the progressive end of the continuum. The most highly controversial issues were those dealing with aspects of freedom and change, that is, with dynamic concepts. Peterson found that his subjects were inconsistent in their ideological stance, endorsing both liberal and conservative statements. He concluded that the two viewpoints were not antithetical.

In 1952, two decades later, Cook, Leeds, and Callis published the Minnesota Teacher Attitude Inventory, a scale designed to measure the kind of classroom atmosphere a teacher candidate was likely to maintain.

Although the dimensions underlying the 150 multiple choice items are not known, the content of the items on inspection appears to be drawn from the progressivism/ traditionalism debate. This is the only standardized teacher attitude inventory available on the market. Oliver and Butcher (1962) have criticized it because the desired responses are easy to guess, and therefore a high score can be faked.

Lindgren and Patton in 1958 constructed a 50-item Opinionnaire on Attitudes toward Education. The Likert-type items assessed attitudes toward child-centered policies in three areas: understanding the behavior of students in terms of motivation, controlling behavior by authoritarian methods, and emphasizing the learner rather than what is learned. The scale is thus heavily oriented toward progressive issues in education. High scores were found to be correlated with subjects' age, sex, and amount of education.

The most systematic attempt to develop a theoretical model of attitudes toward education was that of Kerlinger and Kaya (1959) whose work is reviewed by Jordan (1968). They first used Q-methodology, asking subjects with known views on education to sort attitude statements into piles denoting varying degrees of agreement or disagreement. This substantiated their hypothesis that educational attitudes were dichotomized in parallel

dimensions, permissive and restrictive. The most discriminating items were worked into a series of summated scales and administered to a sample of approximately 200 subjects. Factor analysis was used to demonstrate the existence of two factors, one a "permissive-progressive" dimension, the other a "restrictive-traditional" dimension. The ten progressive and ten traditional items which had the highest loadings were incorporated into the Education Scale.

Kerlinger and Kaya found the two factors to be independent of each other and related to professional training. This meant to them, in corroboration of Petersons's earlier findings, that a progressive position did not imply anti-traditionalism, nor did traditionalism ensure anti-progressivism. However, Shaw and Wright (1967) are of the opinion that "the scale is measuring a single continuum ranging from highly favorable to highly unfavorable attitudes toward progressive practices in education . . . .If so, considering each end of the continuum as a separate attitude may be misleading" (p. 84). They recommend the scale for research purposes only. In a similar vein, Oliver and Butcher (1962) note that Kerlinger and Kaya obtained a quite reliable difference score ("progressivism" minus "traditionalism"), and interpreted it as a measure of inconsistency in attitude,

which they feel is illogical if the factors are truly independent.

Oliver and Butcher themselves made an important attempt to place educational attitudes within a framework of social attitudes. This British study, reported in 1962, proposed the theory that educational attitudes are best represented by three dimensions: a bi-polar educational dimension (the N scale) and two social dimensions (the R and T scales). The content of the N or Naturalism scale is generally equivalent to what is called progressivism in the United States. The opposite pole of that scale measures Idealism, roughly equivalent to traditionalism. The R and T scales are drawn from Eysenck's (1954) factor analytic work on political attitudes, and represent Radicalism and Tendermindedness. A factor analysis of responses to the scale by a sample of 300 teachers confirmed the appearance of the three factors hypothesized and built into the items.

In recent years only one addition has been made to the literature of educational attitude scales. As part of a major study on the implementation of humanistic education programs, Wight (1974) and his colleagues had need for a measure that would discriminate between teachers who favored humanistic teaching and those who were more concerned with academic instruction. Accordingly, they devised the Teacher Attitude Questionnaire, oriented

toward teaching philosophy and practices, and perception of school climate. Items were drawn from a rating scale designed to distinguish open from traditional classroom practices. From this information, and from subscale titles which suggest the child-centered versus subject matter-centered dichotomy, it is apparent that this scale, also, falls into the progressivism/traditionalism category. The nine subscales were derived through analysis of responses of only 91 teachers from 19 different schools. Significant correlations were found between responses to certain items and demographic variables such as age, sex, amount of education, grade taught, and socioeconomic level of class.

It is of interest to report parenthetically a recent master's thesis at Cornell University (Bryant, 1975) which employed Guttman-Jordan facet theory analysis in the study of student attitudes toward open education. The paradigm for intergroup attitudes was used to derive the scale structure, although the attitude object in this case was an abstract concept rather than a social group. An 80-item attitude-behavior scale was constructed, with five facets (role of the teacher, methods of instruction, materials and activities, goals, and evaluation methods) and four levels (stereotypes, norms, hypothetical actions, and personal feelings about actions). The research population included 597 sixth and seventh grade

students in two junior high schools where open education was practiced. The simplex structure was ascertained statistically, showing that the area of student attitudes to open education is scalable through facet analysis.

## Summary

A review of the literature reveals no existing scales for the measurement of teachers' attitudes toward affective education. Six research instruments were identified whose purpose is to measure attitudes toward education in general. Each of these scales, either by intent or from the bias with which items were constructed or borrowed from other sources, focuses on the perennial progressivism versus traditionalism polarity. They contain built-in dichotomies of items. Some researchers suggest that these dimensions are independent, and sufficient to explain attitudes in the educational domain. Others detect evidence for inconsistency of the attitudes so measured, and invoke additional theoretical dimensions in an effort to explain the intercorrelations. Little light has been shed on the probable structure of educational attitudes.

Items in the scales reviewed are all opinion statements of an indefinite subject, and are lacking any behavioral component. Consequently, all the scales tap only the stereotypic level of attitudes. The wording of

items can also be faulted because of their variable format and complex structure, which leads to ambiguity. There is need for a multidimensional model of attitudes to spell out the semantic conditions within which items should be phrased. Item content should relate to systematic concepts of teaching practice and not to dichotomous philosophical concepts alone.

A review of the major theoretical approaches to attitude scaling indicates the heuristic value of the Guttman facet-theory methodology for the design and analysis of a scale for assessing teachers' attitudes toward affective education.

# CHAPTER IV

## INSTRUMENTATION AND PROCEDURES

Although some substantive hypotheses are tested in this study, the primary emphasis is methodological. The major thrust of the study is to develop a modification of Guttman facet theory for the study of attitudes toward affective education, and to apply it in the construction of an attitude-behavior scale as a self-report instrument for elementary school teachers.

The facet theory approach is chosen for this study because it provides a rationale for analysis of cognitive-affective-conative components, and is therefore most pertinent for attitude research, especially in the affective domain. It is a method which allows the systematic description and structuring of the attributes of the attitude-behavior complex. Once this qualitative model has been devised, the scale is derived from it by logical and semantic operations, and is then available for the quantitative analysis of the research problems.

An attitude is defined by Guttman (1950) as "a delimited totality of behavior with respect to something" (p. 51). A "universe" of attributes or elements can be

postulated as describing all aspects of the attitude area. A representative sampling of these elements generates the content and wording of the basic items of the scale. The elements can be clustered into sets or "facets" of related elements. The facets are then stratified in two dimensions: joint struction, which is a semantic analysis of universal behavioral components of attitude independent of item content, and lateral struction, which links facets dependent on the situation and content area of the study. A theoretical structure of the attitude area is then developed by means of the "mapping sentence," which specifies the logical relationships among the facets. By a further semantic analysis of the joint facet profiles delimited in the mapping sentence, attitude statements are derived and arrayed into levels of increasing strength of interpersonal interaction. A multidimensional scale can then be constructed by rephrasing the core item content in the terms of the attitude statement for each of the desired levels. Four response foils ranging from "strongly disagree" to "strongly agree" are attached to each item.

Guttman considers an attitude area to be scalable if responses to a set of items in that area arrange themselves in a predicted order. His "contiguity hypothesis" suggests that the more similar two levels of the attitude scale are in their facet structure, the more

highly they will correlate. Therefore the intercorrelations will form a hierarchical order or simplex. Kaiser's (1962) $Q^2$ statistic can be used to evaluate how closely a matrix of intercorrelations between level scores approximates a simplex. If the simplex structure is obtained in empirical data, it is validation that the attitude area is scalable and that the facets utilized were necessary components of that attitude domain.

In short, facet design and analysis permits the construction of a multilevel scale based on an a priori structural theory of belief and action, and the prediction of the statistical structure that will emerge in empirical data if the attitude area is indeed scalable.

## Modified Facet Analysis Used in This Study

The present study represents a modification in the statement of the joint struction to adapt to the situation under investigation. Previous studies using Guttman's paradigm and Jordan's elaboration of it have dealt with intergroup attitude-behaviors, in exploring attitudes toward drug abusers, Blacks, or the mentally retarded. In this study, however, the focus is on attitudes toward a concept, affective education. The object is to delimit the state or condition of affective education according to the beliefs and experiences of elementary teachers, from the perspective of their own

self-reference and of their reference group of teachers-in-general. This statement generates the facets and elements of Table 7.

Table 7

Three Facets and Their Corresponding Elements Contained in the Joint Struction of Attitude-Behavior Toward Affective Education

| (A) Referent | (B) Behavior | (C) State or Condition |
|---|---|---|
| $a_1$ subject's group | $b_1$ belief | $c_1$ imperative |
| $a_2$ subject himself | $b_2$ experience | $c_2$ indicative |

The joint struction for the study is further depicted in facets A, B, and C of the mapping sentence in Figure 3. These three facets are sufficient to form a semantically complete statement when combined with each of the attitude-behavior elements in turn from the lateral struction. Each facet in the joint struction is a set of related elements which vary in strength from low (subscript 1) to high (subscript 2). Thus a statement about <u>self</u> is stronger than one about <u>others</u>; <u>experience</u> is stronger than <u>belief</u>; and an indicative statement of what <u>is</u> is stronger than an imperative statement of what <u>ought to be</u>.

JOINT STRUCTION

| | (A) Referent | | (B) Referent Behavior | | (C) State or Condition |
|---|---|---|---|---|---|
| Subject (X) attributes to | $a_1$ others<br>elementary teachers in general<br>$a_2$ self | who has | $b_1$ belief<br>$b_2$ experience | that affective education has | $c_1$ imperative ought to be<br>$c_2$ indicative is |

LATERAL STRUCTION

| | (D) Curriculum Issues | | (E) Goals | | (F) Teaching Procedures |
|---|---|---|---|---|---|
| as specified by | $d_1$ recognized subject<br>$d_2$ specific time periods<br>$d_3$ integral part<br>$d_4$ sequenced for each grade | | $e_1$ clearly defined<br>$e_2$ motivation<br>$e_3$ personality development<br>$e_4$ improve society | | $f_1$ materials<br>$f_2$ techniques<br>$f_3$ performance objectives<br>$f_4$ teacher a facilitator |

| (G) Competency Issues | (H) Participation Issues | | (I) Support from System |
|---|---|---|---|
| $g_1$ supervision<br>$g_2$ competence<br>$g_3$ training<br>$g_4$ self-awareness | $h_1$ appropriateness<br>$h_2$ recognition<br>$h_3$ benefits<br>$h_4$ enjoyment | and | $i_1$ State Department of Education<br>$i_2$ school board<br>$i_3$ administration<br>$i_4$ parents |

Figure 3. Mapping sentence for the facet analysis of joint and lateral dimensions of attitude-behaviors toward affective education.

The lateral struction links the facets or sets of elements specifying the content of the attitude domain. Following Guttman's recommendations (Summers, 1970), informal experience and consensus were used to identify the attributes of affective education to be incorporated into the items of the scale. A large number of attributes were recorded during a search of the literature on affective education, from previous scales of attitudes toward education, from analysis of a taped presentation by David Groves, coordinator of the Focus Project, and from discussion with other authorities. Items were clustered by content analysis into facets of related elements, and submitted to doctoral students in the Seminar on Rehabilitation Research, who assisted in selecting the most relevant items and facets. The lateral struction delimiting attitudes toward affective education is given in the mapping sentence in Figure 3, facets E through I.

Using all combinations of one element from each of the three joint facets, eight different "profiles" or attitude statements were logically constructed (Table 8). These statements were ordered into levels on the basis of the number of stronger elements contained. Thus, level 1 contains all weak elements, and level 4 contains all strong elements.

Among the eight facet profiles so formed, six possible semantic paths were identified by systematically

Table 8

Three-Facet, Four-Level System of Attitude-Behavior Statements: Levels, Facet Profiles, Definitional Statements, and Descriptive Terms for Eight Combinations of Joint Structure Elements

| Level | Facet Profile | No.[a] | Definitional Statement | Descriptive Term |
|---|---|---|---|---|
| 1 | **$\underline{a_1b_1c_1}$ | 0 | **Others believe affective education ought to be . . . | **Normative imperative belief |
| | **$\underline{a_2b_1c_1}$ | 1 | **I believe affective education ought to be . . . | **Personal imperative belief |
| 2 | $a_1b_2c_1$ | 1 | Others know from experience that affective education ought to be . . . | Normative imperative experience |
| | $a_1b_1c_2$ | 1 | Others believe that affective education is . . . | Normative indicative belief |
| | $a_2b_2c_1$ | 2 | I know from experience that affective education ought to be . . . | Personal imperative experience |
| 3 | $a_1b_2c_2$ | 2 | Others know from experience that affective education is . . . | Normative indicative experience |
| | (**)$\underline{a_2b_1c_2}$ | 2 | I believe affective education is . . . | (**)Personal indicative belief |
| 4 | **$\underline{a_2b_2c_2}$ | 3 | **I know from experience that affective education is . . . | **Personal indicative experience |

**Combinations in the semantic path used for item/level construction in the ABS:AE.

(**)This combination is part of the semantic path, but is not used in the scale.

[a]Number of strong elements (subscript 2).

changing elements one at a time from weak to strong, so as to make an orderly progression through the four levels. In other words, there were six groupings using one definitional statement from each of the four levels which could be used to phrase attitude-behavior items in combination with elements from the lateral struction. To form the different levels of the scale the core content of an item was embedded in a definitional statement which changed from level to level, moving from the generalized other to the self, from belief to experience, and from the imperative to the indicative mood.

The selection of the appropriate semantic path was made after consideration of the meaning of the component statements, choosing the one that would contribute the most relevance to the scale. The chosen path is indicated by asterisks in Table 8. Of the four levels, level 3 was felt to be nonproductive for the present study. Thus, three levels were designated for the scale:

1. Normative beliefs: Subject's perception of what his reference group believes ought to be in regard to a specific attribute of affective education.

2. Personal beliefs: Subject's belief about what ought to be in regard to a specific attribute of affective education.

3. Personal experience: Subject's self-reported experience of what happens in practice in regard to a specific attribute of affective education.

