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THE DEVELOPMENT OF A VALUES ASSESSMENT DEVICE BASED UPON
THE ASSUMPTIONS UNDERLYING THE DIRECT APPROACH TO MORAL EDUCATION

by

Todd Scott Larsen

A dissertation submitted in partial fulfillment
of the requirements for the degree

of

DOCTOR OF PHILOSOPHY

in

Psychology

Approved:

UTAH STATE UNIVERSITY
Logan, Utah

1980

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ABSTRACT

The Development of a Values Assessment Device Based
Upon the Assumptions Underlying the
Direct Approach to Moral Education

by

Todd Scott Larsen, Doctor of Philosophy

Major Professors: Dr. Keith T. Checketts
Dr. Larry C. Jensen
Department: Psychology

The purposes of the present research were two-fold. The first purpose was the development of a test construction strategy by which an objective assessment device, based upon the unique goals of moral education within a specific school district, may be developed. The second purpose was the actual development of a psychometrically sound instrument based upon such goals. To accomplish these aims, seven interrelated studies were conducted involving a total of 775 subjects.

The rationale for the nature of the test was based upon the assumptions of the direct approach to moral education. These assumptions are that children should learn and exemplify in their behavior certain values that are viewed by the community as essential to adequate socialization. Such values have been indentified by educators of the Salt Lake City School District. Therefore, the

goal of measurement was the development of a test that would discriminate students who exemplify these values in their behavior from those students who do not. The instrument was developed for the assessment of groups to aid curriculum evaluation in moral education. Disclaimers are made regarding the assessment of individuals using the instrument.

The reported studies concerning the development of the test include: (1) the initial writing and field testing of the hypothetical dilemmas and alternative solutions used in the test, (2) the revision of the test based upon the field testing, (3) the item analysis and validation procedures, (4) the cross-validation of selected items, (5) an analysis of the content validity of the dilemmas that compose the test, (6) the establishment of the reliability of the test, and (7) an assessment of the effects of socially desirable response sets on test scores. In addition, normative data regarding test scores for each grade tested and a parent group were presented.

The instrument developed through these procedures is an objective group test, applicable to grades 5 through 12. A content validity study provided reasonable evidence that the dilemmas that compose the test are logically related to the value goals proposed by district personnel. Studies of the reliability of the test revealed reliability coefficients from .82 (stability) to .92 (internal consistency). The concurrent validity of the test was established by selecting items that discriminated between groups of students

who were identified as either exemplary of the district values or non-exemplary of the district values. These items were then successfully cross-validated on an independent sample of similar criterion groups. In addition, two studies related to the effects of socially desirable response sets on test scores were conducted.

The limitations of the present research are discussed and suggestions for further research regarding the instrument are made.

(235 pages)

CHAPTER I

INTRODUCTION

Virtue, then, being of two kinds, intellectual and moral, intellectual virtue in the main owes both its birth and its growth to teaching (for which reason it requires experience and time), while moral virtue comes about as a result of habit, whence also its name ethike is one that is formed by a slight variation from the work ethos (habit). From this, it is also plain that none of the moral virtues arises in us by nature; for nothing that exists by nature can form a habit contrary to its nature. For instance, the stone which by nature moved downwards cannot be habituated to move upwards, not even if one tries to train it by throwing it up ten thousand times; nor can fire be habituated to move downwards, nor can anything else that by nature behaves in one way be trained to behave in another. Neither by nature, then, nor contrary to nature do the virtues arise in us; rather we are adapted by nature to receive them . . . (Aristotle, 1969, p. 61).

As may be seen by the foregoing remarks of Aristotle, concern over moral education is not new. The educational systems in most cultures throughout history have, with few exceptions, sought the development of character in addition to the development of intellect (Castle, 1962). However, what is new is the recent movement for educational accountability. Accountability in education means simply that educators may be held responsible for delivering a curriculum that is effective in achieving its stated purpose. Assessment is clearly related to accountability in education (Buhl, 1978). It is through assessment techniques that curriculum programs

may be evaluated and their effectiveness in achieving their specific purposes determined.

A number of approaches to moral education have been developed in the past few decades. The curriculum programs related to these approaches differ as a result of differing views regarding values and the valuing process. Only one of these approaches currently enjoys a systematic method of assessment (the moral development approach, see Review of Literature). Because of the differences in theoretical underpinnings and desired outcomes among the different approaches to moral education, assessment approaches must also differ.

One of the most widely used approaches to moral education in the United States has been called the direct approach (Superka, et al., 1976). Proponents of the direct approach to moral education believe that specific values exist, which are fundamental to society and which children must learn and put into practice in order to be adequately adjusted in society. The present research is addressed to the need for an assessment technique that is suitable for use in districts where educators utilize the direct approach to moral education.

Need for the Study

Although concern about moral education has existed since antiquity, there appears to have been a resurgence of interest in the area in the United States during the past few decades. Such interest

is reflected most vividly in the results of public opinion polls and professional surveys. For example, evidence of the educational community's support for moral education comes from studies involving the membership of Phi Delta Kappa (a professional community in education). Since the membership of Phi Delta Kappa (PDK) is composed of educational professionals including teachers, principals, superintendents, educational researchers and professors of education, these studies represent a wide sample of the educational community.

In one study, the membership of PDK were asked to rank, in order of priority, 18 specific goals of education (Spears, 1973). Ranked third by this group was "develop good character and self-respect", which included these subdivisions: (1) develop moral responsibility and sound ethical and moral behavior; (2) develop capacity for discipline; (3) develop a moral and ethical sense of values, goals and processes of a free society; and (4) develop standards of personal character and ideas. The only goals ranked above the goals of moral education were: (1) "develop skills in reading, writing, speaking and listening" and (2) "develop pride in work and a feeling of self-worth."

A second survey of the Phi Delta Kappa membership (Ryan & Thompson, 1975) showed that this group almost unanimously believe that schools should be actively and directly involved in moral education. When offered five choices with regard to the school's role in moral education, 88% of the surveyed group chose "An active

program of moral education in the school would be a helpful addition to the efforts of family and church to improve the moral development of children" as the alternative closest to their own overall view. Only 2% of the sample chose "An active program of moral education in the school is simply out of the question."

These two surveys suggest strong support by the professional educational community for some kind of moral education in the schools. However, evidence exists that the public sector is also highly in favor of moral instruction in the schools. The Seventh Annual Gallup Poll of Public Attitudes Toward Education (Gallup, 1975) revealed that 84% of the public school parents polled favored instruction in the schools that would deal with morals and/or moral behavior. The author of this study concluded that "an overwhelming majority of all major groups in the population would like to see such instruction (i.e., moral) provided by the schools. And, significantly, one of the groups most in favor is that composed of parents of children now attending public school" (Gallup, 1975, p. 234).

It may be inferred from these surveys that there is widespread recognition that moral education in the public schools is appropriate and desirable. And there appears to be a trend for school districts to include formal moral/ethical goals as a part of the district's educational objectives. Sanders and Klafter (1975) analyzed goal statements of the State Offices of Education and found that most of these included goals in the moral/ethical domain. In fact, these

researchers found that of 42 States Departments of Education having at least working drafts of public school educational objectives, 36 (86%) of them had at least one goal related to moral education.

With increased interest in moral education within the public, educational and governmental sectors, a number of programs, curriculum materials and instructional approaches have become available in this area (see Review of Literature). Unfortunately, these materials usually lack ways of assessing program effectiveness. This deficit in program assessment is especially serious given the recent movement towards educational accountability (Buhl, 1978; Kehres, 1978). Hoepfner (1974) points out that "Educational accountability, at some point, demands the use of assessment devices to measure the progress or achievements of pupils, classrooms, groups, schools, or school systems" (p. 103). Both the perceived priority of moral education by the educational community and the lack of assessment instruments in this area has been demonstrated by Hoepfner (1974). Through interviews of teachers, principals, superintendents and curriculum literature, Hoepfner (1974) assembled a comprehensive list of 106 educational objective categories. A nationwide sample of 2,555 subjects, including principals, teachers, and parents, were then asked to rank the objectives by importance. Of the 106 objectives, citizenship (a broad label including moral education) was rated the second most important educational objectives. In addition to these priority ratings, Hoepfner matched an exhaustive list of existing

published tests with the appropriate goal category. In this way, 1,644 published tests in education were sorted into the previously mentioned 106 educational objective categories. As a result of this procedure, the number of published tests currently available to assess each objective was determined. The results indicated that as of 1974, no published tests available for the assessment of the citizenship objective category existed. A review of the literature since 1974 also revealed no suitable tests reported in the literature since 1974 (see the Review of Literature section).

This lack of nationally based objective test in the area of moral education probably results from the variability of specific goal statements and curriculum materials produced by educators of different states, and even different districts within a state. This diversity in goal statements and curriculum materials in moral education is a reflection of the pluralistic character of the nation's schools. Indeed, as Purpel and Ryan (1976) have stated: "An open and pluralistic stance is fundamental to our public schools. Many religious, racial, ethnic, and even regional groups are distinguished by their values, the philosophical and theological basis for their morality and their different standards of behavior" (p. 8).

In summary then, educators in the United States who are concerned about moral education find themselves in a quandary. First, there is agreement among the public and educational sectors that moral education is desirable and appropriate in the schools. Second,

because of the pluralistic nature of schools in the United States, curriculum materials and goal statements in moral education have been developed on local levels to be in harmony with regional standards. Finally, because of this variability of curriculum programs and goal statements, nationally based assessment instruments have not been developed. Therefore, those educators interested in assessing the effectiveness of their curriculum programs find themselves without any suitable instruments. They are thus left with a curriculum and no objective means of assessing its impact.

The Salt Lake School District exemplifies this quandary. This district has developed an accepted set of 12 democratic values (see Appendix A) that all students should comprehend and hopefully implement in their personal lives. In addition to the development of these value goal statements, the district has also developed a formal curriculum approach to teach these values. Having established these particular goals and curriculum programs, a method of pupil evaluation was sought. This scenario illustrates the dilemma shared by all school districts that have developed a unique set of educational objectives and curriculum materials in the moral domain. The solution to this problem, that suggests itself, is the development of an assessment device based upon the unique goals and needs of each district.

Purpose and Objectives

Educators within the Salt Lake City School District have adopted a direct approach to moral education, and have developed formal curriculum strategies to teach the values they have identified as fundamental (Appendix A). These educators are presently in search of a method to assess the effectiveness of the curriculum they have implemented.

There are two major assumptions underlying the direct approach to moral education that have a direct bearing on the kind of assessment needed (see following review for more detail). First, educators using the direct approach believe that the prescribed values must be learned by the students. Second, educators using the direct approach believe that if the values are adequately learned by the students, the students' behavior will be directed by and in harmony with the values.

An assessment instrument designed to assess whether these values have been adopted by the student must not only test whether the student knows the values (cognitively), but must also assess whether the student exemplifies these values in his/her behavior. Logically, the best way to assess whether student behavior is congruent with the values is to observe student behavior in situations involving those values. However, such an assessment approach would undoubtedly prove very costly and time consuming. An objective form of measurement

is much more attractive in terms of time and expense. The problem, therefore, is whether an objective, paper and pencil, measurement approach can be developed to assess student exemplification of the particular values identified by district personnel.