Two stages in the formulation of the ABS:AE have now been described. One was the search for the lateral struction: the facets and elements which give the core content for the items. The other stage was the semantic analysis of attitude-behaviors toward a concept, and the derivation of levels and definitional statements for a scale. The next step was to develop the items by rephrasing each lateral element selected for the scale according to the definitional statement of the joint struction for the three levels to be included in the scale. Four response foils ranging from "strongly disagree" to "strongly agree" were attached to each item to provide an intensity weight. In accordance with Guttman's[1] recently expressed view that items should be written in positive form without randomly changing the direction of foils, the response mode remained the same for each item, with scores ranging from 1 for "strongly disagree" up to 4 for "strongly agree." An illustration of item construction for the three levels of the scale is given in Table 9.

## Pilot Study and Item Analysis

The first version of the scale was comprised of six facets: curriculum issues (four items), goals (six items), teaching procedures (six items), competency

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[1]Personal communication to John E. Jordan, 1974.

Table 9

An Example Taken from the ABS:AE Illustrating the Rephrasing of a Lateral Element for Each of the Three Levels, and the Directions for Each Level

| | |
|---|---|
| **Level 1 (Normative beliefs)** | Directions: Indicate what most elementary teachers believe ought to be:<br><br>Item: Most teachers believe affective education ought to be recognized as a subject in the elementary school curriculum.<br><br>1. strongly disagree<br>2. disagree<br>3. agree<br>4. strongly agree |
| **Level 2 (Personal beliefs)** | Directions: Indicate what you, yourself, believe ought to be:<br><br>Item: I believe affective education ought to be recognized as a subject in the elementary school curriculum.<br><br>1. strongly disagree<br>2. disagree<br>3. agree<br>4. strongly agree |
| **Level 3 (Personal experience)** | Directions: Indicate what you have found from experience:<br><br>Item: I have found that affective education is recognized as a subject in the elementary school curriculum.<br><br>1. strongly disagree<br>2. disagree<br>3. agree<br>4. strongly agree |

issues (five items), participation issues (seven items), and issues of support from systems (six items). This yielded a basic subscale of 34 items which, when transposed into the definitional statements for each of the three levels, produced a scale of 102 items.

In order to test the joint structioning of the scale and to refine the scale to a smaller number of more reliable items, a pilot study was conducted in June, 1974. The scale was distributed to all teachers in one of the four clusters of elementary schools in the Lansing school district, a total of twelve schools. From this group, 93 completed and usable answer sheets were obtained.

A matrix of Pearson product-moment correlations of item-to-item and item-to-total scores was run. From an item analysis ten items were identified which could be eliminated from the scale, leaving those 24 items which contributed best to the reliability of the scale because of their high item-total correlations with low item-item correlations.

## Revised Version of the Attitude-Behavior Scale

After the item analysis from the pilot study the number of items in the scale was reduced to four in each of the six facets: 24 in each level and 72 in the total

scale. The wording of items and the directions for the scale were refined where clarity was needed. The revised scale is provided in Appendix C.

Personal Information Questionnaire

The present study is also an attempt to identify some of the correlates of attitudes toward affective education in the samples of elementary teachers surveyed. An intensive review of the literature (Jordan, 1968) indicated that four classes of variables were important determinants, correlates, or predictors of attitudes:

> (a) demographic factors such as age, sex, and income, (b) socio-psychological factors such as value orientation, (c) contact factors such as amount, nature, perceived voluntariness and enjoyment of the contact, and (d) the knowledge factor, i.e., the amount of factual information one has about the attitude object (Jordan, 1971, p. 7).

Items were constructed to tap variables from each of these four classes for teachers of affective education. Also included were items which have been found in other recent studies to discriminate between subjects on ideological change factors. A final cluster of items comprised the nine-item Efficacy Scale which was reported by Wolf (1967) and described as follows:

> The continuum underlying this scale ranges from a view that man is at the mercy of his environment and could only hope to secure some measure of adjustment to forces outside of himself, to a view that man could gain complete mastery of his physical and social environment and use it for his own purposes (p. 113).

These demographic items were also included in the pilot study and revised somewhat in wording and content for the final version of the Personal Information Questionnaire (Appendix C: ABS:AE, items 73-96). Sixteen variables are covered in the questionnaire.

1. Sex (item 73)
2. Age (item 74)
3. Level of education (item 75)
4. Years of experience in teaching (item 76)
5. Grade taught (item 77)
6. Prior knowledge of affective education (item 78)
7. Amount of training in affective education (item 79)
8. Affective education used in the classroom (item 80)
9. Amount of experience teaching affective education (item 81)
10. Availability of consultation or supervision (item 82)
11. Positiveness of experience with affective education (item 83)
12. Political values (item 84)
13. Independence (item 85)
14. Opinion on birth control (item 86)
15. Opinion on child rearing (item 87)
16. Efficacy scale (items 88-96)

## Procedure

The impetus for the present study arose from the researcher's knowledge that experiences in teaching affective education over the previous several years had been quite varied in the three adjoining Michigan school districts of Grand Ledge, Lansing, and Waverly. The central purpose of this study was to construct a scale to measure attitudes toward affective education and to test the construction of the scale on the populations of teachers whose experiences in affective education were known to be positive or negative.

### Research Population

Four research groups were included in the study:

1. Grand Ledge schools with the Focus project. Teaching staffs of three elementary schools who had been supervised in affective education instruction by Project Focus consultants for periods of one, two, and three years were surveyed.

2. Grand Ledge schools without the Focus project. This group consisted of the staffs of the remaining three elementary schools in the district who had not yet received training through Project Focus.

3. Lansing schools with the Focus project. Staffs of Wexford Elementary School and the summer

Migrant Education team, each with one year's experience with Project Focus, were included in this group.

4. Waverly schools. Three elementary schools in the Waverly district known to be near the median for the district in demographic indicators were chosen. Waverly has had negative reactions from parent groups toward several affective education programs.

## Collection of the Data

The research instruments were distributed to participating school staffs by three administrators in a uniform procedure. The researcher was responsible for Waverly schools, and the two Project Focus consultants for Lansing and Grand Ledge contacted the subjects in their districts. The purpose of the study was presented to each school staff at a regularly scheduled staff meeting, and teachers were asked to complete the scales individually, returning them to the school secretary.

## Research Hypotheses

The purposes of the study were threefold: to test the construction of the scale (H-1), to contrast the scores of the research groups on each of the three levels of the scale (H-2, H-3, and H-4), and to evaluate certain demographic hypotheses in relation to the attitude data.

H-1: The data for the three-level ABS:AE will form a Guttman simplex for each of the four research groups.

Rationale: According to Guttman's (1959) contiguity hypothesis, levels of the scale that are close semantically will be close statistically. The correlation matrix will approach a simplex, unless the items were incorrectly chosen, or inaccurately assigned to levels.

Instrumentation: Correlations between the scores of the three levels of the ABS:AE.

Analysis: Kaiser $Q^2$. The obtained $Q^2$ values for each group shall equal or exceed .70.

H-2: There will be no difference in mean scores for the four groups on Level 1 of the ABS:AE, Normative Beliefs.

Rationale: On the Normative Beliefs section of the scale, subjects are asked to attribute attitudes toward affective education to a "generalized other," namely, teachers in general. There is no evidence to suppose that these attributed norms for the profession would differ from one school district to the next.

Instrumentation: Mean scores on Level of of the ABS:AE.

Analysis: One-way analysis of variance (ANOVA).

H-3: Mean scores for the four groups will differ on Level 2 of the ABS:AE, Personal Beliefs, with Focus schools scoring more positively than non-Focus schools.

Rationale: In his theory of cognitive dissonance, Festinger (1957) summarizes research findings to show that subjects who publicly comply with an endeavor often subsequently change their private beliefs about the issue to conform with the actions they have taken, and thus reduce dissonance. Teachers who have complied with the goals of the Focus project would therefore be likely to alter their personal beliefs about affective education in a positive direction. In addition, the classic experiments in social psychology by Sherif (1935) and Asch (1951) demonstrated the powerful influence of group opinion in shaping individual judgment. Project Focus impacts positively on the entire staff of a school, and should therefore have a determining influence on the beliefs of the individual teacher.

Instrumentation: Mean scores on Level 2 of the ABS:AE.

Analysis: One-way analysis of variance (ANOVA).

H-4: Mean scores for the four groups will differ on Level 3 of the ABS:AE, Personal Experience, in the direction:

Grade Ledge Focus > Lansing Focus > Grand Ledge Non-Focus > Waverly.

Rationale: The Focus project schools are known to have had an explicit program of affective education, which is longer established in Grand Ledge. Affective education has been discouraged in the Waverly schools.

Instrumentation: Mean scores on Level 3 of the ABS:AE.

Analysis: One-way analysis of variance (ANOVA).

## Demographic Hypotheses

The Personal Information Questionnaire provided data on 16 demographic variables which are often found to correlate highly with attitude data. As an offshoot of the study, correlations between the scores for each group on the three levels of the scale and the predictor variables were tabulated, in order to identify those that are positively and significantly correlated.

## Level of Significance

The region for rejection of the research hypotheses was set at the .05 level of significance.

# CHAPTER V

# ANALYSIS OF THE DATA

The primary task for analysis was to test the construction of a Guttman facet-designed scale to measure attitudes toward affective education in four populations of elementary teachers known to have had varied experiences in teaching affective education. Other substantive hypotheses regarding the differences between the groups on the three levels of the scale were also tested, as well as post hoc hypotheses about the relationships between responses to predictor variables and level scores.

The data were tabulated on the CDC 6500 at the Michigan State University Computer Center using the Statistical Package for the Social Sciences program. Table 10 contains the basic variable list used in this study.

## Demographic Characteristics

The four research groups comprised 31 teachers from Grand Ledge schools with affective education programs, 30 teachers from the remaining Grand Ledge schools without affective education training, 23 Lansing teachers

Table 10

ABS:AE Basic Variables List[a] by IBM Card and Column

| Variable | Score Range | IBM | | ABS:AE | |
|---|---|---|---|---|---|
| | | Card | Column | Page | Items |
| Attitude Level | | | | | |
| 1. Normative beliefs | 24-96 | 1 | 22-45 | 1-4 | 1-24 |
| 2. Personal beliefs | 24-96 | 2 | 22-45 | 5-8 | 25-48 |
| 3. Personal experience | 24-96 | 3 | 22-45 | 9-12 | 49-72 |
| Demographic Characteristics | | | | | |
| 4. Sex[b] | 1-2 | 1-3 | 47 | 13 | 73 |
| 5. Age | 1-5 | 1-3 | 48 | 13 | 74 |
| 6. Education | 1-5 | 1-3 | 49 | 13 | 75 |
| 7. Teaching experience | 1-5 | 1-3 | 50 | 13 | 76 |
| 8. Grade taught | 1-5 | 1-3 | 51 | 13 | 77 |
| Affective Education | | | | | |
| 9. Knowledge | 1-4 | 1-3 | 52 | 14 | 78 |
| 10. Training | 1-4 | 1-3 | 53 | 14 | 79 |
| 11. Application | 1-4 | 1-3 | 54 | 14 | 80 |
| 12. Experience | 1-5 | 1-3 | 55 | 14 | 81 |
| 13. Supervision | 1-4 | 1-3 | 56 | 14 | 82 |
| 14. Results | 1-4 | 1-3 | 57 | 14 | 83 |
| Change | | | | | |
| 15. Political values | 1-4 | 1-3 | 58 | 15 | 84 |
| 16. Independence | 1-4 | 1-3 | 59 | 15 | 85 |
| 17. Birth control | 1-4 | 1-3 | 60 | 15 | 86 |
| 18. Child rearing | 1-4 | 1-3 | 61 | 15 | 87 |
| Value | | | | | |
| 19. Efficacy scale | 9-36 | 1-3 | 62-70 | 15-16 | 88-96 |
| Identity | | | | | |
| 20. Nation[c] | 1-999 | 1-3 | 1-3 | | |
| 21. School district[d] | 1-3 | 1-3 | 4 | | |
| 22. Local school[e] | 1-6 | 1-3 | 5-6 | | |
| 23. Focus/non-Focus[f] | 1-2 | 1-3 | 7 | | |
| 24. Subject number | 1-99 | 1-3 | 8-9 | | |
| 25. Card number | 1-3 | 1-3 | 10 | | |

[a] On the 22475 edition of the ABS:AE.

[b] Sex: 1-female, 2 male.

[c] Nation: 133-U.S.A.

[d] School district: 1-Grand Ledge, 2-Lansing, 3-Waverly.

[e] Local school: Grand Ledge--01-Delta Center, 02-Delta Mills, 03-Greenwood, 04-Hayes, 05-Holbrook; Lansing--01-Wexford, 02-Migrant Education Staff; Waverly--01-Colt, 02-Winans, 03-Windemere Park.

[f] Focus/non-Focus: 1-non-Focus, 02-Focus.

with affective education training, and 29 teachers from Waverly schools where there were negative reactions to affective education programs from the community. These known characteristics of the research populations are summarized in Table 11.

Table 12 presents the basic descriptive statistics showing how the four research groups scored on the major variables of the three-level scale and the Personal Information Questionnaire. By inspection it can be seen that Waverly educators as a group are older, have more years of education, and longer teaching experience. Lansing teachers tend to be younger, with correspondingly less education, and shorter teaching experience. In every group the highest level mean score is on Personal Beliefs, the lowest on Personal Experience. It appears that teachers place their own beliefs about what ought to be in regard to affective education at a more positive level than they rate the beliefs of their colleagues, and more positive than what they are able to practice in the classroom.

The more pertinent demographic items relate to the experience of the research groups in teaching affective education. Items 78-81 deal with prior knowledge of affective education, specific training, whether they have applied it in their teaching objectives, how long they have practiced it in the classroom, whether they

Table 11

Research Population Characteristics

| | Grand Ledge Focus | | | Grand Ledge Non-Focus | | | Lansing | | Waverly | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | Delta Center[b] | Hayes[a] | Hol-brook[c] | Delta Mills | Green-wood | Neff | Wex-ford[a] | Migrant Educ.[a] | Colt | Winans | Wind. Park |
| Affective curriculum | Yes | Yes | Yes | No | No | No | Yes | Yes | No | No | No |
| Number | 13 | 7 | 11 | 10 | 10 | 10 | 14 | 9 | 14 | 12 | 3 |
| Females | 11 | 7 | 11 | 8 | 10 | 8 | 14 | 7 | 13 | 10 | 2 |
| Males | 2 | 0 | 0 | 2 | 0 | 2 | 0 | 2 | 1 | 2 | 1 |
| Totals | | 31 | | | 30 | | | 23 | | 29 | |

[a]First year of affective education program.

[b]Second year of affective education program.

[c]Third year of affective education program.

Table 12

Means and Standard Deviations for the Four Research Groups on the Major Variables of the ABS:AE and the Personal Information Questionnaire

| Variable | Grand Ledge Focus | | | Grand Ledge Non-Focus | | | Lansing (Focus) | | | Waverly (Non-Focus) | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | N | $\bar{X}$ | SD | N | $\bar{X}$ | SD | N | $\bar{X}$ | SD | N | $\bar{X}$ | SD |
| Attitude Level | | | | | | | | | | | | |
| 1. Normative beliefs | 31 | 67.77 | 7.84 | 30 | 72.97 | 7.44 | 23 | 70.00 | 5.92 | 29 | 68.62 | 5.86 |
| 2. Personal beliefs | 31 | 72.97 | 8.91 | 30 | 75.00 | 11.91 | 23 | 78.17 | 8.85 | 29 | 73.17 | 8.85 |
| 3. Personal experience | 31 | 66.65 | 7.16 | 30 | 61.70 | 8.26 | 23 | 62.52 | 7.13 | 29 | 56.90 | 6.13 |
| Demographic Data | | | | | | | | | | | | |
| 4. Sex | 31 | 1.07 | .25 | 30 | 1.13 | .35 | 23 | 1.09 | .29 | 29 | 1.14 | .35 |
| 5. Age | 31 | 2.71 | 1.35 | 30 | 3.00 | 1.62 | 23 | 2.43 | 1.12 | 29 | 3.21 | 1.35 |
| 6. Education | 31 | 2.23 | .92 | 30 | 2.40 | .93 | 23 | 2.09 | .85 | 28 | 2.54 | 1.00 |
| 7. Teaching experience | 31 | 2.81 | 1.08 | 30 | 3.07 | 1.26 | 23 | 2.43 | .95 | 28 | 3.68 | 1.25 |
| 8. Grade taught | 31 | 2.74 | 1.26 | 29 | 2.83 | 1.26 | 19 | 2.95 | 1.31 | 27 | 2.74 | 1.23 |
| Affective Education Experience | | | | | | | | | | | | |
| 9. Knowledge | 31 | 3.19 | .54 | 30 | 2.63 | .89 | 23 | 3.09 | .60 | 28 | 2.86 | .59 |
| 10. Training | 31 | 2.71 | .86 | 30 | 1.70 | .84 | 23 | 2.57 | 1.04 | 28 | 2.21 | .92 |
| 11. Application | 31 | 3.23 | 1.09 | 30 | 1.87 | .86 | 23 | 2.39 | .89 | 29 | 2.14 | .65 |
| 12. Experience | 31 | 2.52 | 1.24 | 30 | 3.80 | 1.47 | 22 | 1.82 | .96 | 27 | 3.63 | 1.12 |
| 13. Supervision | 30 | 3.00 | .79 | 28 | 2.07 | 1.02 | 21 | 3.00 | .71 | 28 | 2.11 | .69 |
| 14. Results | 31 | 3.16 | .69 | 29 | 3.17 | .81 | 23 | 3.35 | .49 | 29 | 3.32 | .48 |
| Change Orientation | | | | | | | | | | | | |
| 15. Political values | 30 | 2.33 | .55 | 28 | 2.54 | .74 | 23 | 2.96 | .56 | 27 | 2.44 | .58 |
| 16. Independence | 31 | 2.65 | .71 | 27 | 2.52 | .85 | 23 | 2.61 | .50 | 27 | 2.22 | .51 |
| 17. Birth control | 31 | 3.68 | .48 | 28 | 3.71 | .60 | 23 | 3.43 | .59 | 28 | 3.57 | .50 |
| 18. Child rearing | 29 | 2.55 | .69 | 28 | 2.57 | .63 | 22 | 2.55 | .67 | 28 | 2.68 | .48 |
| Value | | | | | | | | | | | | |
| 19. Efficacy scale | 31 | 21.19 | 2.30 | 29 | 21.83 | 2.54 | 23 | 20.52 | 3.23 | 27 | 20.59 | 2.42 |

have consultation or supervision available, and whether the results of dealing with affective matters in the classroom were positive or negative. The responses of the four groups are contained in Table 13.

The trends in scoring items 78-81 indicate that the Focus groups score more positively than the other groups. More than half of the Focus teachers see themselves as having moderate knowledge of affective education, and one in four consider themselves as having a great deal of knowledge. Over half of these teachers have had specific training. In the Grand Ledge Focus group a significant 69 percent of the teachers provide a formal program of affective education in their classrooms, compared to 30 percent of the Lansing group, 14 percent of the Waverly group, and 11 percent of Grand Ledge non-Focus staff. Focus teachers tend to identify their Project Focus consultants as employed by the school district rather than seeing them as external to the system.

Grand Ledge non-Focus teachers, who anticipate being provided with formalized training by the Focus project in coming years, characterize themselves as much more limited in knowledge, application, and supervision of affective education than the others, and 50 percent see themselves as having no training or experience in teaching affective education.

Table 13

Scoring of the Four Research Groups on Items Relating to Affective Education Experience

| Item | Variable | Grand Ledge Focus | | Grand Ledge Non-Focus | | Lansing | | Waverly | |
|---|---|---|---|---|---|---|---|---|---|
| | | N | % | N | % | N | % | N | % |
| 78. | Knowledge | | | | | | | | |
| | None | 0 | 0.00 | 3 | 10.34 | 0 | 0.00 | 0 | 0.00 |
| | Very little | 2 | 6.45 | 9 | 31.03 | 3 | 13.04 | 7 | 25.00 |
| | Moderate | 21 | 67.74 | 14 | 48.28 | 15 | 65.22 | 18 | 64.29 |
| | A great deal | 8 | 25.81 | 3 | 10.34 | 5 | 21.74 | 3 | 10.71 |
| 79. | Training | | | | | | | | |
| | None | 4 | 13.33 | 15 | 51.72 | 5 | 21.74 | 7 | 25.00 |
| | Very little | 5 | 16.67 | 7 | 24.14 | 4 | 17.39 | 10 | 35.71 |
| | Some | 17 | 56.67 | 7 | 24.14 | 10 | 43.48 | 9 | 32.14 |
| | A great deal | 4 | 13.33 | 0 | 0.00 | 4 | 17.39 | 2 | 7.14 |
| 80. | Application | | | | | | | | |
| | No | 2 | 6.90 | 9 | 32.14 | 2 | 8.70 | 2 | 7.14 |
| | Yes-informal | 7 | 24.14 | 16 | 57.14 | 14 | 60.87 | 22 | 78.57 |
| | Yes-formal | 0 | 0.00 | 0 | 0.00 | 3 | 13.04 | 2 | 7.14 |
| | Yes-formal and informal | 20 | 68.97 | 3 | 10.71 | 4 | 17.39 | 2 | 7.14 |
| 81. | Experience | | | | | | | | |
| | First year | 9 | 29.03 | 5 | 16.67 | 10 | 45.45 | 1 | 3.70 |
| | Second year | 7 | 22.58 | 3 | 10.00 | 8 | 36.36 | 5 | 18.52 |
| | Third year | 6 | 19.35 | 2 | 6.67 | 2 | 9.09 | 2 | 7.41 |
| | More than 3 years | 8 | 25.81 | 5 | 16.67 | 2 | 9.09 | 14 | 51.85 |
| | No experience | 1 | 3.23 | 15 | 50.00 | 0 | 0.00 | 5 | 18.52 |
| 82. | Supervision | | | | | | | | |
| | None | 2 | 6.45 | 11 | 40.74 | 1 | 5.00 | 5 | 17.86 |
| | Regular personnel | 2 | 6.45 | 3 | 11.11 | 2 | 10.00 | 15 | 53.57 |
| | Special personnel | 20 | 64.52 | 12 | 44.44 | 13 | 65.00 | 8 | 28.57 |
| | Outside consultants | 7 | 22.58 | 1 | 3.70 | 4 | 20.00 | 0 | 0.00 |
| 83. | Results | | | | | | | | |
| | Very negative | 1 | 3.23 | 1 | 3.57 | 0 | 0.00 | 0 | 0.00 |
| | Somewhat negative | 2 | 6.45 | 2 | 7.14 | 0 | 0.00 | 1 | 3.57 |
| | Somewhat positive | 20 | 64.52 | 17 | 60.71 | 15 | 65.22 | 19 | 67.86 |
| | Very positive | 8 | 25.81 | 8 | 28.57 | 8 | 34.78 | 8 | 28.57 |

Waverly teachers project themselves as having moderate knowledge but not a great deal of training, and applying affective education in an informal way for a longer period, with some supervision from within the system.

All the groups were consistently positive in their responses about the consequences of dealing with affective matters, with one in four describing the results as very positive. Only 7 teachers from throughout the total group of 133 reported negative outcomes.

## Item Analysis

Pearson product-moment correlation matrices were obtained giving inter-item and item-to-total correlations between each of the 24 items in a level and the total scores for that level for each of the 4 groups. In order to enhance the reliability of a scale, low inter-item correlations are desired, indicating that the items are heterogeneous (Anastasi, 1968). Anastasi also states that the reliability of a scale depends on high item-to-total correlations. Items which correlate low or negatively with the total score contribute little to the scale. Table 14 presents the item-to-total correlations for the three levels and the four sample groups.

Item 18 (whether teachers should get special recognition for teaching affective education) was the only

Table 14

Correlations and Significance Levels of Item-to-Total Scores at Three Levels of the ABS:AE for the Four Sample Groups[a]

| Items | Grand Ledge Focus | | | Grand Ledge Non-Focus | | | Lansing | | | Waverly | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Levels | | | Levels | | | Levels | | | Levels | | |
| | 1 | 2 | 3 | 1 | 2 | 3 | 1 | 2 | 3 | 1 | 2 | 3 |
| 1 | .53 | .44 | .66 | .32 | .58 | .45 | .33 | .75 | .50 | .64 | .66 | .11 |
| | (.002) | (.01) | (.001) | (.08) | (.001) | (.01) | (.12) | (.001) | (.02) | (.001) | (.001) | (.59) |
| 2 | .33 | .40 | .52 | .36 | .56 | .39 | .30 | .79 | .48 | .58 | .59 | .75 |
| | (.08) | (.03) | (.003) | (.05) | (.001) | (.03) | (.16) | (.001) | (.02) | (.001) | (.001) | (.001) |
| 3 | .53 | .52 | .59 | .44 | .62 | .19 | .43 | .65 | .40 | .14 | .68 | .49 |
| | (.003) | (.003) | (.001) | (.01) | (.001) | (.32) | (.04) | (.001) | (.06) | (.48) | (.001) | (.01) |
| 4 | .67 | .53 | .71 | .37 | .52 | .51 | .44 | .45 | .38 | .55 | .61 | .35 |
| | (.001) | (.003) | (.001) | (.04) | (.003) | (.003) | (.04) | (.03) | (.07) | (.002) | (.001) | (.07) |
| 5 | .59 | .33 | .67 | .38 | .68 | .26 | .57 | .39 | .70 | .47 | .64 | .75 |
| | (.001) | (.07) | (.001) | (.04) | (.001) | (.17) | (.01) | (.06) | (.001) | (.01) | (.001) | (.001) |
| 6 | .32 | .25 | .60 | .30 | .30 | .14 | .06 | .12 | .09 | .06 | .27 | .25 |
| | (.08) | (.19) | (.001) | (.10) | (.10) | (.44) | (.80) | (.60) | (.68) | (.75) | (.15) | (.19) |
| 7 | .57 | .59 | .34 | .36 | .44 | .36 | .45 | .67 | .46 | .50 | .54 | .33 |
| | (.001) | (.001) | (.07) | (.04) | (.01) | (.04) | (.03) | (.001) | (.03) | (.01) | (.003) | (.08) |
| 8 | .21 | .49 | .20 | .05 | .27 | .14 | .35 | .52 | .44 | .48 | .17 | .43 |
| | (.26) | (.01) | (.29) | (.79) | (.15) | (.45) | (.11) | (.01) | (.04) | (.01) | (.37) | (.02) |
| 9 | .53 | .61 | .65 | .55 | .53 | .45 | -.35 | .66 | .81 | .36 | .55 | .19 |
| | (.003) | (.001) | (.001) | (.001) | (.002) | (.01) | (.10) | (.001) | (.001) | (.05) | (.002) | (.33) |
| 10 | .55 | .33 | .79 | .65 | .76 | .46 | .37 | .55 | .20 | .73 | .62 | .52 |
| | (.002) | (.08) | (.001) | (.001) | (.001) | (.01) | (.09) | (.01) | (.36) | (.001) | (.001) | (.004) |
| 11 | .56 | .29 | .67 | .38 | .25 | .38 | .56 | .72 | .76 | .30 | .45 | .45 |
| | (.001) | (.12) | (.001) | (.03) | (.17) | (.04) | (.01) | (.001) | (.001) | (.12) | (.02) | (.01) |
| 12 | .39 | .67 | .62 | .36 | .57 | .67 | .40 | .22 | -.01 | .42 | .54 | .38 |
| | (.04) | (.001) | (.001) | (.05) | (.001) | (.001) | (.06) | (.32) | (.98) | (.02) | (.003) | (.04) |
| 13 | .56 | .70 | .36 | .28 | .69 | .57 | .30 | .61 | .68 | .56 | .62 | .56 |
| | (.001) | (.001) | (.05) | (.13) | (.001) | (.001) | (.17) | (.002) | (.001) | (.002) | (.001) | (.002) |
| 14 | .34 | .75 | .59 | .26 | .47 | .27 | -.06 | .29 | .26 | .16 | .60 | .45 |
| | (.08) | (.001) | (.001) | (.16) | (.01) | (.14) | (.78) | (.18) | (.24) | (.40) | (.001) | (.02) |
| 15 | .46 | .45 | .36 | .43 | .56 | .32 | .63 | .25 | .53 | .65 | .60 | .64 |
| | (.01) | (.01) | (.05) | (.02) | (.001) | (.08) | (.001) | (.26) | (.01) | (.001) | (.001) | (.001) |
| 16 | .43 | .49 | .03 | .61 | .68 | .51 | .71 | .45 | .27 | .41 | .37 | .32 |
| | (.02) | (.01) | (.87) | (.001) | (.001) | (.003) | (.001) | (.03) | (.21) | (.03) | (.05) | (.10) |
| 17 | .67 | .57 | .26 | .59 | .82 | .61 | .33 | .10 | .14 | .41 | .82 | .39 |
| | (.001) | (.001) | (.17) | (.001) | (.001) | (.001) | (.12) | (.65) | (.53) | (.03) | (.001) | (.04) |
| 18 | .10 | .12 | .19 | .12 | .03 | .32 | -.18 | .31 | .23 | .26 | .08 | .31 |
| | (.61) | (.53) | (.31) | (.52) | (.88) | (.09) | (.41) | (.15) | (.30) | (.18) | (.170) | (.11) |
| 19 | .32 | .69 | -.11 | .58 | .46 | .48 | .19 | .34 | .20 | .13 | .70 | .29 |
| | (.09) | (.001) | (.56) | (.001) | (.01) | (.01) | (.39) | (.11) | (.38) | (.49) | (.001) | (.13) |
| 20 | .61 | .58 | .37 | .55 | .56 | .62 | .31 | .70 | .63 | .48 | .83 | .31 |
| | (.001) | (.001) | (.05) | (.002) | (.001) | (.001) | (.16) | (.001) | (.001) | (.01) | (.001) | (.11) |
| 21 | .27 | .71 | .44 | .55 | .73 | .29 | .39 | .71 | .46 | .28 | .69 | .44 |
| | (.15) | (.001) | (.02) | (.002) | (.001) | (.14) | (.07) | (.001) | (.03) | (.14) | (.001) | (.03) |
| 22 | .68 | .72 | .53 | .70 | .72 | .42 | .82 | .85 | .28 | .60 | .85 | .45 |
| | (.001) | (.001) | (.003) | (.001) | (.001) | (.02) | (.001) | (.001) | (.19) | (.001) | (.001) | (.02) |
| 23 | .64 | .79 | .33 | .62 | .83 | .46 | .82 | .77 | .23 | .59 | .80 | .31 |
| | (.001) | (.001) | (.08) | (.001) | (.001) | (.01) | (.001) | (.001) | (.30) | (.001) | (.001) | (.10) |
| 24 | .58 | .69 | .39 | .54 | .72 | .68 | .51 | .76 | .41 | .51 | .76 | .40 |
| | (.001) | (.001) | (.03) | (.002) | (.001) | (.001) | (.01) | (.001) | (.05) | (.01) | (.001) | (.03) |