The purposes of the present research are two-fold. The first purpose is the development of a test construction strategy based upon the unique goals of moral education within a specific district. The second purpose is the actual development of a psychometrically sound instrument based upon these goals. Therefore, the present research should culminate in a measurement approach that is useful to other districts using the direct approach to moral education. In addition, the research should result in the development of an instrument tailored specifically for use in the Salt Lake School District.

The specific objectives of the present research project are outlined below, subsumed by the two major purposes stated previously.

Objectives for the Test Construction Strategy

For a test construction strategy that would be useful to most school districts, it was assumed that the following three characteristics were essential:

1. Time efficiency. The strategy should be time efficient enough so as to allow the complete development of the final test within a period of one school year (nine months).

2. Data efficiency. The strategy should allow for the efficient use of data. The data collection procedures should be reasonable in terms of the number of subjects needed, yet yield complete information regarding sex, grade, and criterion group.
3. Ease of data analysis. The treatment of data and data analysis should be within the resources and capabilities of most school districts.

Objectives for the Assessment Instrument

The essential specifications of the final assessment instrument are as follows. The instrument should:

1. Be a group test, objective in format.
2. Be applicable to a wide grade range (fifth-twelfth grades).
3. Require less than one class period to complete.
4. Be logically and demonstrably tied to district educational objectives in the area of moral education.
5. Meet established standards for reliability and validity.
6. Test practical knowledge of the value goals proposed by district personnel. That is, the implications of the particular values on decisions and actions should be tested.

Measurement Goal

The measurement goal in the present research is necessarily related to the assumptions underlying the approach to moral education

used within the district. Therefore, the goal of measurement in the present research is an attempt to measure the degree to which students exemplify the values identified as important by educators within the district. In other words, the goal is to assess the degree to which students implement the identified values in their behavior.

Definition of Terms

To establish a common ground or frame of reference from which to proceed, the meaning of a number of terms are clarified in the present section.

Values

Values have traditionally been classified into two general categories: "intrinsic" or "instrumental." Intrinsic values are seen as important in and of themselves, while instrumental values are seen as important for being a means to other ends. For example, Rockeach (1973) refers to values as either "instrumental" or "terminal." In Rockeach's conception, instrumental values refer to values concerning desirable end-states of existence.

Shaver and Strong (1976) suggest the following broad definition of values: "Values are our standards and principles for judging worth. They are the criteria by which we judge "things" (people, objects, ideas, actions and situations) to be good, worthwhile, desirable; or

on the other hand, bad, worthless, despicable; or, of course, somewhere in between these extremes" (p. 15). Further, these authors define three types of values: esthetic, instrumental and moral. Esthetic values are described as those values by which beauty is judged. These values are applied in areas such as art, music and literature. Instrumental values are defined as values that are not important in and of themselves, but as means to an end. Usually more fundamental values underlie instrumental values, and the instrumental values are used as means to these more basic values. Finally, moral values are defined as "the standards, the principles, by which we judge whether aims or actions are proper" (p. 22). Therefore, moral values are applied in making decisions about our own or others' actions or intents. Shaver and Strong further contend that moral values vary considerably as to their importance and applicability. Therefore, moral values may be placed on a continuum of importance, from "personal preferences" to "basic values." Personal preferences are values such as "cleanliness." These values are generally not imposed upon others or used to judge the behavior of others. These values are not as weighty as basic values. Basic values, however, unlike personal preferences, are usually fundamental to the society. An example of such a value is the sanctity of human life. This kind of value is usually seen as fundamental to human existence and applicable to all men as a universal value. Shaver and Strong remark: "In a democratic

society, our basic values include commitments to such ideals as equal protection of the law, equal opportunity, freedom of speech, and religious freedom" (1976, p. 23).

The values with which the present dissertation deals (Appendix A) appear to fit well the definition of basic moral values given by Shaver and Strong.

Moral

"'Moral' refers to issues for which consideration of values or principles are relevant. A moral question requires the kind of thinking which seeks to establish a relationship between one's particular decisions and one's values or principles" (Hall & Davis, 1975, p. 15).

In addition to this cognitive component of morality, educators using the direct approach to moral education include a behavioral component to morality. A number of authors in the field of moral education agree with this conception of morality. For example, Hall and Davis (1975) state: "Morality concerns the ideals and values that underlie people's actions" (p. 16). Similarly, Purpel and Ryan (1976) emphasize that "the consideration of moral education must take into account both the students' capacity to think about moral problems and the way in which a student actually behaves in situations involving right and wrong behavior" (p. 5).

Moral Education

"Moral education is direct and indirect intervention of the school which affects both moral behavior and the capacity to think about issues of right and wrong" (Purpel & Ryan, 1976, p. 5). This definition encompasses both overt and covert attempts of the school to help the child become a more moral individual. It also includes both cognitive and behavioral components on the part of the student. That is, the student's ability to think about moral issues, as well as the way the student actually behaves in situations involving "right" and "wrong" behavior is considered.

The terms "value education" and "moral education" have been used interchangeably in the literature, and will be used interchangeably in this dissertation.

Hypothetical Dilemmas

Hypothetical dilemmas are short story problems that present the reader with a conflict that must be resolved by some decision or action. Throughout this investigation, the hypothetical situations that compose the test will be referred to as dilemmas, and the alternative solutions to each dilemma will be referred to as items.

In the following review of the literature, two major areas are reviewed. First, the major contemporary approaches to moral education are presented in order to point out the differences in assumptions and desired outcomes among the approaches. Second, an historical survey of attempts to assess values is offered.

CHAPTER II

LITERATURE REVIEW

In the previous chapter, evidence was presented to show that there exists widespread support for moral education in the public schools. In addition, it was pointed out that currently there are no assessment instruments appropriate for use in the schools to evaluate the effectiveness of curriculum programs in the area of moral education. This lack of appropriate assessment instruments presents a dilemma to educators who search for a way to evaluate curriculum programs in the area of moral education.

In the present chapter, a review of the major approaches to moral education is presented. Also, an historical survey of attempts to assess values is offered. Conclusions are drawn from the review and aims related to the instrument developed in this dissertation are presented.

Contemporary Approaches to Moral Education

As a result of the increasing interest in the area of values/moral education, various approaches to teaching values have been developed. The literature in the area of values and values education is vast and until recently has lacked any systematic organization.

A typology of values education approaches was formulated by Superka (1973) in his doctoral dissertation. This typology was originally developed around eight approaches to values education. Subsequently, because of inconsistencies and overlap among these categories, the number of categories was reduced to five (Superka, Ahrens, Hedstrom, Ford & Johnson, 1976). In the present review, Superka's (1976) general format and typology is followed. The review of each approach includes (1) the general purposes of the approach, and (2) the instructional methods usually utilized within that approach. The five approaches reviewed in the following sections include (1) the inculcation or direct approach, (2) the moral development approach, (3) the values analysis approach, (4) the values clarification approach, and (5) the action-learning approach.

Inculcation or the Direct Approach

The direct approach is probably the most widely used approach to moral education (Superka, et al., 1976). A discussion of the purpose and the instructional methods typically used in this approach follows.

Purpose. The general purpose of the direct approach is to instill or help the child internalize values that are considered desirable and accepted by the community. The values that are taught are considered standards or rules of behavior which are drawn from the society or culture and are, therefore, seen as necessary to the adequate socialization and adjustment of the child. The task of

values education, according to this approach, is to instill the values that are necessary for the child to efficiently assume the roles prescribed by society (Superka, et al., 1976).

The values commonly taught in western societies, using this approach, are usually described as democratic values and includes such things as freedom, dignity, justice, equality before the law, and self-development, among other values. The specific list of values may vary, however. Educators adopting this approach contend that the process of socialization requires that the values be adopted, internalized, and put into action by the time the child reaches adulthood (Jensen & Knight, 1980). Therefore, educators utilizing the direct approach to values education are not merely concerned that the child learn the values, but also adopt the behaviors that are consistent with these values.

Instructional methods. The instructional methods used to teach these values generally involves three basic approaches. The first and most widely used teaching method is that of reinforcement (Superka, et al., 1976). This method may involve positive reinforcement such as praise, or punishment for behaving contrary to a certain desirable value. A second method used in the direct approach for teaching values is modeling (Sarason & Sarason, 1974). The teacher personifies the values that he or she holds, and therefore is a model of these values. In addition, other students, community leaders and national heroes are presented symbolically or in real life for the

purposes of encouraging children to emulate them. A third method used to teach values by the direct approach is the traditional pedagogical teaching approach, in which a concept is presented in a classroom situation with illustrations and definitions. In addition to this form of teaching, role playing and participation in games may be used to facilitate the learning of these values by the students.

The direct approach is the approach to moral education that is utilized by the educators of the Salt Lake City School District. The democratic values taught in this school system are the values upon which the instrument developed in this dissertation is based (see Appendix A).

The Moral Development Approach

The moral development approach to values education is predicated on the theory and research of cognitive developmental psychologists such as Jean Piaget and Lawrence Kohlberg. The purposes of this approach and the typical teaching methods utilized are outlined below.

Purpose. Educators using a moral development approach to values education attempt to stimulate the student to achieve more complex levels of moral thought. Development in moral reasoning is seen as the progression of thought through a series of sequential stages. This conception follows the tradition set by Jean Piaget and emphasizes stages.

Kohlberg's (1958) theory of moral development has been the popular mainstay of this developmental approach. Expanding on Piaget's (1932) studies of moral judgement in children, Kohlberg developed a six-stage theory of the development of moral reasoning. Recently Kohlberg has dropped the sixth stage of development because of lack of empirical conformation of this stage (Kohlberg, 1978).

Kohlberg (1978) contends that there is a universal and invariant series of five stages of cognitive moral development. Further, he contends that the achievement of any stage requires passing through the previous stages and that each successive stage is morally superior to those preceding it. Kohlberg (1966) argues that, although individuals may stop at any stage in the sequence, he can be stimulated to move to the next stage. The three levels and five stages of Kohlberg's developmental classification are presented in Table 1. Kohlberg (1966) contends that an individual can understand the cognitive reasoning one stage above and one stage below his/her own stage. Movement to the next stage requires exposure to the reasoning patterns of the next higher stage.