[a]Grand Ledge Focus sample size = 31
Grand Ledge Non-Focus sample size = 30
Lansing sample size = 23
Waverly sample size = 29

item which failed to reach a correlation of .50 on any level for any group, and yielded uniformly low and even negative indices. This item should be dropped from future versions of the scale. Other items are valuable for their contribution to certain levels of the scale even though they may have low item-to-total correlations on another level. Item 8 (the improvement of society as a primary goal of affective education) is the only other item which fails to correlate at the .001 level for any group or scale level, though it does attain the .01 level.

The results for the Grand Ledge Focus group, which has the most experience in affective education, provide the most dependable data about which items contribute most to the scale. Looking at the items which correlate the highest with the total score on Level 2, Personal Beliefs, the four items dealing with support from systems (administration, school board, State Department, and parents) rank among the top six, along with competence of teachers and supervision. On Level 3, however, the six items which correlate most highly with the total score on Personal Experience for the Grand Ledge Focus group deal with strictly programmatic issues such as techniques, curriculum, goals, performance objectives, and materials, which suggests the impact of the Project Focus consultants.

## Hypothesis Testing

### Simplex Analysis

Hypothesis 1 predicts that the data for the three-level ABS:AE will form a Guttman simplex for each of the four research groups. The simplex approximation was tested by using a computer program devised to produce level-to-level correlations for each group, with the obtained matrices evaluated according to Kaiser's (1962) simplex approximation test, which assigns a $\underline{Q}^2$ value to each matrix. The program also rearranges adjacent pairs of coefficients into the best possible simplex order, and computes a $\underline{Q}^2$ value for the "best-ordered" simplex. $\underline{Q}^2$ is a descriptive statistic with a range from 0.00 to 1.00. Hamersma (1969) established a criterion value for $\underline{Q}^2$ of .70 as indicating an acceptable simplex for a six-level scale. The value .70 applied to a four-level scale is thus a more stringent test. Table 15 gives the $\underline{Q}^2$ values for the original and the best-ordered matrices for the four groups. Each group surpasses the criterion level for $\underline{Q}^2$, showing that the underlying statistical structure of the empirical data conforms to the theoretical semantic structure in the facet design of the scale. These results indicate construct validity for the ABS:AE on the groups tested.

Table 15

Simplex Structure for Original and Best Matrices on the Three-Level ABS:AE for Four Research Groups

| | Levels | Original Matrices | | | Best Ordered Matrices | | |
|---|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 1 | 2 | 3 |
| Grand Ledge Focus | 1 | -- | | $\underline{Q}^2$=1.00 | -- | | $\underline{Q}^2$=1.00 |
| | 2 | .57 | -- | | .57 | -- | |
| | 3 | .40 | .67 | -- | .40 | .67 | -- |
| Grand Ledge Non-Focus | 1 | -- | | $\underline{Q}^2$= .82 | -- | | $\underline{Q}^2$= .98 |
| | 2 | .51 | -- | | .51 | -- | |
| | 3 | .34 | .09 | -- | .09 | .34 | -- |
| Lansing | 1 | -- | | $\underline{Q}^2$= .97 | -- | | $\underline{Q}^2$= .97 |
| | 2 | .60 | -- | | .60 | -- | |
| | 3 | .45 | .52 | -- | .45 | .52 | -- |
| Waverly | 1 | -- | | $\underline{Q}^2$=1.00 | -- | | $\underline{Q}^2$=1.00 |
| | 2 | .39 | -- | .39 | -- | | |
| | 3 | .07 | .21 | -- | .07 | .21 | -- |

## Differences Between Groups

Hypothesis 2 states there will be no difference in mean scores for the four groups on Level 1 of the scale, Normative Beliefs, as there is no reason to suppose that these attributed norms for the profession would differ from one school district to the next. Hypothesis 3 predicts that mean scores on Level 2, Personal Beliefs, will differ, with Focus schools scoring more positively because of their special training in affective education.

According to Hypothesis 4, the mean scores for the four groups on Level 3, Personal Experience, should differ in a specified way, with Grand Ledge Focus scoring higher than Lansing, followed by Grand Ledge non-Focus, and with Waverly the lowest.

The sample sizes, means, and standard deviations for the four groups are given in Table 12 (page 73). One-way analyses of variance (ANOVA) were used to assess the differences among group means. Table 16 summarizes the analysis of variance results for the three levels of the scale. A significance level of .05 was established for rejection of the null hypothesis.

To further specify the differences between means, the significant results of t tests on group contrasts using a pooled variance estimate are reported in Table 17. Significant contrasts were obtained on Levels 1 and 3.

The findings do not support Hypothesis 2, as significant differences were found between the groups on Normative Beliefs. Grand Ledge non-Focus teachers attributed more positive beliefs about affective education to the profession as a whole than did the Grand Ledge Focus and Waverly groups.

Neither do the findings bear out the predictions of Hypothesis 3, as there are no significant differences between groups on Personal Beliefs. The difference between Lansing scores and those of Grand Ledge Focus and

Table 16

ANOVA Summary Tables for the Four Sample Groups on the Three Levels of the ABS:AE

| Level | Source of Variation | Sum of Squares | df | Mean Squares | F | Sig. |
|---|---|---|---|---|---|---|
| 1 | Between groups | 469.25 | 3 | 156.42 | 3.29 | .02 |
| | Within groups | 5,179.21 | 109 | 47.52 | | |
| 2 | Between groups | 440.23 | 3 | 146.74 | 1.54 | .21 |
| | Within groups | 10,412.41 | 109 | 95.53 | | |
| 3 | Between groups | 1,432.10 | 3 | 477.37 | 9.14 | .0001 |
| | Within groups | 5,694.89 | 109 | 52.25 | | |

Table 17

Summary of Significant t Tests for Sample Groups on Levels 1 and 3 of the ABS:AE

| Group Contrasts | | df | T Value | T Prob. |
|---|---|---|---|---|
| Level 1: Normative Beliefs | | | | |
| Grand Ledge non-F. | > Grand Ledge F. | 109 | 2.94 | .004 |
| Grand Ledge non-F. | > Waverly | 109 | 2.42 | .02 |
| Level 3: Personal Experience | | | | |
| Grand Ledge F. | > Grand Ledge non-F. | 109 | 2.64 | .01 |
| Grand Ledge non-F. | > Waverly | 109 | 2.59 | .01 |
| Grand Ledge F. | > Lansing | 109 | 2.07 | .04 |
| Grand Ledge F. | > Waverly | 109 | 5.22 | .0001 |
| Lansing | > Waverly | 109 | 2.79 | .01 |

Waverly approached a significant level, with a probability of .056 and .07, respectively. The mean score for the Grand Ledge Focus group was the lowest of the four, though this can be accounted for by random variation. The results for Level 2 do indicate that teachers in each of the four groups surveyed are quite positive in their personal attitudes toward affective education.

Hypothesis 4 was supported by the findings, with the means for the four groups on Level 3 ranking in the predicted way. This provides further validation for Level 3 of the scale, as the groups known to differ in experience with affective education scored as expected. The mean for the Grand Ledge Focus group was significantly higher than each of the other groups, and Waverly's mean was significantly lower than each of the others.

## Predictor Variables

Post hoc hypotheses were derived from the demographic and predictor variables contained in the Personal Information Questionnaire, described in Chapter IV. These hypotheses would predict a significant correlation between scores on these items and scores for individual levels of the ABS:AE. The correlations and significance levels for the items of the Personal Information Questionnaire and the three levels of the scale are tabulated in Tables 18-20.

Table 18

Correlations and Significance Levels Between Demographic Variables and Total Score on ABS:AE Level 1, Normative Beliefs

| Variable | Grand Ledge Focus (N = 31) | | Grand Ledge Non-Focus (N = 30) | | Lansing (N = 23) | | Waverly (N = 29) | |
|---|---|---|---|---|---|---|---|---|
| | r | P | r | P | r | P | r | P |
| Sex | -.23 | .20 | -.16 | .38 | .00 | 1.00 | -.23 | .20 |
| Age | -.38 | .03* | -.11 | .54 | -.17 | .44 | -.17 | .37 |
| Education | -.21 | .25 | -.04 | .82 | -.20 | .36 | -.21 | .27 |
| Teaching exper. | -.16 | .36 | .06 | .75 | .27 | .22 | -.10 | .60 |
| Grade taught | .09 | .60 | -.13 | .50 | .49 | .03* | -.17 | .38 |
| Knowledge-Aff. Ed. | .19 | .29 | .28 | .12 | .03 | .91 | -.29 | .12 |
| Training-Aff. Ed. | -.09 | .62 | .15 | .40 | .36 | .10 | -.18 | .35 |
| Application | .22 | .22 | .14 | .43 | .23 | .29 | .05 | .79 |
| Exper.-Aff. Ed. | -.09 | .61 | -.27 | .13 | -.10 | .66 | -.21 | .28 |
| Supervision | -.04 | .81 | -.04 | .85 | .09 | .69 | -.39 | .03* |
| Results | .53 | .001** | .06 | .75 | -.28 | .19 | .07 | .72 |
| Political values | -.12 | .53 | .19 | .31 | .48 | .02* | .25 | .18 |
| Independence | -.40 | .02* | .13 | .49 | .23 | .29 | .30 | .11 |
| Birth control | -.22 | .22 | .29 | .12 | .25 | .26 | .12 | .53 |
| Child rearing | -.02 | .91 | .13 | .50 | .26 | .24 | -.07 | .72 |
| Efficacy Scale | .03 | .88 | .09 | .62 | .06 | .80 | .63 | .005** |

*P $\leq$ .05

**P $\leq$ .01

Table 19

Correlations and Significance Levels Between Demographic Variables and Total Score on ABS:AE Level 2, Personal Beliefs

| Variable | Grand Ledge Focus (N = 31) | | Grand Ledge Non-Focus (N = 30) | | Lansing (N = 23) | | Waverly (N = 29) | |
|---|---|---|---|---|---|---|---|---|
| | r | P | r | P | r | P | r | P |
| Sex | -.25 | .15 | -.01 | .96 | .33 | .12 | -.24 | .20 |
| Age | -.41 | .02* | -.40 | .02* | -.13 | .55 | -.19 | .32 |
| Education | -.23 | .18 | .04 | .83 | .10 | .65 | .18 | .33 |
| Teaching exper. | -.31 | .08 | -.35 | .05* | .31 | .15 | -.10 | .59 |
| Grade taught | .11 | .54 | -.00 | 1.00 | .34 | .15 | -.48 | .01** |
| Knowledge-Aff. Ed. | .17 | .33 | .35 | .05* | .30 | .17 | .30 | .11 |
| Training-Aff. Ed. | -.09 | .63 | .21 | .25 | .70 | .001** | .41 | .02* |
| Application | .17 | .36 | .33 | .07 | .51 | .01* | .32 | .09 |
| Exper.-Aff. Ed. | -.14 | .42 | -.39 | .03* | -.16 | .48 | -.37 | .05* |
| Supervision | .20 | .26 | .22 | .25 | .62 | .003** | -.27 | .15 |
| Results | .65 | .0001** | .35 | .05* | .13 | .55 | .22 | .25 |
| Political values | -.00 | .99 | .14 | .46 | .28 | .19 | .21 | .27 |
| Independence | -.13 | .48 | .25 | .18 | .21 | .33 | .33 | .08 |
| Birth control | -.17 | .35 | .22 | .24 | .29 | .18 | .33 | .07 |
| Child rearing | .28 | .12 | .00 | 1.00 | .10 | .66 | -.26 | .17 |
| Efficacy scale | .03 | .88 | .09 | .93 | -.22 | .30 | .45 | .01** |

*P $\leq$ .05

**P $\leq$ .01

Table 20

Correlations and Significance Levels Between Demographic Variables and Total Score on ABS:AE Level 3, Personal Experience

| Variable | Grand Ledge Focus (N = 31) | | Grand Ledge Non-Focus (N = 30) | | Lansing (N = 23) | | Waverly (N = 29) | |
|---|---|---|---|---|---|---|---|---|
| | r | P | r | P | r | P | r | P |
| Sex | -.14 | .45 | -.02 | .91 | .33 | .12 | -.06 | .75 |
| Age | -.36 | .04* | .07 | .68 | -.14 | .53 | .08 | .67 |
| Education | -.16 | .36 | -.32 | .07 | -.18 | .43 | -.05 | .81 |
| Teaching exper. | -.28 | .12 | .22 | .22 | .39 | .07 | .15 | .43 |
| Grade taught | -.18 | .31 | -.25 | .17 | -.29 | .23 | .001 | .99 |
| Knowledge-Aff. Ed. | .21 | .25 | .22 | .22 | -.01 | .96 | .20 | .30 |
| Training-Aff. Ed. | .12 | .50 | .40 | .02* | .52 | .01** | .13 | .50 |
| Application | .14 | .43 | .18 | .31 | .35 | .10 | .35 | .06 |
| Exper.-Aff. Ed. | -.02 | .91 | -.13 | .47 | -.22 | .34 | .04 | .83 |
| Supervision | .22 | .22 | .20 | .28 | .42 | .06 | .42 | .02* |
| Results | .62 | .0001** | .14 | .47 | .06 | .78 | .33 | .08 |
| Political values | -.03 | .85 | -.04 | .84 | .22 | .31 | -.32 | .09 |
| Independence | -.08 | .67 | -.15 | .44 | -.09 | .67 | .09 | .63 |
| Birth control | .05 | .77 | -.09 | .65 | .15 | .50 | -.24 | .19 |
| Child rearing | .29 | .12 | .07 | .70 | .20 | .36 | .52 | .003** |
| Efficacy scale | -.05 | .76 | -.27 | .14 | .09 | .67 | .01 | .96 |

*P $\leq$ .05

**P $\leq$ .01.

There were no significant correlations for the variables of sex, amount of education, or opinion on birth control for any group or level. The other variables obtained correlation indices significant at the .05 level for certain groups and levels. Age was significantly and negatively correlated with scores on all three levels for the Grand Ledge Focus group. The most striking finding was the high correlation between perceived positiveness of the results of dealing with affective matters in the classroom and scores on all three levels for the Grand Ledge Focus staff. The Efficacy Scale of nine items proved to be an effective predictor of total scores only for the Waverly group on Levels 1 and 2. This means that as the Waverly staff scored high on a sense of control over their environment they scored high on normative and personal beliefs toward affective education.

Since personal experience in teaching affective education in the population sampled was largely determined by school district and opportunity, predictor variables are of less consequence for Level 3 of the scale. It is more relevant to define those personal characteristics that correlate with Personal Beliefs. The pattern of significant correlations for predictor variables on Level 2 suggests that a younger teacher with less experience who has had training and supervision in affective education and practices it in the classroom with positive results will have a more positive attitude toward it.

# CHAPTER VI

## SUMMARY AND CONCLUSIONS

The impetus for this study came from the researcher's familiarity over a span of years with developments in local school districts as programming for affective education was initiated. In three adjoining school districts the circumstances were quite varied. In the Waverly district several affective education programs met with resounding objections from a parents' group opposed to the idea of the school taking on a role in the development of their children's attitudes or values. In Grand Ledge, however, a planned, sequenced program to train teachers in affective education methods and provide materials and consultation was introduced with the full support of the school board and administration. This was Project Focus, with staff and funds provided by the Community Mental Health Board, while the Project office was based in a Grand Ledge school. The procedure was to introduce the program into the eight elementary schools gradually, one school each year. The project was highly successful in winning the support of educators and public alike. In the second year the Focus project was

introduced into two elementary schools in the Lansing district.

During this same period, a bill that was introduced before the Michigan House and Senate Committees on Education and endorsed by a sizable group of representatives was drawing a great deal of attention. A number of the proposed amendments would, if enacted, seriously curtail not only affective programming in the public schools, but special services as well. The significance of the bill lay in its enunciation of a viewpoing strongly subscribed to by some citizens: that the schools should develop a child's cognitive capacities only, and have no right to intervene in other areas of personal development.

## Review of the Literature

A survey of the literature on affective development underlined this confusion and ambivalence about the role of the elementary school in the affective development of the child. The topic of affective education itself encompassed a wide range of issues and endeavors, with little clarity or consensus about feasible objectives for the public school. The point of logic was frequently argued that affect and cognition are integral to the behavior of the learner, and neither can be abstracted out of a learning situation and negated. Yet the dilemma was still apparent: whether to emphasize the affective

component of any learning experience as a formal educational goal, or to leave it as part of the "hidden curriculum"; to specify it as a desired outcome or to relegate it to incidental learning.

Within the context of such divergent opinions, both nationally and locally, about the nature and relevance of affective education, it was pertinent to ask about the attitudes of educators themselves. A review of the literature on attitudes revealed no existing scales for the measurement of teachers' attitudes toward affective education. Six research instruments were identified whose purpose was to measure attitudes of teachers toward education in general, but each of these focused on the perennial traditionalism versus progressivism polarity. Little progress had been made toward defining the probable structure of educational attitudes, let alone the more specified area of attitudes toward affective education.

A further review of articles on Guttman's facet design and analysis of attitude scales showed his theoretical approach to provide a rationale for the structural analysis of cognitive-affective-conative components of attitude-behavior. This approach therefore seemed most suited to attitude research in the affective domain.

## Purpose of the Study

The major thrust of the present study was to develop a modification of Guttman facet theory for the

study of attitudes toward affective education, to apply it in the construction of an attitude-behavior scale for affective education (ABS:AE) as a self-report instrument for elementary teachers, and to test that construction on the populations of teachers whose experiences in affective education were known to range from negative to positive. A post hoc evaluation of the relationship between demographic and predictor variables and attitude-behavior scores was also undertaken.

## Methodology

In contrast to most studies using Guttman facet theory, this study focused on attitudes toward a concept rather than a social group. It attempted to delimit the state or condition of affective education according to the beliefs and experiences of elementary teachers, from the perspective of their own self-reference and of their reference group of teachers-in-general. This necessitated a modified facet-analytic approach, altering the statement of joint struction (an analysis of universal behavioral components of the attitude-complex) to adapt to the situation under investigation. In order to refine the scale to an optimal number of reliable items, a pilot study was conducted in June, 1974, using as subjects 93 teachers from one of the four clusters of elementary schools in the Lansing district. The final version of

the scale comprised six facets of four items each: curriculum issues, goals, teaching prcedures, competency issues, participation issues, and issues of support from systems which have impact on teachers. This basic subscale of 24 items was transposed into the definitional statements for three structural levels: normative beliefs, the subject's perception of what his reference group believes ought to be in regard to a specific attribute of affective education, personal beliefs about what ought to be, and personal experience of what happens in practice in regard to those issues.

A Personal Information Questionnaire of 24 items was compiled to record demographic data about the subjects, as well as to measure those variables thought to be likely determinants or predictors of attitudes toward affective education in the target populations. The nine-item Efficacy Scale was also incorporated into the questionnaire as an ideological or psycho-social measure. The complete instrument included 96 items in all, 24 for each of the three attitude-behavior levels and the Personal Information Questionnaire.

The instrument was then administered to four "known groups" of subjects: 31 teachers from Grand Ledge schools with affective education programs, 30 teachers from other Grand Ledge schools without affective education programs, 23 Lansing teachers with affective

education training, and 29 teachers from Waverly schools where there were negative parent reactions to affective education programs.

## Major Findings of the Study

The main purpose of the study was to test the construction of the Guttman facet-designed ABS:AE. If the semantic analysis was correctly applied in the derivation of the items and levels for the scale, then according to Guttman's (1959) contiguity hypothesis, the correlation matrix between scores on the three levels of the scale would approach a simplex, as evaluated by Kaiser's $\underline{Q}^2$. For each of the four groups, the obtained $\underline{Q}^2$ values far exceeded the criterion value for significance (.70). These results give evidence for the construct validity of the ABS:AE, and indicate the scalability of teacher attitudes toward affective education in the four different settings. Content validity of the scale can be assumed by reason of the facet-analytic approach to the determination of relevant item content and wording.

An item-analysis was conducted, using Pearson product-moment correlation matrices to provide inter-item and item-to-total correlations between each of the 24 items in a level and the total scores for that level for each of the four groups. Item 18 (whether teachers should get special recognition of teaching affective education) was

the only item which failed to reach a correlation of .50 on any level for any group, and yielded uniformly low and even negative indices. This item should be dropped from future versions of the scale. All other items except one correlated at the .001 level for at least one group or scale level, and the one exception correlated at the .01 level, indicating satisfactory item reliability for the scale.

Other hypotheses concerned the predicted differences between the four groups on the three levels of the scale. On the Normative Beliefs section it was predicted that there would be no differences between the groups in their perception of the attitudes of their profession toward affective education. However, an analysis of variance and t-test contrasts between the group means indicated that one of the groups, Grand Ledge non-Focus, attributed more positive beliefs to their colleagues than did the Grand Ledge Focus or Waverly groups. This finding suggests that normative beliefs may be affected by differences in treatment of the research groups. The staffs of the four elementary schools in the Grand Ledge district which have not yet had experience with the Focus project apparently exaggerate the benefits and potentiality of the program, as borne out by observation of the consultants and response to certain items of the scale. From an inspection of the responses of this group, it seems

that Grand Ledge non-Focus staff have high expectations for an affective education program that will motivate students to learn and lead to the improvement of society, that will be capable of assessment through specific performance objectives, and that they will enjoy teaching. Perhaps this positive perception of affective education has influenced the responses of the group on Level 1, in a kind of "halo effect." It is also possible that some dynamic is operating whereby those in the "in-group" who are already participating in a formal program see the beliefs of others as being less "developed" than their own.

It was also hypothesized that Focus groups would score more positively on Level 2, Personal Beliefs, because of their special training and positive experiences with affective education. This was not borne out by the results of the analysis of variance, which showed no differences between the means for the four groups on this level. The positive attitudes of the Grand Ledge non-Focus group, as described above, may partially explain this finding. It can also be accounted for by the overall positiveness in personal belief scores for all groups, on almost all items, suggesting that the teachers personally hold favorable attitudes toward affective education. However, the difference between the scores for the Lansing group and those of Grand Ledge Focus and Waverly

did approach a significant level, with a t-probability of .056 and .07, respectively. With all groups being positive in their responses, and only two positive foils provided for each item, little discriminatory power was achieved. Using a different response mode, possibly a rating continuum allowing for further breakdown of positive responses, might show up differences between the groups.

Based on the known differences in affective education training between the groups, it was predicted that the mean scores on Level 3, Personal Experience, would differ, with Grand Ledge Focus scoring higher than Lansing, followed by Grand Ledge non-Focus, and with Waverly scoring the lowest. This hypothesis was confirmed by the results of the analysis of variance and t-test contrasts. Indeed, the mean for Grand Ledge focus was significantly higher than each of the others, and Waverly's mean was significantly lower than the rest. This finding attests to the predictive validity of Level 3 of the scale and is also an indicator of construct validity.

Substantive hypotheses were investigated in a post hoc procedure, correlating scores on the independent variables contained in the Personal Information Questionnaire with total scores on each level for each group. The most striking finding was the high correlation between perceived positiveness of the results of dealing with

affective matters in the classroom and scores on all three levels for the Grand Ledge Focus group, suggesting that this is one of the critical factors in determining teachers' attitudes in this area. There were no differences due to sex or amount of education, but age was significantly and negatively correlated with scores on each of the levels for the Grand Ledge Focus group. The Efficacy Scale, indicating a sense of control over the environment, proved to be an effective predictor of total scores only on Levels 1 and 2 for the Waverly staff, in the district where the climate for affective education is more negative, interestingly enough.

Predictor variables have a greater bearing on the results of Level 2 than on the other levels. Responses on Level 3 are largely determined by the history of the group to which the subject belongs. Normative beliefs are to some degree a projection of one's personal beliefs. To understand how attitudes develop and change it is important to know the determinants of personal beliefs. The pattern of significant correlations for predictor variables on Level 2 suggests that a younger teacher with less experience who has had training and supervision in affective education and practices it in the classroom with positive results will have a more positive attitude toward it.

## Limitations

While the study achieved its main purpose of demonstrating the scalability of teacher attitudes toward affective education in different settings, and provided evidence for the item reliability and construct validity of the ABS:AE, some limitations must be noted. First is the relatively small size of the sample populations available, notably the Lansing group with only 23 subjects. The study also suffers the drawbacks of an *ex post facto* design, in which it is attempted to relate differences in results on the scale to known or assumed differences among the groups. The assigning of randomly chosen school staffs to different treatments in terms of affective education training would give a better experimental basis for the study of attitude change. The correlational aspects of the design also carry the usual proviso that a significant correlation does not imply that a cause-and-effect relationship has been demonstrated, as other unknown factors may be operating to account for the findings.

## Recommendations

The ABS:AE, with revisions, would provide a useful research instrument to study the implementation of affective education programs. The unreliable item (number 18 on Level 1, 42 on Level 2, and 66 on Level 3)

should first be eliminated, and the response foils adapted to record a wider range of responses in the positive mode. The resulting scale should be subjected to further validation studies, on a larger sample.

An in-depth study could detail responses to individual items and facets. It would be of practical importance to know on which issues there is general consensus in the profession, and whether there are crucial matters of difference, such as on appropriate goals or teaching procedures. Further exploration of the relationship of predictor variables is also warranted.

Each level of the scale can also be used as separate tools for research. Levels 2 and 3 have particular value for describing the beliefs and experiences of teachers, either in a general survey or as pre- and post-measures of the effectiveness of training programs. The personal beliefs subscale could be administered to other key groups, such as parents, administrators, or school board members, to determine the nature of community support for affective education programming.

Further work needs to be done to develop a scoring technique for Guttman-Jordan multilevel scales to assess discrepancy or dissonance between total scores, facet scores, or item scores on different levels of the scale. For instance, if strong statements of support for the items in the system-support facet on Level 2 are

followed by negative statements on the experiential level for the same items, then an area of dissonance is apparent which would be likely to operate negatively on attitude-behaviors of the group. A discrepancy score would facilitate study of these effects. It could be hypothesized that in the most harmonious conditions there would be minimal discrepancy between levels of the scale. Thus, rather than a discrete score for each level of the scale, which has little descriptive power, it might be possible to assign a compound "discrepancy value" to the scale as a whole, thereby increasing its usefulness to describe the attitude-behavior universe, or to discriminate between groups.

## Implications

A Guttman facet-designed scale has been successfully developed for the measurement of attitudes of elementary teachers toward affective education. The varying results of the four research groups on the three levels of the scale indicate that each level is a different entity, even though the core content of the items remains the same. This finding supports the contention that attitudes are complex in structure and not unitary, and that specifying the components of attitude-behavior in a multifaceted structural analysis is a relevant and necessary procedure.

In spite of the current debate about the relevancy of affective education in the elementary school curriculum, the study shows that teachers in the four groups surveyed were remarkably positive in their personal beliefs, although there were major discrepancies in practice, especially in the non-Focus schools. The teachers who had received consistent training and supervision from the Focus project were indeed implementing a formal program of affective education, developmentally sequenced according to grade level, with special teaching aids and materials, and appropriate teaching procedures.