Unlike educators who utilize the direct approach to moral education, Kohlberg criticizes the practice of teaching and reinforcing specific rules of behavior. Kohlberg opposes teaching specific moral content, and has labeled the content of morality as nothing but a "bag of virtues" (Hamm, 1977). Unlike educators using the direct approach, Kohlberg holds that morality is basically an aspect of

Table 1
 Classification of Moral Judgement Into
 Levels and Stages of Development

| Level | Basic of Moral Judgement | Stage of Development |
|-------|--|---|
| I | Moral values reside in external, quasi-physical happenings, in bad acts, or in quasi-physical needs rather than in person and standards. | <p>Stage 1: Obedience and punishment orientation. Egocentric deference to superior power or prestige, or a trouble-avoiding set. Objective responsibility.</p> <p>Stage 2: Naively egoistic orientation. Right action is that instrumentally satisfying the self's needs and perspective. Naive egalitarianism and orientation to exchange and reciprocity.</p> |
| II | Moral value resides in performing good or right roles, in maintaining the conventional order and the expectancies of others. | <p>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 judgement by intentions.</p> <p>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.</p> |

Table 1 (Continued)

| Level | Basic of Moral Judgement | Stage of Development |
|-------|---|---|
| III | Moral value resides in conformity by the self to shared or shareable standards, rights or duties. | 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 and rights of others, and majority will and welfare. |

reasoning, deemphasizing behavior (Kohlberg, 1975). According to Kohlberg, behavior that conforms to conventional standards of right and wrong is not necessarily moral. The only behaviors that can be considered moral are behaviors that are the result of the kinds of moral decisions that are determined by a high level of moral reasoning.

Kohlberg's conception of morality differs in two fundamental ways from the conception of morality utilized in the direct approach. First, morality is viewed as a function of the type of reasoning used in judging moral issues. Second, because morality is seen as an aspect of reasoning, specific values (i.e., content) and behavior are viewed as unimportant.

Instructional methods. The teaching technique most characteristic of the moral development approach is to present a moral dilemma story, which is then discussed by students in small groups (Galbraith & Jones, 1975). Students are urged to take a position with regard to what action the major character in the dilemma story should take and provide reasons for that position. Theoretically, exposure to higher levels of moral reasoning through such group discussions stimulates students to progress into higher stages of moral reasoning (Kohlberg, 1966).

The Values Analysis Approach

The values analysis approach to moral education is advocated by many of today's social science educators (Metcalf, 1971; Shaver & Strong, 1976). A discussion of the purposes of this approach and the typical teaching methods are described below.

Purpose. The purpose of the values analysis approach is to help students use logical thinking and the principles of scientific investigation in dealing with value issues (Superka, et al., 1976). In this approach, students learn to provide facts about whether something is good or of value. The student must justify his statements with appropriate evidence. Feelings and passions are viewed as secondary to the acquisition of a rational approach to morality.

Like moral development, the analysis approach emphasizes rationality. Valuing is seen as the cognitive process of determining

what facts are relevant in justifying the goodness or worth of phenomena. Unlike the moral development approach, values analysis concentrates primarily on social values issues rather than on personal value dilemmas (Superka, et al., 1976). Thus, the valuing process is seen by the proponents of this approach as relying on facts and reason rather than being guided by the dictates of conscience. The individual can attain the highest good, according to proponents of this method, by subordinating feelings and passions to logic and the scientific method in resolving values issues.

Unlike the direct approach, specific content is not stressed and moral behavior is justified by the presentation of facts and logical argument.

Instructional methods. Because social science specialists have developed this approach, instruction generally involves learning to deal with, and resolve, hypothetical problems, issues, and questions. Typical learning experiences provided within this approach include group study, library and field research, and class discussion (Jensen & Knight, 1979). The following sequence of steps, condensed from the 41st yearbook of the National Council for the Social Studies (Metcalf, 1971), illustrate the primary goals of instruction.

1. Identify and clarify the value question: Clarify by defining terms from which the evaluation is to be made. Specify the value object to be judged.

2. Assemble facts: Gather and organize facts to make a value judgement.
3. Assess the truth of facts: Assess the truth of purported factual assertions by finding supporting evidence and by assessing the source of the purported fact.
4. Clarify the relevance of facts: Clarify the relevance of the facts by encouraging and insuring that (a) the facts are about the value object in question, and (b) the evaluator has criteria which gives the facts a positive or negative balance.
5. Arrive at a tentative value decision: Decide tentatively the answer to the value question.
6. Test the value principle implied in the decision: Test the value principle implied in their decision for acceptability in any of the following four ways: (a) New cases test: formulate the value principle explicitly, imagine other situations in which it would logically apply, and decide if one can accept its application in these situations. (b) Subsumption test: formulate the value principle explicitly and assemble facts that show the value principle is a case of some more general value principle that the evaluator accepts. (c) Role exchange test: imaginatively exchange roles with someone else affected by the application of the value principle and consider whether he or

she can still accept the principle as it applies to him or her in this role. (d) Universal consequences test: imagine what the consequences would be if everyone in similar circumstances were to engage in the action being evaluated and consider whether one can accept these consequences.

The Values Clarification Approach

The values clarification approach to moral education has evolved primarily from the humanistic education movement. It has been popularized through the work of Sidney Simon and his colleagues (Simon & Kirschenbaum, 1973). The purposes and teaching methods of this approach are outlined in the following sections.

Purpose. A quotation from the originators of the values clarification approach may give the reader a flavor for the general purposes of this approach:

We are interested in the process that are going on. We are not much interested in identifying the values which children hold. We are much more interested in the process because we believe that in a world that is changing as rapidly as ours, each child must develop habits of examining his purposes, aspirations, attitudes, feelings, etc., if he is to find the most intelligent relationship between his life and the surrounding world, and if he is to make a contribution to the creation of a better world: . . .The development of values is a personal and life-long process. It is not something that is completed by early adulthood (Raths, Harmin & Simon, 1966, p. 37).

These authors, Louis Raths, Merrill Harmin and Sidney Simon, advocate teaching valuing (as a process) rather than teaching specific values (content). The major goal of this approach is to develop individuals who are capable of valuing. The authors propose seven basic elements

which characterize the valuing process. These elements include:

1. Choosing freely. If something is in fact to guide one's life, whether or not authority is watching, it must be a result of free choice. If there is coercion, the result is not likely to stay with one for long, especially when out of the range of the source of that coercion. Values must be freely selected if they are to be really valued by the individual.
2. Choosing from among alternatives. This definition of values is concerned with things that are chosen by the individual, and, obviously, there can be no choice if there are no alternatives from which to choose. It makes no sense, for example, to say that one values eating. One really has no choice in the matter. What one may value is certain types of food or certain forms of eating, but not eating itself. We must all obtain nourishment to exist; there is no room for decision. Only when a choice is possible, when there is more than one alternative from which to choose, do we say a value can result.
3. Choosing after thoughtful consideration of the consequences of each alternative. Impulsive or thoughtless choices do not lead to values as we define them. For something intelligently and meaningfully to guide one's life, it must emerge from a weighing and an understanding. Only when the consequences of each of the alternatives are clearly understood can one make intelligent choices. There is an important cognitive factor here. A value can emerge only with thoughtful consideration of the range of the alternatives and consequences in a choice.
4. Prizing and cherishing. When we value something, it has a positive tone. We prize it, cherish it, esteem it, respect it, hold it dear. We are happy with our values. A choice, even when we have made it freely and thoughtfully, may be a choice we are not happy to make. We may choose to fight in war, but be sorry circumstances make that choice reasonable. In our definition, values flow from choices that we are glad to make. We prize and cherish the guides to life that we call values.
5. Affirming. When we have chosen something freely, after consideration of the alternatives, and when we are proud of our choice, glad to be associated with it, we are likely to affirm that choice when asked about it. We are willing to publicly affirm our values. We may even be willing to champion them. If we are ashamed of a choice, if

we would not make our position known when appropriately asked, we would not be dealing with values but with something else.

6. Acting upon choices. Where we have a value, it shows up in aspects of our living. We may do some reading about things we value. We are likely to form friendships or to be in organizations in ways that nourish our values. We may spend money on a choice we value. We budget time or energy for our values. In short, for a value to be present, life itself must be affected. Nothing can be a value that does not, in fact, give direction to actual living. The person who talks about something but never does anything about it is dealing with something other than a value.
7. Repeating. Where something reaches the stage of a value, it is very likely to reappear on a number of occasions in the life of the person who holds it. It shows up in several different situations, at several different times. We would not think of something that appeared once in a life and never again as a value. Values tend to have a persistency, tend to make a pattern in a life (Raths, et al., 1966, pp. 28-29).

The proponents of values clarification, therefore, do not advocate the teaching of specific values, rather the emphasis is placed upon the process of discovering one's own true values. The values clarification approach differs from the direct approach and the values analysis approaches in that the former relies upon external influences in the development of values and the latter relies on logical and empirical processes in the development of values; whereas the clarification approach relies on "the wisdom of the whole human organism to decide which values are positive and which are negative" (Superka, et al., 1976, p. 105). The values clarification approach is similar to the direct approach in that the proponents of both

approaches view values as having a clear behavioral component. That is, it is expected that one will act upon values that have been freely chosen and are cherished.

Instructional methods. Raths, Harmon and Simon (1966) have developed a rather comprehensive and detailed instructional packet for teaching values clarification. The essentials of these specific techniques are outlined in the following quotation:

1. Encourage children to make choices, and to make them freely.
2. Help them discover and examine available alternatives when faced with choices.
3. Help children weigh alternatives thoughtfully, reflecting on the consequences of each.
4. Encourage children to consider what it is that they prize and cherish.
5. Give them opportunities to make public affirmations of their choices.
6. Encourage them to act, behave, live in accordance with their choices.
7. Help them to examine repeated behaviors or patterns in their life. (p. 38-39).

The primary purpose of these techniques is to raise questions in the minds of children to help them examine basic issues, actions and ideas. The goal is to help the children examine their lives and to think about values issues in an atmosphere of positive acceptance and intelligence.

The Action-Learning Approach

The action-learning approach to moral education is the least developed approach of the five presently reviewed. This approach is derived from social-psychological concepts that stress the interaction of social and cognitive fields (Bigge, 1971). The emphasis is on moving beyond thinking and feeling to action. The purposes and typical instructional techniques are outlined below.

Purpose. The action-learning approach can be distinguished from the other approaches discussed in this review in that its proponents attempt to provide students with specific opportunities to act on their values. Values education is not confined to the classroom, but is extended into experiential learning within the community (Superka, et al., 1976). Such experiences in the community allow the learner to deal with the constant interplay between value choices and actions.

The valuing process in the action-learning approach is very similar to the process defined by the proponents of values clarification. That is, the emphasis is placed upon considering alternatives, choosing freely from among those alternatives, and prizing and acting upon those choices (Superka, et al., 1976). However, the values clarification concept is expanded in two major ways. First, more emphasis is placed on action taking based upon the freely chosen values, and second, more emphasis is placed on the influence of social and group pressures on the valuing process (Superka, et al., 1976).

Instructional methods. Many of the instructional methods used in the values analysis and values clarification approaches, as described earlier, are also used in the action-learning approach. However, these methods are expanded to include skill practice in interpersonal relationships and groups. Instruction also includes the provision of experiential "action projects" which provide opportunities for interaction in the school and community (Superka, et al., 1976).

Summary of Moral Education Approaches

Table 2 presents an overview of the five major approaches to moral education discussed in the present review. These five approaches differ with regard to the way in which the cognitive component of the valuing process is defined and with regard to the emphasis that is placed on the behavioral component of values.