The findings of this study carry some implications for the proper planning and implementation of affective education programs in elementary schools. To ensure a climate of acceptance, effort must be made to develop the awareness and support of the administration, the school board, and parents. A comprehensive inservice training model is needed to prepare teachers for the special methods and materials of affective education. Competent supervision should be readily available within the system. Above all, an affective curriculum succeeds best where people have their own positive feelings engaged, so that teachers and students together find benefit and enjoyment in the process.

# LIST OF REFERENCES

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Anastasi, A. Psychological testing. New York: Macmillan, 1968.

Asch, S. E. Effects of group pressure upon the modification and distortion of judgments. In H. Guetzkow (Ed.), Groups, leadership and men. Pittsburgh: Carnegie Press, 1951.

Aspy, D. Toward a technology for humanizing affective education. Champaign, Ill.: Research Press, 1972.

Bastide, R., & van den Burghe, P. Stereotypes, norms and interracial behavior in San Paulo, Brazil. American Sociological Review, 1957, 22, 689-694.

Beatty, W. H. Emotions and learning. Educational Leadership, 1965, 22, 517-522.

Bedwell, S. K. The metatheory of facets: Construct validity of a structual approach to attitude measurement. Unpublished doctoral dissertation, Michigan State University, 1976.

Berger, M. L. Student rights and affective education: Are they compatible? Educational Leadership, 1976, 33, 460-462.

Berman, L. New priorities for the curriculum. New York: Merrill Press, 1969.

Bernier, N. R., & Williams, J. E. Beyond beliefs: Ideological foundations of American education. Englewood Cliffs, N.J.: Prentice-Hall, 1973.

Bogardus, E. S. Measuring social distance. Journal of Applied Sociology, 1925, 9, 299-308.

Borton, T. Reach, touch, and teach. Cambridge, Mass.: McGraw-Hill, 1970.

Brandes, B. J. Problems in the evaluation of affective education: A case study. Paper presented at the Annual Meeting of the American Educational Research Association, New Orleans, February, 1973.

Brodwin, M. G. A facet theory analysis of "what's in a name": Black versus Negro. Unpublished doctoral dissertation, Michigan State University, 1973.

Brown, G. I. Human teaching for human learning: An introduction to confluent education. New York: Viking Press, 1971.

Brown, L. B. Ideology. London: Penguin Books, 1973.

Bryant, D. A. L. Assessing student attitudes toward open education: A Guttman facet theory analysis. Unpublished master's thesis, Cornell University, 1975.

Cohen, A. R. Attitude change and social influence. New York: Basic Books, 1964.

Cohen, S. The elementary school in the twentieth century: A social context. In J. I. Goodlad & H. G. Shane (Eds.), The elementary school in the United States: The seventy-second yearbook of the National Society for the Study of Education, Part II. Chicago: The University of Chicago Press, 1972.

Comrey, A. L., Backer, T. E., & Glaser, E. M. A source-book for mental health measures. Los Angeles: Human Interaction Research Institute, 1973.

Cook, W. C., Leeds, C. H., & Callis, R. Manual for the Minnesota Teacher Attitude Inventory. New York: The Psychological Corporation, 1951.

Darling, D. W. Why a taxonomy of affective learning? Educational Leadership, 1965, 22, 473-475.

Dewey, J. Moral principles in education. Carbondale, Ill.: Southern Illinois University Press, 1975.

Down, W. J. A Guttman facet analysis of attitudes toward the war-disabled in the Republic of Viet-Nam: Content, structure, and determinants. Unpublished doctoral dissertation, Michigan State University, 1974.

Eiss, A. F., & Harbeck, M. B. Behavioral objectives in the affective domain. Washington: National Science Supervisors Association, 1969.

Eysenck, H. J. The psychology of politics. London: Routledge & Kegan Paul, 1954.

Festinger, L. A theory of cognitive dissonance. Stanford: Stanford University Press, 1957.

Foskett, D. J. Classification and indexing in the social sciences. London: Butterworth Co., 1963.

Geisert, P. The dimensions of measurement of the affective domain. Laramie, Wyoming: The University of Wyoming, 1972.

Glass, L. Assessment of affective outcomes of instruction with high school sophomore biology students and teachers. Journal of Research in Science Teaching, 1971, 8, 41-43.

Goodlad, J. I. The schools vs. education. Saturday Review, April 19, 1969, 58-61.

Goodlad, J. I., & Klein, M. F. Looking behind the classroom door. Worthington, Ohio: Charles A. Jones, 1974.

Greene, M. Values in society and teacher education. In M. Lindsey (Ed.), Teacher education: Future directions. Washington: The Association of Teacher Educators, 1970.

Guttman, L. A basis for scaling qualitative data. American Sociological Review, 1944, 9, 139-150.

Guttman, L. The problem of attitude and opinion measurement. In S. A. Stouffer et al. (Eds.), Measurement and prediction. New York: John Wiley & Sons, 1950.

Guttman, L. The basis for scalogram analysis. In S. A. Stouffer et al. (Eds.), Measurement and prediction. New York: John Wiley & Sons, 1950.

Guttman, L. A note on Sir Cyril Burt's factorial analysis of qualitative data. British Journal of Statistical Psychology, 1953, 6, 1-4.

Guttman, L. An outline of some new methodology for social research. Public Opinion Quarterly, 1954-55, 18, 395-404.

Guttman, L. A structural theory for intergroup beliefs and action. American Sociological Review, 1959, 24, 318-28.

Guttman, L., & Schlesinger, I. M. Development of diagnostic analytical and mechanical ability tests through facet design and analysis. Cooperative Research Program of the Office of Education, U.S. Department of Health, Education and Welfare, Grant No. OE-4-21-014, Jerusalem: The Israel Institute of Applied Social Research, 1966.

Guttman, L., & Schlesinger, I. M. Systematic construction of distractors for ability and achievement test items. Educational and Psychological Measurement, 1967, 27, 569-580.

Hamersma, R. J. Construction of an attitude-behavior scale of Negroes and whites toward each other using Guttman analysis. Unpublished doctoral dissertation, Michigan State University, 1969.

Hamersma, R. J., Paige, J., & Jordan, J. E. Construction of a Guttman facet designed cross-cultural attitude-behavior scale toward racial-ethnic interaction. Educational and Psychological Measurement, 1973, 33, 565-576.

Harrelson, L. E., Jordan, J. E., & Horn, H. An application of Guttman facet theory to the study of attitudes toward the mentally retarded in Germany. Journal of Psychology, 1972, 80, 323-335.

Heath, D. H. Affective education: Aesthetics and discipline. The School Review, 1972, 80, 353-372.

Hitt, W. D. Education as a human enterprise. Worthington, Ohio: Charles A. Jones Publishing Co., 1973.

Jones, R. M. Fantasy and feeling in education. New York: New York University Press, 1968.

Jordan, J. E. Attitudes toward education and physically disabled persons in eleven nations. East Lansing, Mich.: Latin American Studies Center, Michigan State University, 1968.

Jordan, J. E. Attitude-behaviors toward mentally retarded persons: A cross-cultural analysis. Final report, U.S. Office of Education, Grant No. OEG-0-8-00126-0197, Project No. 7-E-126, Washington, D.C., 1970.

Jordan, J. E. Attitude-behavior research on physical-mental-social disability and racial-ethnic differences. Psychological Aspects of Disability, 1971, 18, 5-26. (a)

Jordan, J. E. Construction of a Guttman facet designed cross-cultural attitude--ehavior scale toward mental retardation. American Journal of Mental Deficiency, 1971, 76, 201-219. (b)

Jordan, J. E. Attitude-behaviours toward the disabled and disadvantaged: Contact, intensity, knowledge and favourableness. Proceedings Preview, 12th World Congress of Rehabilitation International. August 27-September 1, 1972, Sydney, Australia, pp. 796-800. (a)

Jordan, J. E. A cross-cultural facet theory paradigm for studying attitude-behaviors toward race-ethnicity-caste-tribalism. Abstracts of Proceedings. 20th International Congress of Psychology, August 13-19, 1972, Tokyo. (b)

Jordan, J. E. Facet theory and cross-cultural research methodology. Paper presented at the First International Conference for the Association of Cross-Cultural Psychology, University of Hong Kong, August 1972. (c)

Jordan, J. E. Attitude-behaviors toward technical education (CEMIE-OAS). San José, Costa Rica: Ministry of Education, 1975. (a)

Jordan, J. E. Attitude-behaviors toward women (CEMIE-OAS). San José, Costa Rica: Ministry of Education, 1975. (b)

Jordan, J. E., & Guttman, L. Facet theory and cross-cultural research. Manuscript submitted for publication, 1976.

Kaiser, H. F. Scaling a simplex. Psychometrika, 1962, 27, 155-162.

Kaple, J. Development of an attitude-behavior toward drug users scale employing Guttman facet design and analysis. Unpublished doctoral dissertation, Michigan State University, 1971.

Kelley, E. C. The place of affective learning. Educational Leadership, 1965, 22, 455-457.

Kerlinger, F. N. The attitude structure of the individual: A Q-study of the educational attitudes of professors and laymen. Genetic Psychology Monographs, 1956, 53, 283-329.

Kerlinger, F. N. Progressivism and traditionalism: Basic factors of educational attitudes. Journal of Social Psychology, 1958, 48, 111-135.

Kerlinger, F. N., & Kaya, E. The construction and factor-analytic validation of scales to measure attitudes toward education. Educational and Psychological Measurement, 1959, 18, 13-29.

Kohlberg, L. Moral education in the schools: A developmental viewpoint. School Review, 1966, 74, 1-30.

Kohlberg, L. Moral education for a society in moral transition. Educational Leadership, 1975, 33, 46-54.

Krathwohl, D. R., Bloom, B. S., & Masia, B. B. Taxonomy of educational objectives. Handbook II: Affective domain. New York: David McKay Co., 1964.

Lawry, A. The empirical validity of major properties of a taxonomy of affective educational objectives. The Journal of Experimental Education, 1968, 36, 70-77.

Lindgren, H. C. Correlates of attitudes toward child-centered practices in education. Psychological Reports, 1961, 9, 440.

Lindgren, H. C. Authoritarianism, independence, and child-centered practices in education: A study of attitudes. Psychological Reports, 1962, 10, 747-750.

Lindgren, H. C., & Patton, G. M. Attitudes of high school and other teachers toward children and current educational methodology. California Journal of Educational Research, 1958, 9, 80-85.

Llewellyn, A., & Cahoon, D. Teaching for affective learning. Educational Leadership, 1965, 22, 469-472.

Longstreet, W. S. The school's curriculum. In J. I. Goodlad & H. G. Shane (Eds.), The elementary school in the United States: The seventy-second yearbook of the National Society for the Study of Education, Pt. 2. Chicago: The University of Chicago Press, 1972.

Maslow, A. H. Motivation and personality. New York: Harper & Row, 1970.

Nicholson, W. N. A Guttman facet analysis of attitude-behaviors toward drug users by heroin addicts and mental health therapists. Unpublished doctoral dissertation, Michigan State University, 1972.

Oliver, R. A. C., & Butcher, H. J. Teachers' attitudes to education. British Journal of Social and Clinical Psychology, 1962, 1, 56-59.

Oppenheim, A. N. Questionnaire design and attitude measurement. New York: Basic Books, 1966.

Ostrom, T. M. The emergence of attitude theory: 1930-1950. In A. G. Greenwald, T. C. Brock, & T. M. Ostrom (Eds.), Psychological foundations of attitudes. New York: Academic Press, 1968.

Patterson, C. H. Humanistic education. Englewood Cliffs, N.J.: Prentice-Hall, 1973.

Peterson, F. E. Philosophies of education current in the preparation of teachers in the U.S. New York: Teachers' College, Columbia University, 1933.

Piaget, J. Six psychological studies. New York: Random House, 1967.

Poulos, T. H. Attitudes toward the deaf: A Guttman facet analysis of their content, structure and determinants. Unpublished doctoral dissertation, 1970.

Read, D. A., & Simon, S. B. Humanistic education sourcebook. Englewood Cliffs, N.J.: Prentice-Hall, 1975.

Ringness, T. A. The affective domain in education. Boston: Little, Brown & Co., 1975.

Ripple, R. E. Affective factors influence classroom learning. Educational Leadership, 1965, 22, 473-475.

Rogers, C. Freedom to learn. Columbus, Ohio: Charles E. Merrill Publishing Co., 1969.

Shaw, M. E., & Wright, J. M. Scales for the measurement of attitudes. New York: McGraw-Hill, 1967.

Sherif, M. A study of some social factors in perception. Archives of Psychology, 1935, 27, No. 187.

Silberman, C. E. Crisis in the classroom. New York: Random House, 1970.

Simon, S. B., & Kirschenbaum, H. Values clarification: A handbook of practical strategies for teachers and students. New York: Hart Publishing Co., 1972.

Spindler, G. D. Education in a transforming American culture. Harvard Educational Review, 1955, 25, 145-156.

Suchman, E. A. The intensity component in attitude and opinion research. In S. A. Stouffer (Ed.), Measurement and prediction. Princeton: Princeton University Press, 1950.

Summers, G. (Ed.). Attitude measurement. Chicago: Rand McNally & Co., 1970.

Thurstone, L. L., & Chave, E. J. The measurement of attitudes. Chicago: University of Chicago Press, 1929.

Valett, R. E. Affective-humanistic education. Belmont, California: Fearon Publishers, 1974.

Weinstein, G., & Fantini, M.D. Toward humanistic education: A curriculum of affect. New York: Praeger, 1970.

Wight, A. R., Doxsey, J. R., & Mathiesen, R. Measurement of affect and the humanizing of instruction: Part 2, Instrument development and use. Salt Lake City, Utah: Interstate Educational Resource Service Center, 1974.

Wolf, R. M. Construction of desriptive and attitude scales. In T. Husen (Ed.), International study of achievement in mathematics, Vol. I. New York: John Wiley & Sons, 1967.

# APPENDICES

# APPENDIX A

## HOUSE BILL NO. 4951

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April 15, 1975, Introduced by Reps. Thaddeus C. Stopczynski, Brown, Stevens, Ogonowski, Novak, Welborn, Powell, Stephen Stopczynski, Hunsinger, Rocca and Fessler and referred to the Committee on Education.

A bill to prescribe the rights of parents and guardians of children enrolled in public schools; to prescribe the responsibilities of parents, guardians, teachers, and school personnel; and to prescribe penalties.

THE PEOPLE OF THE STATE OF MICHIGAN ENACT:

Sec. 1. (1) All programs within the public schools are subject to continuous review by parents and guardians to insure that the programs are consistent with the primary function of the school. The primary function of a public school is to develop the intellectual capabilities of the child. The school has neither the responsibility nor the right to intervene in areas of personal development and exceeds its authority as a servant of the people paid by public taxes if it attempts to do so.

(2) A student shall not be placed in an experimental or pilot program without the prior written consent of a parent or guardian. Instructional materials, including teacher manuals, films, tapes, or other supplementary material which will be used shall be available to a parent or guardian before placement of a student in the program, and a parent or guardian may view the instructional materials upon request.

(3) An employee of a public school or a person brought into a public school by the administration shall not seek to subvert parental authority by acting as a change agent of attitudes, values, and religious or political beliefs of the students.

(4) An employee of a public school shall not require of a student proof of registration to vote or party affiliation as a prerequisite for obtaining a grade or enrollment in a class.

Sec. 2. A pupil shall only be tested for intelligence quotient, proficiency in basic skills, and academic subject matter.

Testing pertaining to student attitudes, parent attitudes, or personal information pertaining to the student and the student's family, or as concerns their habits or values, including personality inventories, value appraisals, psychological inventories, or diagnostic tests shall be given only after receiving written parental permission. When a test is to be administered to a student, the parent or guardian of the student shall be provided a copy of the test upon request.

Sec. 3. (1) A school district officer, superintendent, administrative employee, teacher, or other school district employee having charge or control of a student's cumulative record file shall exhibit the entire contents of the file, including teacher notes, test scores, achievement records, health record, psychological tests and scores, and other data contained therein, to a student's parent or guardian upon demand and copies of the same shall be furnished upon request.

(2) Psychological or psychiatric methods shall not be practiced in the public schools. This prohibition includes role-playing, sensitivity training, or any other method of dealing with or probing the psyche of the student. "Sensitivity training" when used in this act means group meetings, large or small, to discuss publicly a student's intimate and personal matters, opinions, values or beliefs; or to act out emotions and feelings toward one another in the group, using techniques such as self-confession or mutual criticism. A school has no authority to use guidance counseling in the areas of social, emotional, mental, or personal problems without prior written parental permission.

Sec. 4. A parent or guardian must be apprised not less than annually by the teacher or principal of a student's progress in the basic skills, in particular, reading, composition, and computation, as measured against standard grade level norms. Information such as standing in the class, class standing in relation to the school, the school district, and the school district in relation to the national norms, shall be provided to the parent or guardian upon request.

Sec. 5. Failure to comply with this act is a misdemeanor. Refusal to comply with this act by a certified employee is grounds for revocation or refusal to renew the certificate.

# APPENDIX B

## PROJECT FOCUS: PROGRAM DESCRIPTION

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## Focus: A Primary Prevention Program

### General Characterization

Focus is a primary prevention program implemented in selected elementary schools in the Grand Ledge and Lansing School Districts. It is a systematic program used in pre-school and K-6 classrooms, designed to teach problem-solving techniques in helping the child become aware of himself, others, and his environment. It assists in helping the student discover his potentials as well as behavior effects. It hopes to assist the child in forming a better self-concept and a positive self-image. It looks at our world, its environment, and the child's relationship to it. Its major aim is to help the child to focus on and understand his own development. This prevention program represents a model of a partnership between a mental health agency and educational systems.

Focus utilizes a mental health professional working as a consultant in the schools, training teachers to implement the program in the classroom. Teachers are trained in the use of primary prevention techniques through workshops and individual meetings with the mental health consultant. The consultant discusses with the teachers weekly lesson plans as well as the teachers' own reactions and perceptions to concepts. With this training and on-going support, the teachers implement an affective/problem-solving curriculum in the classroom. Each teacher is supplied with grade-appropriate classroom instructional materials including activities of role-playing, filmstrips, group discussion, art, music, creative writing, audio tapes, puppets, open-ended stories, etc. A within-system person (social worker, counselor, resource teacher, etc.) is identified and closely worked with in order to better insure continued consultative support for the teacher once the mental health professional moves to additional schools. In addition to becoming a distinct portion of the daily curriculum, one's hope is to have concepts and techniques utilized in relation to other subject areas as well.

Parent involvement in the program begins through the use of an introductory PTO meeting at the start of the year. A letter is sent home explaining the program in detail and asking for parental support through discussion groups offered by the consultant. These groups may be on-going evening meetings (10 to 12 weeks), afternoon

group meetings in the school or parent homes, or special topic area presentations meeting for one session. Some areas covered in these meetings include: motivation of behavior, problem-solving techniques, personality development, behavioral management, communication skills, sibling rivalry, death, divorce, etc. Attendance varies significantly (8-60) depending upon topic and purpose of meeting, with the special topic meetings attracting the larger number.

Focus has also been involved with the community by making its staff available for presentations and workshops with groups such as migrant education, other educational systems, child study clubs, child parent classes, day-care consultation and parent groups, big brothers/sisters parent groups, etc. An adult education class in communication and decision-making skills will also be offered through the community adult education program and taught by Focus staff.

Focus is viewed as a systems impact program in that it is to become a permanent part of the teaching curriculum. Through its work with the home and community, and expansion to one or two additional schools a year within a district, affective eduation will eventually become a K-12 instructional portion of the curriculum process.

## Curriculum and Materials

In working within the school system, it has been found most helpful to provide curriculum materials for utilization by the teachers. It is suggested that these materials be used at least three times a week with all grade levels, if not every day with lower elementary grades. While the materials are to be used as a structured portion of the instructional process, it is emphasized that many of the techniques and concepts can be utilized throughout the daily interaction between teacher and students. As special needs arise in individual classrooms, the consultant and teacher modify or create new lesson plans to help facilitate dealing with the situations.

In that there are numerous affective materials available, the Focus staff found it necessary to carefully select those which we view as appropriate for our program. In buying materials, Focus utilized a committee of classroom teachers and professional staff which decided upon the selection criteria of (1) are developmentally sound; (2) fit into the taxonomy of affective educational objectives proposed by Bloom, Krathwohl, and Masia (Taxonomy of Educational Objectives Handbook II: Affective Domain, David McKay Co., New York); (3) are open-ended in their format, initiating discussion between the students with the teacher facilitating rather than "teaching" a moralistic point of view; (4) are applicable to the classroom, especially in providing methods of integrating the

materials into the classroom in ways additional to a specified affective curriculum; that is, projects in Reading, Art, Music, etc., that tie in with the topic under consideration.

The Focus Program has selected one major curriculum kit for each grade level and supplemented these materials with others which are available from the consultant. Consultants emphasize the needed sequence of experiences which facilitate the movement from the external socialization of the child to the internalization by the child of skills involved in the development around attending, responding, valuing, organization, and characterization.

## Training Teachers

In that this program trains the "caretaker" of children, rather than dealing directly with children themselves, teacher training is perhaps the most critical function of the program. An attempt is made to provide teachers with some basic awareness and skills in the complex area of affective education. Since the utilization of the program is on a voluntary basis for teachers, workshops are also voluntary for only those who wish to pursue the area further. Even given this voluntary format, attendance at the workshops is generally very high. Specific content and number of workshops are dictated by the specific needs of each school's staff. However, in general, the following is included: a workshop held prior to school starting in the fall or within the first couple of days, concentrating upon distribution of materials, program philosophy, modeling alternative methods of utilizing the kits, etc. Workshops are then scheduled throughout the rest of the year and offered at available times which might include staff development days, lunch meetings, or after-school meetings.

Areas which are generally included in the workshop format are (1) Instruction in Child Development--helping the teacher understand the process of emotional growth as it is related to the cognitive growth of children; (2) Interpersonal and Small Group Communication Training,--communication and listening skills are a basic necessity for classroom learning to take place; (3) Problem-solving --exposing teachers to this area by discussing a number of processes and by having the teachers experience as many of these as possible; (4) Value Clarification--helping teachers understand this area and its use in a process manner; (5) Behavioral Management Skills--very little learning takes place if the teacher cannot get the attention of students; (6) Affective Education Materials--discussing with the teachers the material they have available to them and utilization of presently existing stimulus material in the school setting; (7) Intervention in Crisis Situations--discussing with the teacher alternative ways to deal with some of the crises that may be encountered in the classroom, not as a counselor but as an understanding person who can meet an immediate need.

Workshops are generally held with one school staff at a time to help build trust and communication channels between teachers within a building. Independent workshops are also generally held for teacher aides in that they spend considerable time in contact with both individual and small groups of students.

Ongoing Support of Teachers and Maintenance of Program

A crucial aspect to the impact of Focus has been the ongoing support offered to teachers. Without consistent and continal support it has been found some teachers will not maintain usage of the materials. The consultant meets with participating teachers each week to discuss issues that have arisen in the classroom and to help the teacher work out techniques to deal with the issues. These weekly contacts are made outside the classroom, either individually or in small grade-level groups. The consultant makes special efforts to utilize the teacher's natural release time (before school, after school, lunch, library, music, recess) to ensure never taking the teacher's time from the student. While a few teachers have expressed concern over not receiving additional release time to talk to the consultant, the majority are willing to use their regular time away from students. These meetings are voluntary and can either be scheduled for a specific time or on a "drop-in" basis over a time period. The physical presence of the consultant in a consistent manner has been found to be an essential role of support. Even if a teacher chooses not to meet with the consultant, knowing that one is available has been expressed as crucial. While this requires some waiting time on the consultant's part, the pay-off is too essential to ignore. While not meeting with teachers outside the classroom, the consultant may observe the teacher in the classroom utilizing materials. This gives the consultant the advantage of becoming better acquainted with the classroom system and at offering process feedback on the techniques and reactions. The consultant will also work with the teacher presenting materials to the student in areas the teacher may feel insecure with or desire some modeling of techniques. The consultant working with two schools will spend approximately two days in each with an additional day being utilized in previous project schools or in other consultative activities. Therefore, a project school has available the mental health consultant half-time for one complete year, for a half-day the second year, and then one expects to maintain a self-sustaining program in succeeding years. To better insure support for the teacher in on-going years, the consultant initially works very closely with a within-system person who would then be available to give consultation support to teachers. An example is: Grand Ledge selected school social workers. They changed their defined roles to Home/School Coordinator with their job description now giving them time for Primary Prevention Consultation activities, utilizing Focus materials in their assigned schools. All new teachers in previous project schools are invited

to attend the initial workshop to ensure their understanding of the program.

## Funding

Funding for Focus is based upon a 3 to 1 ratio between mental health and the school district, with the school providing 25%, mental health 75%. Costs include consultant salary and fringe, evaluation, travel, supplies, and contractual services.

## Evaluation

Focus provides independent evaluation to formally assess the program and its outcomes with respect to the stated goals and objectives. From this it is hoped to clarify and possibly modify or redesign present and future programming attempts in the area of primary prevention.

The program consultant offers ongoing informal process evaluation through individual teacher contact and classroom observation. Formal evaluation efforts have centered around a self-esteem test (self-appraisal Inventory by Instructional Objectives Exchange, 1972, Box 24095, Los Angeles, California 90024) given pre-post in the fall and again in the spring. Project schools are compared to control schools of matched achievement and SES populations. In addition, individual records of all academic subjects, attendance, and referrals to special services are accumulated. Data from this effort is not completed and thus not available at this time. Research specialists from Michigan State University have been contracted to assist in this effort. As an additional help to teachers, grade-level objectives concerning the curriculum kits have been formed to better assess actual achievement within the classroom. Evaluation in primary prevention is still in its infancy and much work in longitudinal studies need to take place.

## Summary

Focus is a systematic prevention program involved with elementary schools which exposes children to problem-solving and affective situations focusing upon social-emotional-behavioral growth and development. It is viewed as a systems program in that it deals directly with some environmental learning systems which children are exposed to. In addition to the preventative aspects of future problems, this program represents an effort to enhance and facilitate each individual's unique normal growth sequence. It attempts to help each individual focus on and better understand his own development within environmental systems.

It is apparent that this model is operational, has impact in a needed area of mental health, and is enthusiastically put into operation by school personnel. By bringing together in a working model the influence of the home, school, and community, programs in this area can aid greatly in the full and productive development of children and adolescents.

# APPENDIX C

## ATTITUDE-BEHAVIOR SCALE:

## AFFECTIVE EDUCATION

ATTITUDE-BEHAVIOR SCALE: AFFECTIVE EDUCATION (ABS:AE)

DIRECTIONS

This scale is designed to assess the attitudes of elementary teachers toward the various facets of teaching affective education, and to see how these attitudes correlate with personal beliefs and behavior.

The items of the scale deal with curriculum, goals and teaching procedures, with issues of competency and reward, and with the support of social systems which have an impact on the teacher. The basic set of items in Level I is replicated with vital changes in frame of reference in Levels II and III:

Level I deals with your perceptions of the beliefs of teachers in general.

Level II deals with your own personal beliefs.

Level III deals with your actual experiences in relation to teaching affective education.

The items may thus appear repetitious, but do in fact vary in a significant manner which is of basic importance to the study.

Here is a sample statement:

1. Most teachers believe that affective education deals with attitudes, values, and feelings.

    1. strongly disagree
    2. disagree
    3. agree
    4. strongly agree

If you think that most elementary teachers would agree with this, though not strongly, you should make a heavy dark line with a lead pencil over the number 3 on the answer sheet, as follows:

1. [1] [2] [3] [4] [5]

NOTE: Be sure to use a lead pencil . . . There is no need to put your name on the answer sheet . . . Please do not write on the booklet.

Thank you for your participation in the study.

**********

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## LEVEL I: NORMATIVE BELIEFS

ABS:AE - I

### Directions

This section contains statements about what most elementary school teachers believe affective education ought to be.

Mark the space on the answer sheet that indicates your perception of what most elementary teachers believe ought to be:

1. Most teachers believe affective education ought to be recognized as a subject in the elementary school curriculum.

    1. strongly disagree
    2. disagree
    3. agree
    4. strongly agree

2. Most teachers believe specific time periods in the class schedule should be set aside for affective education.

    1. strongly disagree
    2. disagree
    3. agree
    4. strongly agree

3. Most teachers believe affective education should be taught as an integral part of the whole curriculum.

    1. strongly disagree
    2. disagree
    3. agree
    4. strongly agree

4. Most teachers believe there ought to be a developmental program of affective education specifically geared to each grade level.