The direct approach views the student as reactive. That is, specific values exist, external to himself, which he must adopt in order to become a well socialized and adjusted adult. The moral development approach likewise views the student as reactive in the sense that there exist well defined, universal, processes of reasoning about moral issues. The student learns "higher" levels of reasoning through exposure to these more complex patterns of reasoning. In the moral development approach, the student is also seen as active. That is, he must actively reconcile his current

Table 2

Overview of Values Education Approaches

| Approaches | Purposes | Methods | Process | Behavioral Referent |
|---------------------|---|--|---------------------|---------------------|
| The Direct Approach | To instill or internalize certain values in students. To change the values of students so they more nearly reflect certain desired values. | Modeling, positive and negative reinforcement, games and simulations, role playing, discovery learning. | Reactive | + * |
| Moral Development | To help students develop more complex moral reasoning patterns based on a higher set of values. To urge students to discuss the reasons for their value choices and positions. | Moral dilemma episodes with small-group discussion relatively structured and argumentative. | Reactive and Active | — |
| Values Analysis | To help students use logical thinking and scientific investigation to decide value questions and issues. To help students use rational analytical processes in inter-relating and conceptualizing their values. | Structured rational discussion that demands application of reasons as well as evidence, testing principles, analyzing analogous cases, debate, research. | Active | — |

Table 2. (Continued)

Overview of Values Education Approaches

| Approaches | Purposes | Methods | Process | Behavioral Referent |
|----------------------|---|--|-------------|---------------------|
| Values Clarification | To help students become aware of and identify their own values and those of others. To help students communicate openly and honestly with others about their values. To help students use both rational thinking and emotional awareness to examine their personal feelings, values, and behavior patterns. | Role-playing games, simulations, contrived or real value-laden situations, in-depth self-analysis exercises, sensitivity activities, out-of-class activities, and small group discussions. | Active | + |
| Action Learning | Those purposes listed for analysis and clarification. To provide students with opportunities for personal and social action based on their values. To encourage students to view themselves as personal-social interactive beings, not fully autonomous, but members of a community or social system. | The methods listed for analysis and clarification as well as action projects within the school and community, and skill practice in group organizing and interpersonal relations. | Interactive | + |

* + Indicates that emphasis is placed on a behavioral component of values. — Indicates that emphasis is not placed on a behavioral component. (Adapted from Superka, et al., 1976, pp. 4-5).

level of reasoning with the higher levels to which he is exposed. Both the values clarification and values analysis approaches view values as internally derived. The student actively chooses and evaluates values by internal cognitive processes. Finally, the active-learning approach views the student as interactive in the development of values. Internal cognitive processes, as well as social and environmental forces, are seen as important determinants of values.

The five approaches also differ with regard to the emphasis that is placed on a behavioral component of values (see Table 2). Some of these approaches view behavior as an indicator or referent of the underlying values of the actor. Proponents of other approaches do not view behavior as an important referent of values. The approaches that place importance on behavior as a reflection of underlying values are the direct approach, values clarification, and the action-learning approach. These approaches view behavior as an important indicator of the values that have been adopted by the individual. Values are thought of as directing behavior, therefore, values that have been accepted should be accompanied by behavior that is congruent with these values. On the other hand, the moral development and values analysis approaches view the cognitive processes as the fundamental referent of values. Therefore, morality is seen as an aspect of reasoning, not behavior. Behavior is considered moral or immoral,

with regard to these two approaches, only in light of the cognitive processes that determined the behavior.

Because of the theoretical differences among these approaches, assessment instruments designed to measure value change must be congruent with the assumptions of the educational approach. Currently, a systematic and well developed assessment approach exists for only one of these approaches (the moral development approach). This instrument, along with the other previous attempts in the area of values assessment, are reviewed in the following sections.

Review of Previous Approaches to Values Assessment

From the foregoing review of the various approaches to moral education, it may be seen that major theoretical differences exist with regard to the definition and derivation of values (i.e., internally or externally defined and derived), the nature of the cognitive processes involved in the acquisition of the values, and the importance of behavior as a referent of values. Because of these theoretical differences in process and outcome regarding moral education, assessment techniques in evaluating the effectiveness of the approaches in achieving their specified goals must differ drastically. For example, with the moral development and values analysis approaches, assessment approaches should be aimed at the cognitive reasoning processes which underlie value decisions. In the values clarification and action-learning approaches, assessment efforts should be directed

at determining what values an individual has chosen and assessing whether his/her behavior is congruent with those chosen values. Finally, with regard to the direct approach, assessment efforts should be aimed at (1) whether the individual has learned the values that are considered desirable (by the community), and (2) whether the individual actually behaves in accordance with those values (i.e., whether or not he/she exemplifies them).

A review of the literature in the area of values assessment is presented in the following sections. The purposes of the review are two-fold. First, the review is conducted to determine whether an assessment device currently exists that is suitable for use in the schools and is compatible with the theoretical assumptions of the direct approach to moral education. Secondly, if such an instrument does not exist, a review may provide valuable information regarding (1) possible types of items that may be used in the construction of a new test, (2) ideas concerning a general testing format, and (3) potential approaches for the development of a suitable assessment instrument.

The Measurement of Values

The immediate concern of the present review is a survey and evaluation of previous attempts to assess values. Since the literature on the measurement of values is extensive (dating back to before the turn of the century), it is necessary to limit the present review

to the consideration of some instruments that are representative of the various methodological approaches used in previous values assessment research. Previous assessment attempts may essentially be divided into three general categories.

The three most widely used approaches seem to be (1) direct tests of "moral knowledge"; (2) tests requiring the respondent to rate or rank explicit, abstract elements of values or standards; and (3) tests presenting the respondent with a hypothetical story that raises a value dilemma and requires the subject to make a judgement concerning appropriate action in the situation. Each of these approaches is discussed separately in the following sections. The tests reviewed, representing each approach, are presented historically, with the oldest tests presented first and the most recent considered last.

Direct Tests of Moral Knowledge

The earliest reported attempts to assess moral values were, in general, tests designed to measure "moral knowledge." "Moral knowledge" is the ability to identify and correctly conceptualize conventional moral standards.

One of the earliest studies of moral values was of this general approach. Osborn (1894) used an open ended questionnaire in an attempt to discover the "ethical content of childrens' minds." The children were asked to state what acts a child must do in order to be called good or bad. Osborn determined by responses to this test

that specific categories of acts were less important to children, in terms of their notion of morality, than was the idea of conformity to rules.

Fernald (1912), developed a battery of tests designed to identify "defective delinquents." This battery included two tests of moral knowledge. The first tested knowledge of right and wrong by asking the subjects to indicate agreement or disagreement with acts that were described in ten situations involving violations of the law. In the second test (which was considered a test of "moral intelligence"), the children were required to rank the seriousness of a series of offences. For both these tests the correct answers were determined by the investigators. Including some problems from the Fernald battery, Kohs (1922) developed what he called the Ethical Discriminations Test. This test also included items from the Army Alpha, proverbs from the Otis test, and two new tests developed by Kohs. The new tests included definitions of various moral terms and the placement of certain behaviors into categories according to the treatment deserved by the individual committing the act. Thus, in the first test the subjects were asked to select the correct definitions of words such as "good", "love", "right", etc., and in the second to state which of six treatments (nothing, praise, scold, jail, prison, kill) is deserved for behaviors such as forgery, perjury, dirtiness, stubbornness, etc.

McGrath (1923) developed a test which was designed to study the "moral knowledge" of delinquent children. The subtests of this instrument included (1) a variety of multiple-choice and true-false items involving violations of conventional (often religious) moral prohibitions, (2) vocabulary tests, and (3) tests involving comparisons of acts. This test differed from previous assessment techniques in that McGrath attempted to standardize the questions by age (from 6 to 17). Following the same line of thinking as McGrath, Lincoln and Shields (1931) attempted to develop a standardized test of conventional moral knowledge. The subtests to the test included items dealing with vocabulary, comprehension, use of moral words in sentences, and judgements of moral violations. These items were arranged by years from age 6 to 20, based upon responses expected of children of these ages. The subtests were scored similarly to the Stanford-Binet, with Age of Responsibility and Responsibility Quotients derived as scores.

Finally, as a part of the Character Education Inquiry, Hartshorne and Colleagues (Hartshorne & May, 1930) used a series of tests designed to measure moral knowledge. All these tests were similar to those that have already been described (i.e., vocabulary test of moral terms, selection of consequences for certain acts, attitudes toward misconduct, etc.). These instruments are known collectively as the Tests of Moral Knowledge. These tests were used in an attempt to predict behavior in a number of conduct studies carried out by Hartshorne and his associations (Hartshorne, et al., 1930). These

investigators reported that no differences were found on any of their test items (or tests as wholes) between those children who violated moral prohibitions and those who did not in these studies. The investigators did report that the Tests of Moral Knowledge correlated markedly with measures of intelligence ($r = .70$), while correlations of the tests with behavioral measures of honesty, cooperation and inhibition were low (generally around $r = .25$).

In general, each of the authors of the tests described seem to have implicitly accepted the notion that moral behavior is in some way determined by moral knowledge or beliefs (Pittel & Mendelsohn, 1966). However, evidence as that provided by Hartshorne (1930) does not support this assumption. Evidence in this regard had been offered earlier by Lowe and Shimberg (1925). Lowe and Shimberg tested the assumption that moral knowledge and moral behavior are directly related. Lowe and Shimberg tested a large group of normal and delinquent youths with the Terman Fables Test, which is purported to be a measure of moral knowledge. No significant difference was found between normals and delinquents on this test. The authors concluded that the "results make us suspicious of all tests having as their underlying principle the assumption that moral judgements offer a reliable estimation of moral integrity" (p. 59). Maller (1944), in reviewing these early tests of moral knowledge, also concluded that their inability to predict behavior is a major flaw of such tests. He argued that test items included in a test of

moral values should be selected on the basis of their predictive validity, rather than on the basis of their presumed moral content.

In summary, the early tests of moral knowledge appear not to be useful in either predicting behavior or differentiating criterion groups. Given these limitations, this method of values assessment has all but disappeared from use.

Tests Requiring Rating or Ranking of Value Statements

The second general approach to values assessment is one in which the respondent is required to rate or rank explicit, abstract elements of values and/or standards. This is the most direct approach to the measurement of values. Typically the subject is asked to rate a statement representing some value (e.g., doing my duty) on a Likert-type scale in terms of how much he likes or agrees with the statement. The subject may also be asked to rank the statements in order of preference. These instruments are typically "descriptive" in nature, in that they seek only to describe an individual's value preferences. Usually, with instruments of this type, no assumptions are made with regard to the correctness of the responses, and usually no scoring of the responses on the basis of norms is attempted.

Allport, Vernon and Lindsay (1960) were perhaps the first to utilize the rating of value statements to measure values. The Study of Values test, which first appeared in 1931, was devised to measure

Spranger's six "value types": theoretical, economic, social, political and religious. These classifications are directly based upon Eduard Spranger's theory of personality. The test includes two parts. Part I of the test is composed of 30 items that require the subject to rate two alternative value statements by weighting each from 0 to 3. In Part I, each value is paired twice with every other value. Part II is composed of 15 items which require the subject to rank in order four different value statements.

Scores are obtained for each of the six "value types" identified by Spranger. These scores are plotted on a profile of values to reveal the relative prominence of these six basic types.

Crissman (1942) developed an instrument using an item rating approach. This test requires respondents to rate 50 acts on a 10-point scale of wrongness. The acts themselves are descriptions of violations of conventional moral standards (many are legal transgressions). Some examples of the kinds of items used are "kidnapping and holding a child for ransom", "killing a person in defense of one's own life", "disbelieving in God", etc. This inventory has been used only to establish item norms for specific populations. It has not been employed to assess individual differences in values. That is, the inventory has been used to establish mean "wrongness" ratings for each item and establish a hierarchical ordering of items for selected populations of subjects.

Another more sophisticated attempt to assess values using general value statements is the "Ways to Live" questionnaire devised by Charles Morris (1956). The "Ways to Live" questionnaire describes 13 ways to live, each in a paragraph-long statement. These paragraphs include general personal preferences, preferences for social policies, norms of conduct, as well as some general philosophical statements about the nature of the world and the trends of history. Respondents are required both to rate each paragraph on a seven-point scale indicating their degree of liking or disliking, and to rank all 13 paragraphs in order of preference. These responses are not combined into an overall score, but are used to form a 13-dimensional profile of values. Each of the 13 paragraphs ("Ways") are designed to represent various combinations of three hypothetical components. These components are (1) the dionysian component, which presumably reflects an individual's tendency to release and indulge existing desires; (2) the promethean component, which reflects the tendency to manipulate and remake the world; and (3) the buddhistic component, which reflects the tendency to regulate self by holding desires in check. The 13 "Ways", representing various combinations of these components (high, medium and low) were devised on a priori, rather than an empirical basis.

An interesting and unusual procedure for assessing a wide range of values issues was developed by Carter (1956). This instrument is composed of a dialogue among several explorers who come upon

an ideal, unpopulated country never before discovered. The dialogue concerns a discussion of the best society for the future population of this new country. The dialogue contains about 70 paragraphs, each putting forward a viewpoint on some social issue. Respondents are required to read through the dialogue and indicate their degree of agreement or disagreement with each paragraph on a five-point scale. The responses are coded into areas such as education, social organization, moral code, etc., to yield 24 scores indicating the social value profile of the individual. The strengths of this method are that the material appears highly interesting and a large number of issues can be covered with a minimum of strain and boredom on the part of the subjects. Presumably this method of measurement can be adapted to almost any topic or values issue one is interested in assessing.

The most recent attempt to utilize the rating or ranking method of values measurement is represented by the Value Survey developed by Rokeach (1973). Rokeach distinguishes two kinds of values--instrumental and terminal. He considers instrumental values as desirable modes of conduct, or guides to personal or interpersonal action. On the other hand, terminal values are considered to be desirable end states of existence and are guides to ways of being. Examples of terminal values (according to Rokeach) are inner harmony, mature love, and salvation; while examples of instrumental values include responsibility, honesty, and broad-mindedness.

Survey presents the respondent with a list of 18 terminal and 18 instrumental values (in accordance with this theoretical distinction). The respondent is required to rank the values in each list by order of importance. The 18 terminal values were "distilled" from a larger list obtained from a number of sources, including the literature, the author's own values, and values obtained from 30 graduate students. The 18 instrumental values were selected from Anderson's (1968) list of 555 personality-trait words. The values selected from this list were those "deemed to be maximally discrimination across social status, sex, race, age, religion, politics, etc." (p. 29). No overall score is derived from the ratings. Some of the uses for the instrument described by Rokeach are (1) a measure of value system stability, (2) a measure of value system change, and (3) a measure of value system similarity between two persons. Scores for these purposes are derived by correlating the rank orders obtained on two separate occasions by the same individual, or by correlating the rank orders between two individuals.

In summary, direct rating measures of the kind described in the foregoing section seem to have two major characteristics in common. First, instruments of this type are generally "descriptive" rather than "predictive" or "discriminative" in nature. That is, these kinds of instruments are aimed more at describing an individual's system of values than predicting future behavior or discriminating between specific criterion groups. Second, because of the descriptive

quality of these instruments, the authors typically make no assumptions about the correctness of the responses.

Some advantages of using a direct rating or ranking method are (1) the subjects can accomplish the task quickly and with a minimum of effort, (2) the responses are easy to interpret and quantify, and (3) the technique is relatively reliable in terms of response consistency. The drawbacks of such an approach are (1) the influences of the social desirability of the items on how they are rated or ranked, (2) the subject does not have to demonstrate an understanding of a value statement (i.e., its implications for behavior or decision), but only how well he likes or dislikes it, and (3) these tests are not intended to predict moral behavior.

Tests Using Hypothetical Situations

An assessment strategy that comes closer to the observation of actual behavior than the previously reviewed strategies is the presentation of hypothetical stories to which the subject is asked to respond in some way. Typically, these stories present value dilemmas about which the respondent is required to make some judgement concerning appropriate action. The intent of this method is to present the subject with a situation that is concrete and realistic enough that he is more likely to respond in a way that accurately reflects his actual thinking and/or probable behavior in such a situation. There are relatively few examples of this approach cited in the literature.

Piaget (1932) was one of the first to employ hypothetical stories to explore the formal aspects of childrens' moral behavior. Piaget characteristically presented children with a pair of stories that described some kind of moral behavior (e.g., lying, stealing). The two stories were constructed so that the nature of the behavior described in each was similar, but elements such as motivation, intention and consequences differed. For example, the following two stories were designed to determine whether the child was more concerned with the motive or results of an action when making moral judgements.

1. Alfred meets a friend who is very poor. This friend tells him that he has had no dinner that day because there was nothing to eat in his home. Then Alfred goes into a baker's shop, and as he has no money, he waits until the baker's back is turned and steals a roll. Then he runs out and gives the roll to his friend.
2. Henriette goes into a shop. She sees a pretty piece of ribbon on a table and thinks to herself that it would look very nice on her dress. So while the shop lady's back is turned, she steals the ribbon and runs away at once.

Upon hearing both stories, the respondent is asked whether the children in the stories are equally guilty and to state which is the "naughtiest" and why. Piaget classified responses to these stories in terms of the child's stage of moral development. Therefore, within Piaget's framework, children were placed into classes of moral thinking based upon the responses to these dilemmas.

Piaget distinguished two general types of responses. Moral "realistic" responses are those in which rules are seen as absolute. The violation of such rules bring about imminent punishment, the

severity of which is a direct function of the seriousness of the consequences of the act. These rules are not internalized at this stage, but are seen as emanating from some external source. Moral "relativistic" responses are those responses that take into consideration extenuating circumstances and a consideration of the motivation of the act in making moral judgements. Punishment for an act is made on the basis of the motives and circumstances surrounding the act, and not simply on the basis of the consequences of the act. At this stage, it is hypothesized, the rules are internalized by the child.

Another example of a test utilizing the hypothetical situation format is the Problems of Human Relations Test, developed for the Cooperative Study of Evaluation in General Education (1953). This test presents the respondent with 30 hypothetical situations involving a problem in dealing with people in personal or organizational activities. In 19 of the items the respondents are asked to indicate what they would do. In the remaining items, the respondents are asked what would be done or what they would like to have done. The alternatives from which the subject has to choose supposedly represent a "democratic", an "authoritarian", a "laissez-faire", and a "resort to experts" approach to human relations. The responses are scored to provide a profile of the relative preference for these four types of responses.

Extending Piaget's (1932) theory of moral judgement, Kohlberg (1958) developed what is probably the most systematic and influential theory of moral development. As discussed earlier (see review of approaches to moral education, page 15 of this dissertation), Kohlberg defines five invariant stages through which moral reasoning can proceed. Each stage is characterized by a separate type of moral reasoning; the type of reasoning becoming more sophisticated with higher stages.

The method used to assess Kohlberg's stages of moral reasoning is the Moral Judgement Scale, which was primarily developed in his dissertation (Kohlberg, 1958). The purpose of this scale is to determine the stage of moral development of an individual by examining the individual's type of moral reasoning. The scale consists of nine hypothetical dilemmas, which were invented by Kohlberg or adapted from other sources.

The Moral Judgement Scale is a structured projective type of instrument that is individually administered. The interviewer presents the subject with the dilemmas, one at a time, and asks the subject to make a judgement about the situation and justify that judgement. All of the subject's responses are recorded verbatim by the interviewer (Kurtines & Greif, 1974).

The following is a widely used example of one of Kohlberg's dilemmas:

In Europe a woman was near death from cancer. One drug might save her, a form of radium that a druggist in the same town had recently discovered. The druggist was charging \$2,000, ten times what the drug cost him to make. The sick woman's husband, Heinz, went to everyone he knew to borrow the money, but he could only get together about half what it cost. He told the druggist that his wife was dying and asked him to sell it cheaper or let him pay later. But the druggist said "No." The husband got desperate and broke into the man's store to steal the drug for his wife. Should the husband have done that? Why? (Kohlberg, 1969, p. 379).

The administration time for the test is approximately two hours, and must be given individually by a trained examiner.

The subject's responses that are scored are the reasons the individual has given for a specific judgement related to the dilemma, not the judgement itself. The exact scoring instructions are available only from Kohlberg personally, and intensive training is required for correct scoring (Kurtines & Greif, 1974). The cumbersome nature of the scoring system led Kurtines and Greif (1974) to the following conclusions:

The variability and complexity of the scoring schemes for the Moral Judgement Scale have three major consequences for the evaluation of research conducted with the scale. First, the judgemental nature of the coding procedures introduces a potential for scorer bias. Standardized and objective scoring procedures would reduce the possibility of scores reflecting biases of individual judges. Second, the variability of scoring and reporting procedures confounds the interpretation of results. With both administration and scoring of the scale varying from study to study, it is difficult to estimate from the literature the extent to which results actually reflect differences among people. Finally, the intricate and often ambiguous nature of the scoring scheme almost surely discourages independent research, thereby preventing confirmation or disconfirmation of Kohlberg's Model (Kurtines & Greif, 1974, p. 456).

Finally, hypotheticals have been used by Carlin (1966) to assess differences in the ethical behavior of lawyers. As a first step in the development of this instrument, a large number of hypothetical situations involving ethical conflicts were constructed according to the following criteria:

1. They should be stated in a concrete and realistic manner.
2. They should involve unethical practices to which lawyers are likely to admit--common or borderline practices rather than flagrantly criminal or vicious ones.
3. They should cover a wide range of ethical obligations--to clients, colleagues, and the administration of justice.
4. They should include problems faced by lawyers working in different areas of practice. (p. 62).

Each of the items constructed in this manner required the respondent to state what he/she would do in the given situation.

To narrow down the number of items that were constructed, a preliminary study was conducted. During this study, six "lawyer-informants" were asked to rate ten to 12 colleagues as ethical or unethical. By this method, ratings of overall "ethicality" were obtained on a group of about 60 lawyers. The preliminary instrument, consisting of the hypothetical situations, was then administered to this group of rated lawyers. Finally, only those items that discriminated between the lawyers rated as ethical and unethical were retained for the final form of the test. The result was the selection of 13 items, all of which discriminated well between lawyers judged ethical and those judged unethical by the lawyer-informants.