    1. strongly disagree
    2. disagree
    3. agree
    4. strongly agree

5. Most teachers believe there ought to be clearly defined goals in affective education.

    1. strongly disagree
    2. disagree
    3. agree
    4. strongly agree

6. Most teachers believe one of the primary goals of affective education should be to increase motivation for learning.

    1. strongly disagree
    2. disagree
    3. agree
    4. strongly agree

Indicate what most elementary teachers believe ought to be:

7. Most teachers believe one of the primary goals of affective education should be to promote personality development.

    1. strongly disagree
    2. disagree
    3. agree
    4. strongly agree

8. Most teachers believe one of the primary goals of affective education should be the improvement of society.

    1. strongly disagree
    2. disagree
    3. agree
    4. strongly agree

9. Most teachers believe commercially produced teaching aids and materials ought to be readily available for use in affective education programs.

    1. strongly disagree
    2. disagree
    3. agree
    4. strongly agree

10. Most teachers believe special teaching techniques should be used in affective education programs.

    1. strongly disagree
    2. disagree
    3. agree
    4. strongly agree

11. Most teachers believe it ought to be possible to specify performance objectives for affective education.

    1. strongly disagree
    2. disagree
    3. agree
    4. strongly agree

12. Most teachers believe the teacher's role in affective education should be to help the students develop their own attitudes, values, and feelings.

    1. strongly disagree
    2. disagree
    3. agree
    4. strongly agree

Indicate what most elementary teachers believe ought to be:

13. Most teachers believe when problems arise in teaching affective education, teachers should be able to get supervision or consultation.

    1. strongly disagree
    2. disagree
    3. agree
    4. strongly agree

14. Most teachers believe teachers should feel competent to deal with issues of affective education in the classroom.

    1. strongly disagree
    2. disagree
    3. agree
    4. strongly agree

15. Most teachers believe teachers ought to have had special training before they teach affective education.

    1. strongly disagree
    2. disagree
    3. agree
    4. strongly agree

16. Most teachers believe teachers should become conscious of their own attitudes, values, and feelings through teaching affective education.

    1. strongly disagree
    2. disagree
    3. agree
    4. strongly agree

17. Most teachers believe teaching affective education ought to be seen as an appropriate role for the elementary school teacher.

    1. strongly disagree
    2. disagree
    3. agree
    4. strongly agree

18. Most teachers believe teachers ought to get special recognition for teaching affective education.

    1. strongly disagree
    2. disagree
    3. agree
    4. strongly agree

Indicate what most elementary teachers believe ought to be:

19. Most teachers believe teaching affective education ought to have beneficial effects in the classroom for both teacher and students.

    1. strongly disagree
    2. disagree
    3. agree
    4. strongly agree

20. Most teachers believe teachers should enjoy teaching affective education.

    1. strongly disagree
    2. disagree
    3. agree
    4. strongly agree

21. Most teachers believe the State Department of Education ought to advocate the teaching of affective education in the elementary schools.

    1. strongly disagree
    2. disagree
    3. agree
    4. strongly agree

22. Most teachers believe teachers should have the support of their school board to teach affective education.

    1. strongly disagree
    2. disagree
    3. agree
    4. strongly agree

23. Most teachers believe teachers should have administrative support for teaching affective education.

    1. strongly disagree
    2. disagree
    3. agree
    4. strongly agree

24. Most teachers believe teachers should have support from parents in teaching affective education.

    1. strongly disagree
    2. disagree
    3. agree
    4. strongly agree

LEVEL II: PERSONAL BELIEFS ABS:AE- II

Directions

This section contains statements indicating what you personally believe affective education ought to be.

Mark the space on the answer sheet that indicates what you, yourself believe ought to be:

25. I believe affective education ought to be recognized as a subject in the elementary school curriculum.

1. strongly disagree
2. disagree
3. agree
4. strongly agree

26. I believe specific time periods in the class schedule should be set aside for affective education.

1. strongly disagree
2. disagree
3. agree
4. strongly agree

27. I believe affective education should be taught as an integral part of the whole curriculum.

1. strongly disagree
2. disagree
3. agree
4. strongly agree

28. I believe there ought to be a developmental program of affective education specifically geared to each grade level.

1. strongly disagree
2. disagree
3. agree
4. strongly agree

29. I believe there ought to be clearly defined goals in affective education.

1. strongly disagree
2. disagree
3. agree
4. strongly agree

30. I believe one of the primary goals of affective education should be to increase motivation for learning.

1. strongly disagree
2. disagree
3. agree
4. strongly agree

Indicate what you, yourself believe ought to be:

31. I believe one of the primary goals of affective education should be to promote personality development.

    1. strongly disagree
    2. disagree
    3. agree
    4. strongly agree

32. I believe one of the primary goals of affective education should be the improvement of society.

    1. strongly disagree
    2. disagree
    3. agree
    4. strongly agree

33. I believe commercially produced teaching aids and materials ought to be readily available for use in affective education programs.

    1. strongly disagree
    2. disagree
    3. agree
    4. strongly agree

34. I believe special teaching techniques should be used in affective education programs.

    1. strongly disagree
    2. disagree
    3. agree
    4. strongly disagree

35. I believe it ought to be possible to specify performance objectives for affective education.

    1. strongly disagree
    2. disagree
    3. agree
    4. strongly agree

36. I believe the teacher's role in affective education should be to help the students develop their own attitudes, values, and feelings.

    1. strongly disagree
    2. disagree
    3. agree
    4. strongly agree

Indicate what you, yourself believe ought to be:

37. I believe when problems arise in teaching affective education, teachers should be able to get supervision or consultation.

    1. strongly disagree
    2. disagree
    3. agree
    4. strongly agree

38. I believe teachers should feel competent to deal with issues of affective education in the classroom.

    1. strongly disagree
    2. disagree
    3. agree
    4. strongly agree

39. I believe teachers ought to have had special training before they teach affective education.

    1. strongly disagree
    2. disagree
    3. agree
    4. strongly agree

40. I believe teachers should become conscious of their own attitudes, values, and feelings through teaching affective education.

    1. strongly disagree
    2. disagree
    3. agree
    4. strongly agree

41. I believe teaching affective education ought to be seen as an appropriate role for the elementary school teacher.

    1. strongly disagree
    2. disagree
    3. agree
    4. strongly agree

42. I believe teachers ought to get special recognition for teaching affective education.

    1. strongly disagree
    2. disagree
    3. agree
    4. strongly agree

Indicate what you, yourself believe ought to be:

43. I believe teaching affective education ought to have beneficial effects in the classroom for both teacher and students.

1. strongly disagree
2. disagree
3. agree
4. strongly agree

44. I believe teachers should enjoy teaching affective education.

1. strongly disagree
2. disagree
3. agree
4. strongly agree

45. I believe the State Department of Education ought to advocate the teaching of affective education in the elementary schools.

1. strongly disagree
2. disagree
3. agree
4. strongly agree

46. I believe teachers should have the support of their school board to teach affective education.

1. strongly disagree
2. disagree
3. agree
4. strongly agree

47. I believe teachers should have administrative support for teaching affective education.

1. strongly disagree
2. disagree
3. agree
4. strongly agree

48. I believe teachers should have support from parents in teaching affective education.

1. strongly disagree
2. disagree
3. agree
4. strongly agree

LEVEL III: PERSONAL EXPERIENCE ABS:AE - III

Directions

This section contains statements indicating what your own personal experience has been in regard to affective education.

Mark the space on the answer sheet that indicates what you have found from experience:

49. I have found that affective education is recognized as a subject in the elementary school curriculum.

1. strongly disagree
2. disagree
3. agree
4. strongly agree

50. I have found that specific time periods in the class schedule are set aside for affective education.

1. strongly disagree
2. disagree
3. agree
4. strongly agree

51. I have found that affective education is taught as an integral part of the whole curriculum.

1. strongly disagree
2. disagree
3. agree
4. strongly agree

52. I have found that there is a developmental program of affective education specifically geared to each grade level.

1. strongly disagree
2. disagree
3. agree
4. strongly agree

53. I have found that there are clearly defined goals in affective education.

1. strongly disagree
2. disagree
3. agree
4. strongly agree

54. I have found that one of the primary goals of affective education is to increase motivation for learning.

1. strongly disagree
2. disagree
3. agree
4. strongly agree

Indicate what you have found from experience:

55. I have found that one of the primary goals of affective education is to promote personality development.

    1. strongly disagree
    2. disagree
    3. agree
    4. strongly agree

56. I have found that one of the primary goals of affective education is the improvement of society.

    1. strongly disagree
    2. disagree
    3. agree
    4. strongly agree

57. I have found that commercially produced teaching aids and materials are readily available for use in affective education programs.

    1. strongly disagree
    2. disagree
    3. agree
    4. strongly agree

58. I have found that special teaching techniques are used in affective education programs.

    1. strongly disagree
    2. disagree
    3. agree
    4. strongly agree

59. I have found that it is possible to specify performance objectives for affective education.

    1. strongly disagree
    2. disagree
    3. agree
    4. strongly agree

60. I have found that the teacher's role in affective education is to help the students develop their own attitudes, values, and feelings.

    1. strongly disagree
    2. disagree
    3. agree
    4. strongly agree

Indicate what you have found from experience:

61. I have found that when problems arise in teaching affective education, teachers can get supervision or consultation.

    1. strongly disagree
    2. disagree
    3. agree
    4. strongly agree

62. I have found that teachers feel competent to deal with issues of affective education in the classroom.

    1. strongly disagree
    2. disagree
    3. agree
    4. strongly agree

63. I have found that teachers have had special training before they teach affective education.

    1. strongly disagree
    2. disagree
    3. agree
    4. strongly agree

64. I have found that teachers become conscious of their own attitudes, values, and feelings through teaching affective education.

    1. strongly disagree
    2. disagree
    3. agree
    4. strongly agree

65. I have found that teaching affective education is seen as an appropriate role for the elementary school teacher.

    1. strongly disagree
    2. disagree
    3. agree
    4. strongly agree

66. I have found that teachers get special recognition for teaching affective education.

    1. strongly disagree
    2. disagree
    3. agree
    4. strongly agree

Indicate what you have found from experience:

67. I have found that teaching affective education has beneficial effects in the classroom for both teacher and students.

1. strongly disagree
2. disagree
3. agree
4. strongly agree

68. I have found that teachers enjoy teaching affective education.

1. strongly disagree
2. disagree
3. agree
4. strongly agree

69. I have found that the State Department of Education advocates the teaching of affective education in the elementary schools.

1. strongly disagree
2. disagree
3. agree
4. strongly agree

70. I have found that teachers have the support of their school board to teach affective education.

1. strongly disagree
2. disagree
3. agree
4. strongly agree

71. I have found that teachers have administrative support for teaching affective education.

1. strongly disagree
2. disagree
3. agree
4. strongly agree

72. I have found that teachers have support from parents in teaching affective education.

1. strongly disagree
2. disagree
3. agree
4. strongly agree

PERSONAL DATA ABS:AE - D

Directions

This part of the questionnaire deals with a wide variety of questions about yourself. Please answer each question as frankly and simply as possible. There should be only one answer to each question. Since the questionnaire is completely confidential, you may answer all of the questions freely without fear of being identified.

Please read every question carefully, and remember that it is important to obtain a response for every item.

73. Please indicate your sex:

1. Female
2. Male

74. Please indicate your age:

1. 21 - 25
2. 26 - 30
3. 31 - 40
4. 41 - 50
5. 51 and over

75. What is your level of education?

1. Bachelor's degree
2. Course work beyond the bachelor's degree
3. Master's degree
4. Course work beyond the master's degree
5. Specialist degree or more

76. How many years of experience do you have in teaching?

1. Less than one year
2. 1 to 5 years
3. 6 to 10 years
4. 11 to 15 years
5. 16 years or more

77. What grade do you teach?

1. Kindergarten
2. First or second grade
3. Third grade
4. Fourth grade
5. Fifth or sixth grade

78. How much did you know about affective education prior to reading this questionnaire?

    1. Nothing whatsoever
    2. Very little
    3. A moderate amount
    4. A great deal

79. Have you had specific training in affective education?

    1. None
    2. Very little
    3. Some
    4. A great deal

80. Has your teaching included affective education objectives? (Check only one response)

    1. No
    2. Yes, on an informal basis
    3. Yes, as part of a formal program in affective education
    4. Both 2 and 3

81. How long have you been using affective education techniques in the classroom? (If you have <u>not</u> been using them, check 5)

    1. This is my first year
    2. This is my second year
    3. This is my third year
    4. More than three years
    5. I have <u>not</u> taught affective education

82. Do you feel you have a readily accessible expert to turn to for consultation or supervision in matters concerning affective education? (Check only one response)

    1. None available
    2. Yes, from regular personnel within the school
    3. Yes, from special personnel employed by the school system
    4. Yes, from consultants outside of the school system

83. When you dealt with personal or affective matters in the classroom, what were the consequences?

    1. Very negative
    2. Somewhat negative
    3. Somewhat positive
    4. Very positive

84. Politically, how would you classify yourself?

1. Very conservative
2. Conservative
3. Liberal
4. Very liberal

85. I find it easier to do things on my own than to follow rules.

1. Strongly disagree
2. Disagree
3. Agree
4. Strongly agree

86. Family planning on birth control has been discussed by many people. What is your feeling about a married couple practising birth control? Do you think they are doing something good or bad? If you had to decide, would you say they are doing wrong, or that they are doing right?

1. It is always wrong
2. It is usually wrong
3. It is probably all right
4. It is always right

87. Some people feel that in bringing up children, new ways and methods should be tried whenever possible. Others feel that trying out new methods is dangerous. What is your feeling about the following statement?

"New methods of raising children should be tried whenever possible."

1. Strongly disagree
2. Disagree
3. Agree
4. Strongly agree

88. It should be possible to eliminate war once and for all.

1. Strongly disagree
2. Disagree
3. Agree
4. Strongly agree

89. Success depends to a large part on luck and fate.

1. Strongly disagree
2. Disagree
3. Agree
4. Strongly agree

90. Someday most of the mysteries of the world will be revealed by science.

1. Strongly disagree
2. Disagree
3. Agree
4. Strongly agree

91. By improving industrial and agricultural methods, poverty can be eliminated in the world.

1. Strongly disagree
2. Disagree
3. Agree
4. Strongly agree

92. With increased medical knowledge, it should be possible to lengthen the average life span to 100 years or more.

1. Strongly disagree
2. Disagree
3. Agree
4. Strongly agree

93. Someday the deserts will be converted into good farming land by the application of engineering and science.

1. Strongly disagree
2. Disagree
3. Agree
4. Strongly agree

94. Education can only help people develop their natural abilities; it cannot change people in any fundamental way.

1. Strongly disagree
2. Disagree
3. Agree
4. Strongly agree

95. With hard work anyone can succeed.

1. Strongly disagree
2. Disagree
3. Agree
4. Strongly agree

96. Almost every present human problem will be solved in the future.

1. Strongly disagree
2. Disagree
3. Agree
4. Strongly agree