However, no cross validation of this instrument was conducted. Therefore, the predictive validity of the instrument is questionable.

In summary, the hypothetical situation technique is a method in which respondents are presented with a realistic situation involving a value dilemma and asked how he/she would behave. This technique appears to be highly flexible and could be used to assess a wide range of ethical or values issues. It also seems to offer a more valid method of measuring whether the behavioral implications of specific values are comprehended by the subjects. Barton (1962), in reviewing this particular type of assessment technique, states "Of course there is a great distance between saying that you would be honorable or brave, and actually behaving in these ways. But at least these questions go beyond generalities and slogans by asking for concrete decisions in specific, realistic situations which the respondent may have been in or may expect to be in. Short of studying actual behavior, this "story" method would seem to have the closest correspondence to the notion that basic values are those which influence real-life decisions" (p. 88).

Review Summary and Conclusions

In the preceding sections, two major areas related to values were reviewed. First, the primary contemporary approaches to moral education were discussed. Second, a review of previous assessment approaches in the area of values was presented. The major points in each of these discussions is summarized below.

Approaches to moral education. Five major approaches to moral education were discussed, (1) the direct approach, (2) the moral development approach, (3) the values analysis approach, (4) the values clarification approach, and (5) the action-learning approach. Differences among these approaches seem to occur on three dimensions, (1) the derivation or source of values (external vs. internal), (2) the nature of the cognitive processes involved, and (3) the emphasis on behavior as a reflection of values.

Along the first dimension, the underlying assumption of the direct approach is that certain values are derived externally to the individual. That is, certain values are determined by the culture and society in which the individual lives. The acquisition of such values is necessary for the adequate socialization and adjustment of the individual to his social environment. In contrast, the assumptions underlying other approaches are that values are universal and dependent upon reasoning processes (moral development) or are internally derived through a process of choice (values clarification and action learning), or by justification with facts (values analysis). The underlying assumptions regarding cognitive process also differ among the various approaches. The direct approach views the individual as reactive to the external values, that is, he must either accept them or reject them. Whereas, the other approaches view the individual as active or interactive. That is, the individual must engage in

complex cognitive processes in evaluating values. Finally, the approaches differ with regard to the importance placed on the actual behavior of the individual as an indicator of underlying values. The proponents of the direct approach, the values clarification approach, and the action-learning approach assume that values guide behavior and, therefore, are an index of the values the individual holds. The proponents of the moral development and values analysis approaches, on the other hand, view the cognitive process of the individual as the referent of values. Behavior is not seen as an important component of morality.

Values assessment approaches. Previous approaches to values assessment were grouped into three main categories, (1) tests of moral knowledge, (2) tests requiring rating or ranking of value statements, and (3) tests using hypothetical dilemmas.

Tests of moral knowledge, by and large, represent the first attempts at values assessment. Such tests attempted to assess the individual's ability to identify and correctly conceptualize conventional moral standards. These tests are largely capacity or ability measures, and require the subject to rely on comprehension and recall. Rather than asking a subject to indicate his own value judgement, these tests ask the subject to demonstrate that he can think in a certain way, regardless of whether he personally endorses it. A further characteristic of these tests is their lack of predictive validity. Maller (1944) has criticized such tests on

these grounds and has suggested that items included in tests of moral values should be selected on the basis of their predictive validity, rather than on the basis of their presumed moral content.

The second group of tests discussed are those requiring rating or ranking of value statements. Tests in this category are largely measures of preference. That is, the subject is required on-y to indicate how well he likes or dislikes the statement. The subject does not have to demonstrate an understanding of the statement or its implications for actual behavior. These tests were developed primarily for descriptive purposes and not for the assessment of knowledge and/or behavior.

The final type of test reviewed are those utilizing hypothetical situations. Such tests present the subject with a hypothetical story that requires a decision regarding appropriate behavior. The hypothetical dilemma approach has the advantage of presenting a realistic situation in which a judgement concerning action is required. The individual is, therefore, required to implement his knowledge of values to arrive at an appropriate solution to the dilemma. The major drawback of such a method is that the format is usually an open ended interview which is time consuming and difficult to score (except Carlin, 1966, who used an objective format).

Conclusions. Using as criteria the stated objectives for the present assessment instrument (see page 10 of this dissertation), none of the instruments reviewed in the previous sections appear

suitable for the purposes at hand. The primary and most obvious reason being that the specific value principles delineated by the educators of the Salt Lake School District are not assessed by these measures. Secondly, none of the measures reviewed possess any clear predictive validity. That is, the measures reviewed do not purport to discriminate groups on a behavioral basis. Based upon the theoretical assumptions of the direct approach to moral education, a suitable assessment instrument should possess these characteristics. Therefore, it appears that the development of an assessment device possessing these characteristics is necessary.

In reviewing the literature for an appropriate test format, direct test of moral knowledge was ruled out because this kind of instrument has consistently failed to discriminate groups or predict a criterion. Likewise, preference measures have shown little predictive validity, and these kinds of instruments do not require the subject to demonstrate an understanding of the values presented. The hypothetical dilemma format appears the most appealing for present purposes, since it requires the subject to recognize the implications of values on decisions or behavior. Also, Calin (1966) has shown that such a test format is useful in discriminating between criterion groups (although this evidence is weak, since no cross-validation was conducted).

Since one of the objectives for the present instrument is that it should be amenable to group administration, it was decided

that the test must be objective. Therefore, the decision was made to include objective alternative solutions to the dilemmas that could be chosen by the subjects. Thus, the test format chosen includes the use of hypothetical dilemmas, utilizing objective alternative solutions.

The following chapter presents a detailed account of the development of the proposed instrument. The chapter reports (1) the initial pilot testing and subsequent revisions of the test format, (2) the process of item selection, (3) the validation procedures, (4) reliability information, and (5) information regarding the influences of social desirability on responses to the test.

CHAPTER III

METHODOLOGY AND RESULTS

The purposes of the present research are two-fold. They are (1) to develop a test construction strategy by which an assessment device, based upon the unique goals of moral education within a specific school district, may be developed; and (2) the actual development of a psychometrically sound instrument based upon such goals. To accomplish these aims, seven interrelated studies were conducted, involving a total of 775 subjects.

The primary objectives to be achieved regarding the construction of the test are as follows: (1) the initial writing and field testing of the dilemmas and alternative items, (2) the revision of the test based upon such field testing, (3) the analysis of item validity, (4) the cross-validation of selected items, (5) an analysis of the content validity of the dilemmas that compose the test, (6) the establishment of the reliability of the test, (7) an assessment of the effects of socially desirable response sets on test scores, and (8) the collection of normative data regarding test scores for each grade tested and a parent group.

The effectiveness of a test is dependent upon the characteristics of the individual items which compose the test. Both the reliability and validity of a test are a reflection of the reliabilities,

validities and intercorrelations of its component items. Therefore, in order to produce the most effective test, each of the items in the item pool must be studied with regard to its specific characteristics. The choice of items for the final test form is based upon the following specifications: (1) the degree to which the item differentiates those who are high on some standard (exemplification of district values) from those who are low on the same standard, (2) the content validity of the items, (3) the reliability of the items, and (4) the internal consistency of the test (Thorndike, 1967).

The following steps were utilized in the present test construction process. First, a preliminary test was constructed and an item analysis conducted. The objectives were to write the initial test items, and obtain information regarding the sensitivity of the test to group differences, testing time, and the difficulty level of the items. Second, an item selection and validation procedure was conducted. The primary objective was to identify items that possess satisfactory characteristics of discrimination. Criterion groups were identified and items selected on the basis of their ability to discriminate the criterion groups. Third, a cross-validation procedure was conducted for the selected items. In addition, information concerning the internal consistency of the test and the best method of scoring were obtained. Fourth, evidence regarding the content validity of the dilemmas that compose the test was obtained. Data were gathered regarding the degree to which the dilemmas that compose the test are related to the 12 value goal statements proposed

by the Salt Lake City School District personnel. Fifth, information concerning the stability of the test utilizing a test-retest approach was obtained. Finally, the effects of socially desirable response sets on test scores was assessed. In addition, supplementary test data are presented which provide normative data for the test with regard to grade level and sex.

Because of the interrelated nature of these studies, and the relevance of the results of each study on the procedures in the subsequent studies, the methodology and results of each study are presented together in the present chapter. Such a presentation is designed to preserve the continuity of the investigation as a whole, improve the readability, and assist comprehension for the procedures of the reported research project. Therefore, this chapter presents the research design and methodology followed in gathering and analyzing the data of the present investigation, and also presents the results of each sequential study.

Preliminary Item Construction and Analysis

After establishing that the test format was to employ hypothetical dilemmas followed by alternative solutions, the initial construction and field testing was necessary. Two considerations were assumed to be important in developing the dilemmas.

First, the dilemmas should be logically derived and related to the 12 value goals proposed by the school district. Second, the

dilemmas should be realistic in terms of content. That is, the dilemmas should be believable in the sense they represent situations that could realistically be encountered in everyday life by the students. To meet these considerations, a team of experts was assembled to write the initial dilemmas. The team consisted of four experienced teachers in the district, one district representative, whose responsibility included monitoring minority group interests, two curriculum specialists from the district office, and one of the principle investigators. The initial dilemmas and the corresponding alternatives (items) were written and approved by this group. The preliminary test written by this team consisted of 24 dilemmas, with two dilemmas representing each of the 12 value goals. Each of the dilemmas was followed by either four or five alternatives in multiple-choice format. Students were asked to choose the best answer. This initial test form is presented in Appendix B.

The purposes of the present procedures were to provide data concerning (1) the appropriateness of the test format, (i.e., whether the task is understood by the students), (2) the sensitivity of the test to age (grade) differences, and (3) the difficulty levels of the items. If an item is to be useful in distinguishing between those who are high on some trait and those who are low on the trait, then the item must not be too easy so as to be chosen by everyone or too difficult and selected by only a few. An appropriate level of difficulty by itself does not make the item contribute to the

discrimination between different individuals, however. The procedures and results for the preliminary item analysis follow.

Subjects

There were 106 male and female students enrolled in the Salt Lake City public schools who completed the preliminary test. Included in this sample were 28 sixth grade students, 31 eighth grade students, and 47 tenth grade students.

Procedure

The subjects were administered the preliminary test form during class by their regular teacher. One sample dilemma was used as a practice question, and was accompanied by the following instructions:

The purpose of these questions is to assess your thinking about citizenship.

Below is a practice question. Please read this incident involving John and select the answer you consider best.

You may notice that more than one answer seems suitable. Some answers are more suitable than others. No one answer is the only correct answer.

If you are having a problem answering the question, then guess, for any answer will give you some credit. Mark only one answer for each question. For example, in John's decision above, A is the best answer; however, B and C are also valuable. Your answers will be confidential. It is important to answer each question. Use the entire class period, if you need it to complete the 24 questions. Please write your full name on the answer sheet.

Now turn the page and begin working.

No additional instructions were given.

Data Analysis

In analyzing the data obtained in this preliminary study, a tabular presentation of response frequencies for each item was constructed. This tabulation included (1) the number of students choosing the correct answer (i.e., the alternative selected by the panel constructing the test), (2) the number of students choosing one of the distractor items, and (3) the number of students not reacting to the dilemma (see tables in Appendix C).

Results

All subjects completed the test within the allotted period of time (60 minutes) indicating the test was not too long. In addition, no teachers reported that any students had difficulty reading the test.

Visual inspection of the item response frequencies (Appendix C) showed that there was general agreement as to the preferred alternative. In general, the most frequently selected alternative was the same for each grade level. The percentage of subjects selecting each item is shown in parentheses next to the frequency.

Counting the preferred response as one and the other responses as zero, the tests were scored. The mean scores by grade were 16.3, 16.5, and 16.3 for Grades 6, 8 and 10, respectively. The maximum score possible was 24. The scores ranged from 2 to 24.

Item Selection and Validation

Based upon the results of the preliminary item analysis, it was determined that (1) some of the items were too easy, (2) some of the dilemmas needed better distractor items, and (3) the overall test score was not higher for upper grade levels. Based on these concerns, a second study was considered necessary.

The purposes of the procedures in the present section were two-fold: (1) to modify and expand the preliminary test based upon the results of Study 1, and (2) to establish a method of determining the validity of the items to be used in the final test form. These purposes are discussed below.

Modification of the Preliminary Test

The response frequency tables generated in the preliminary item analysis were used as guides in modifying many of the items. Those items that appeared too easy (i.e., a difficulty level greater than 70%) were rewritten to be less obvious. Also, many of the distractor items that were judged weak were replaced by more attractive alternatives. Also, the number of alternatives for all dilemmas was increased to five. In addition, 12 new dilemmas were written, one representing each value goal statement. This resulted in a pool of 36 dilemmas, a total of three dilemmas for each of the 12 value goal statements. The pool was expanded to accommodate expected

attrition of dilemmas during later phases of the investigation. All rewriting of items was done following the same general style and content approach used by the team in the initial item construction.

The format for the subject's responses was changed from the original multiple-choice format to an item rating system. That is, instead of asking the student to choose the "best" alternative, the student was asked to rate each alternative as "good", "maybe" or "poor." By this method, information about the acceptability of each item could be gathered. It is argued that this kind of format will allow an analysis of the discriminative characteristics of each item, thus resulting in a more sensitive instrument. The revised instrument (item selection and validation test form) is composed of 36 dilemmas (see Appendix D). Each dilemma is followed by five alternative solutions (items), resulting in a total of 180 items.

Index of Item Validity

One method of determining the validity of an item is to determine how well the item discriminates between groups of individuals supposed to be high in the trait being measured and those supposed to be low on the trait (Guilford, 1954; Thorndike, 1967). Such a method results in a discrimination index for each item. This index indicates how well a particular item discriminates between the two groups. A technique discussed by Guilford (1954) that may be used to identify these extreme criterion groups is known as the nomination technique. This technique involves the use of judges who know the subjects to

be classified. The judges are asked to select the highest and lowest members in the trait variable. The subjects are then administered the items and indices of discrimination are then calculated.

The teachers of the students administered the test were asked to nominate students who most exemplified and least exemplified the value goals defined by the district. Therefore, the teachers served as the judges in the nomination procedure.

Evidence exists to show that teachers judgements of student conduct are valid indices. Bolstad and Johnson (1977) conducted an investigation of the relationship between teacher's assessments of student's conduct and immediate behavioral observation data. In this investigation, teachers were asked to select from their class rooms boy and girl pairs whom they would label as "best, average, and least well-behaved." Both the teacher ratings and immediate behavioral observation data were collected for each of these students. The results indicated that the teacher's perceptions of students were corroborated by the independent behavioral observations. The authors concluded, "In the general case, it appears that teachers can make accurate discriminations between students in evaluating their behavior" (p. 57).

The following procedures detail the use of the nomination technique in determining indices of item validity.

Subjects

A total of 255 students enrolled in the Salt Lake City public schools were administered the item selection and validation test form. Included in this sample were 59 fifth grade students, 58 seventh grade students, 69 ninth grade students, and 69 eleventh grade students. There were 127 female students and 128 male students. Two classrooms at each grade level 5, 7, 9, and 11 were administered the test. The criterion groups (nominated students) consisted of a total of 48 students. Table 3 describes these subjects.

Table 3
Number of Male and Female Subjects Per Grade
Level in the Criterion Groups

| Grade | Exemplary | | Non-Exemplary | |
|-------|-----------|--------|---------------|--------|
| | Male | Female | Male | Female |
| 5 | 3 | 2 | 5 | 1 |
| 7 | 2 | 4 | 2 | 4 |
| 9 | 2 | 4 | 4 | 2 |
| 11 | 3 | 3 | 3 | 3 |
| Total | 10 | 14 | 14 | 10 |

Only the 48 subjects in the criterion groups were actually used in the data analysis for item selection and validation. The data obtained for the remaining subjects are utilized for descriptive purposes, and is presented in a later section titled Supplementary Test Data.

Procedure

Two major procedures are discussed in this section. First, the nomination procedure used to obtain the criterion groups is described. Second, the procedures used to administer the item selection and validation test form are described.

Nomination procedure. The teachers of each classroom were asked to nominate three students in their classrooms who best exemplified the 12 value goals proposed by the district, and three students who least exemplified these values. The teachers were given a form (Appendix E) on which to identify these six students. This form contained the following instructions:

Please select the three students in your class who are present today whose lives best exemplify the 12 values found on the attached sheet.

Also indicate the three students who have the most difficult time putting these values into practice. Make certain the students identified below are taking the test today.

Thank you.

In this way, a total of 24 exemplary and 24 nonexemplary students were identified, six exemplary and six nonexemplary students per grade level.

Administration of the item selection and validation test form.

The subjects were administered the test during the class hour by their regular teacher. One sample dilemma was used as a practice question and was accompanied by the following instructions:

The purpose of these questions is to assess your thinking about citizenship.

Below is a practice question. Please read this incident about John and select the answer you consider best. For each number you should circle either good, maybe, or poor that best tells how you feel.

If you are having a problem answering the question, then guess. Any answer will give you some credit. It is important to answer each statement. Use the entire class period if you need to. Please write your full name on the answer sheet.

Now turn the page and begin working.

No additional instructions were given.

Data Analysis

A chi-square test of statistical significance was conducted for each of the 180 items to determine whether the two criterion groups (exemplary and non-exemplary) behaved differently with respect to each item. In this analysis, the criterion groups were pooled across grade level, resulting in 24 students in the exemplary group and 24 students in the non-exemplary group. Criterion group students with missing data were included in the chi-square analysis.

Results

The results of the chi-square item analysis are presented in Appendix F. There were 35 items that differentiated the criterion

groups at a significance level of .10 or better. There were 22 items that differentiated the criterion groups at a significance level of .05 or better, while seven items differentiated the groups at a significance level of .01 or better. These discriminating items then came to constitute the focus of the subsequent studies.

In the study that follows (cross-validation and internal consistency) the items that were identified in the present study are cross-validated on a second sample. In addition, the internal consistency of the test composed of these items is calculated.

Cross-Validation and Internal Consistency

During the item selection and validation, 35 items were identified that discriminated between the exemplary and non-exemplary criterion groups at the .10 level of significance or better. These discriminating items are contained in 17 of the original 36 dilemmas. Therefore, these dilemmas were chosen to comprise the cross-validation form of the test. This form of the test is presented in Appendix G. There are 17 dilemmas, and a total of 85 items, 35 of which are scored.

Although 35 discriminating items were identified during the item selection and validation process, it was felt that these items needed to be cross-validated with a second sample, independent of the first. The aim of a cross-validation study is to determine whether the same items that discriminated between the criterion groups in the earlier study would also discriminate with a new sample. Such a cross-validation is the primary purpose of the present study.

In addition to this primary purpose, data concerning scoring systems to be used with the test and data concerning the test's internal consistency were obtained. The three purposes of the present study are, therefore, (1) to provide a cross-validation of the items identified in Study 2, (2) to determine the best method of scoring the test, and (3) obtain data concerning the internal consistency of the test. The procedures used in accomplishing these purposes are detailed below.

Subjects

A total of 323 students enrolled in the Salt Lake City public schools were administered the preliminary final form of the test. Included in this sample were 87 sixth grade students, 59 eighth grade students, 86 tenth grade students, and 91 12th grade students. There were 176 female students and 147 male students.

A nomination procedure similar to that used in the item selection and validation study was used in the present study to identify exemplary and non-exemplary students, except the teachers were asked to nominate an equal number of males and females. The criterion groups obtained by this procedure consisted of a total of 96 students. Table 4 describes the subjects in these criterion groups.

Procedure

Four major procedures are discussed in this procedures section. First, the nomination procedure used to obtain the criterion groups

Table 4
 Number of Male and Female Subjects Per Grade
 Level in the Criterion Groups

| Grade | Exemplary | | Non-Exemplary | |
|-------------|-----------|----------|---------------|----------|
| | Male | Female | Male | Female |
| 6 | 6 | 6 | 6 | 6 |
| 8 | 6 | 6 | 6 | 6 |
| 10 | 6 | 6 | 6 | 6 |
| 12 | 6 | 6 | 6 | 6 |
| <hr/> Total | <hr/> 24 | <hr/> 24 | <hr/> 24 | <hr/> 24 |

is described. Second, the procedures used to administer the revised test form are described. Third, the cross-validation procedure is described, and fourth, the scoring procedures are explained.

Nomination procedure. The teachers of each classroom in which the test was administered were asked to nominate four students who best exemplified the 12 value goals proposed by the school district, and four students who least exemplified these values. The teachers were asked to identify two male and two female exemplary students and two male and two female non-exemplary students. A form was provided on which the teachers identified these eight students (see Appendix H). This form contained the following instructions:

Please select the four (two male and two female) students in your class who are present today whose lives best exemplify the 12 values found on the attached sheet.

Also indicate the four (two male and two female) students who have the most difficult time putting these values into practice. Make certain the students identified below are taking the test today.

Thank you.

In this way a total of 48 exemplary and 48 non-exemplary students were identified, 12 exemplary and 12 non-exemplary per grade level.

Administration of the cross-validation test form. The 323 students were administered the cross-validation test form during a regular class hour. One sample dilemma was used as a practice question and was accompanied by the following instructions:

The purpose of these questions is to assess your thinking about citizenship.

Below is a practice question. Please read this incident about John and select the answer you consider best. If you have a problem answering the question, then guess. Any answer will give you some credit. It is important to answer each statement. Use the entire period if you need to. Please write your full name on the answer sheet.

Now turn the page and begin working.

No additional instructions were given.

Cross-validation procedures. The tests obtained from the new sample of exemplary and non-exemplary students were scored (see the following section regarding the scoring procedures) using the 35 discriminative items identified in item selection and validation study. Three sets of items were identified based upon the item's level of

discrimination. Tests of significance were then conducted to determine whether the items as a group could discriminate between the two criterion groups in the new sample and also to determine which set of items maximally discriminated between these groups. The following specific procedures were used.

From the 35 items of the test which were found to discriminate significantly, sets of items at three levels of significance were selected. There were 35 items at the .10 level of significance or better, 22 items at the .05 level or better, and seven items at the .01 level or better. The score for each student in the criterion groups of the cross-validation sample was computed. The mean and standard deviation of the scores of each of the criterion groups for each set of items was computed. Finally, a test of significance was computed to determine whether there was a significant difference between the means of the scores of the two groups for each of the sets of items. The set which differentiated the two groups at the highest level of significance was considered the most discriminative set of items.

Scoring. The items were rated by the subjects as "good", "maybe" or "poor." The correct rating for the items to be scored was taken to be the rating chosen most frequently by the exemplary students. Therefore, if the exemplary students most frequently rated an item "good", then that was considered to be the correct answer for that item. Of the 35 scored items (i.e., discriminative items), 28 were

keyed "poor" and seven were keyed "good." That is, "poor" was taken to be the correct answer for 28 of the items, and "good" was taken to be the correct answer for seven of the items.

Two methods for scoring the items were considered. The first method was a weighted method in which each rating ("good", "maybe" or "poor") is given a numerical weight of 1, 2 or 3. For example, if the item were keyed "poor", then a response of "poor" by the student would be given a score of 3. Following the same line of thought, a response of "maybe" would be scored as 2, and a response of "good" would be scored as 1. These weights are then summed across all scored items to obtain the total score. Using the weighting method and scoring all 35 items, the highest possible score would be 105, and the lowest possible score would be 35. The second scoring method considered is a dichotomous method. Using this method, a keyed (correct) response for an item would receive a score of 1, and any other response would receive a score of 0. Using this method, the highest score (using all 35 items) would be 35, and the lowest possible score would be 0.

In order to determine which scoring method is best, both methods were used in the cross-validation procedures. The scoring method that yielded the highest level of significance between the criterion groups was considered the best method.

Data Analysis

In the analysis of the cross-validation and scoring data, a t-test for independent samples was computed to test the difference between the means of the exemplary and non-exemplary student groups for each set of items (.10, .05, and .01) using each scoring system (weighted and dichotomous).

In addition, a two-way analysis of variance (criterion group by sex) was conducted to determine whether there are significant differences between the males and females with regard to their scores on the test, and whether there exist a significant sex by group interaction. Finally, the mean scores for each grade level (6, 8, 10, and 12) were calculated for the exemplary and non-exemplary criterion groups. All the scores used in these analyses were calculated, using the most discriminative item set (.10) and the most discriminative scoring system (weighted).

There were no missing data regarding the items scored in the present analyses. Therefore, all subjects in the criterion groups (exemplary and non-exemplary) were included in the analyses.

As a measure of the internal consistency of the test, the Kuder-Richardson formula 20 was computed for the responses of the 203 students on whom test data was collected, but who were not included in the criterion groups. Only students without responses missing on the items scored were included in this analysis. Because of the

nature of the items of the test (i.e., allowing more than two response categories per item), a modified formula 20, described by Ferguson (1976) was utilized for the internal consistency analysis.

The results of these analysis are reported in the following section.

Results

The results of the t-tests computed between the exemplary and non-exemplary student groups using the three sets of items (.10, .05 and .01) identified earlier are presented in the following tables. Table 5 shows the results using the weighted scoring system. Table 6 shows the results of the tests of significant differences between the exemplary and non-exemplary student groups for the three sets of items using a dichotomous scoring method.

A two-way analysis of variance (for equal N's) was conducted by sex and criterion group, using the test scores as the dependent variable. Table 7 shows the results of this analysis.

Table 8 shows the mean scores and standard deviations of the male and female students in the exemplary and non-exemplary criterion groups.

The mean scores and standard deviations of the exemplary and non-exemplary groups by grade level (6, 8, 10, and 12) are presented in Table 9.

Table 5
Means, Standard Deviations and t Values for Tests of
Significant Differences Between the Exemplary
and Non-exemplary Groups Using a Weighted
Scoring System

| Item Set | Group | N of Cases | Mean | SD | t Value | df | Signif. |
|-------------------|---------------|------------|-------|-----|-----------|----|---------|
| .01 (7 items) | Exemplary | 48 | 19.42 | 1.7 | 3.36 | 94 | .001 |
| | Non-exemplary | 48 | 18.12 | 2.0 | | | |
| .05 (22 Items) | Exemplary | 48 | 62.33 | 3.7 | 3.56 | 94 | .001 |
| | Non-exemplary | 48 | 58.56 | 6.3 | | | |
| .10 (35 items) | Exemplary | 48 | 96.54 | 6.0 | 3.74 | 94 | .000 |
| | Non-exemplary | 48 | 90.48 | 9.5 | | | |

Table 6
Means, Standard Deviations and t Values for tests of Significant
Differences Between the Exemplary and the Non-Exemplary Groups
Using a Dichotomous Scoring System

| Item Set | Group | N of Cases | Mean | SD | t Value | df | Signif. |
|-------------------|---------------|------------|-------|-----|-----------|----|---------|
| .01 (7 items) | Exemplary | 48 | 5.58 | 1.4 | 3.09 | 94 | .003 |
| | Non-exemplary | 48 | 4.68 | 1.4 | | | |
| .05 (22 items) | Exemplary | 48 | 18.68 | 3.1 | 3.22 | 94 | .002 |
| | Non-exemplary | 48 | 16.23 | 4.3 | | | |
| .10 (35 items) | Exemplary | 48 | 26.85 | 5.1 | 3.26 | 94 | .002 |
| | Non-exemplary | 48 | 23.08 | 6.2 | | | |

Table 7

Analysis of Variance by Group and Sex on Test Scores for the
Exemplary and Non-exemplary Criterion Groups in the
Cross-Validation Study

| Source of Variation | <u>df</u> | <u>MS</u> | <u>F</u> | Signif. of F |
|---------------------|-----------|-----------|----------|--------------|
| Sex | 1 | 207.10 | 3.3 | .071 |
| Group | 1 | 882.10 | 14.2 | .000 |
| Interaction | 1 | .01 | .0 | .990 |
| Error | 92 | 62.30 | | |

Table 8

Score Means and Standard Deviations by Sex and Criterion
Group in the Cross-Validation Study

| Sex | Exemplary Group | Non-Exemplary Group |
|--------|-----------------|---------------------|
| Male | 95.08(6.3)* | 89.00(10.2) |
| Female | 98.00(5.5) | 91.96(8.7) |

* Standard deviation in parentheses

Table 9
 Score Means and Standard Deviations for the Exemplary
 and Non-exemplary groups by grade for
 the Cross-Validation Study

| Grade | Group | N | Mean | <u>SD</u> |
|-------|---------------|----|------|-----------|
| 6 | Exemplary | 12 | 97.0 | 3.5 |
| | Non-exemplary | 12 | 88.6 | 10.8 |
| 8 | Exemplary | 12 | 97.9 | 4.4 |
| | Non-exemplary | 12 | 87.3 | 9.1 |
| 10 | Exemplary | 12 | 92.8 | 8.4 |
| | Non-exemplary | 12 | 88.1 | 8.1 |
| 12 | Exemplary | 12 | 98.4 | 5.7 |
| | Non-exemplary | 12 | 97.0 | 5.5 |

Internal consistency results. The Kuder-Richardson formula 20 revealed an internal consistency coefficient of .919 for the 203 tests scored in the present analysis.

Based upon the results of the cross-validation, all 35 discriminating items included in 17 dilemmas were retained in the final form of the test, since this group of items showed the highest discriminative characteristics. These 17 dilemmas composed the final form of the test (see Appendix I). In addition, the weighted scoring system was used in the scoring of items in further work with the test, since this scoring system provided the widest range of scores between the criterion groups.

In the study that follows, the issue of the content validity of the present test is addressed. In addition, the reading difficulty level of the test is assessed.

Content Validation

An important attribute of the test is that it is logically tied to the educational objectives of the Salt Lake School District in the area of moral education (i.e., the 12 values in Appendix A). The assumption cannot be made that the test measures aspects of these value goals unless it can be shown that the dilemmas comprising the test are derived from or sample situations related to these value goals. Although care was taken during the writing of the dilemmas to construct dilemmas that reflected the 12 value goals, some evidence supporting this relationship is necessary. Therefore, the primary purpose of the present procedures is to provide evidence concerning the content validity of the dilemmas comprising the test.

In addition to this need to obtain data concerning the content validity of the test, it is also desirable to determine the readability of the test. Since the test is targeted for children from the fifth grade to the 12th grade, it is important that some measure of the reading difficulty level of the test is obtained. If the reading difficulty level is too high, then lack of comprehension would contribute to the measurement error at the lower grade levels. Therefore, an analysis of the readability of the test is reported in the present study.

Both the content validity study and the readability analysis were conducted for the final form of the test described in the cross-validation study (also see Appendix I). The following methodology was used in obtaining and analyzing the data concerning the content validity and readability of the present test.

Subjects

Ten teachers currently working in the Salt Lake City School District participated in the content validation. These teachers were asked to make the judgements regarding the content validity of the present test. Six of the teachers were male and four were female. The mean number of years these teachers have taught in the Salt Lake City School District is 15.7 (SD = 11.1).

Procedures

The procedures described in this section are two-fold. First, the procedures relating to the content validity study are described. Second, the procedures by which the readability analysis was conducted are described.

Content validity procedures. The ten teachers were given a copy of the final test form (Appendix I), a copy of the 12 value goals identified by educators in the Salt Lake City School District (Appendix A), and an instruction sheet for completing the procedure (Appendix J). The instruction sheet contained the following directions:

On the next page you will find a list of 12 Ethical Democratic values. On the following pages are 17 hypothetical dilemmas. Each of these dilemmas was constructed to reflect one of the 12 values. Please read each dilemma and match it to the Ethical Democratic Value you think it best represents. Place the number of each dilemma opposite the value it seems to represent in the spaces provided below. Some of the values may have only one dilemma that represents it, some may have two and some may have none. Thank you for considering this carefully.

All the teachers made the judgements requested independently. The teachers were allowed to take the materials, complete the task, and return the materials at their convenience.

Readability procedures. To determine the reading difficulty level of the present instrument, the Harris-Jacobson Readability formula (formula 2) was used (Harris & Spay, 1977). This formula requires the determination of the average sentence length of the test and the determination of the percentage of "unfamiliar" words (i.e., words not found on the Harris-Jacobson Readability word list) used in the test. These data were obtained by drawing three samples of text from the test (approximately 450 words per sample). The readability formula was applied to the three samples, and the three results were averaged.

Data Analysis

The present section reports the methods of analysis used for the content validity data and the readability data.

Content validity analysis. The data obtained concerning the content validity of the test were analyzed by computing a percentage

of agreement among the teachers regarding their judgements as to which value each dilemma represents. That is, the greatest number agreeing that a particular dilemma represents a particular value was divided by the total number of judges (10). For example, if eight of the ten judges indicated that dilemma No. 1 represented value number 4, then the percentage of agreement among these judges is 80 for this particular match.

Readability analysis. The three reading samples obtained were analyzed using the Harris-Jacobson Readability formula (formula 2). The results of the three samples were averaged to obtain a raw score. This raw score was compared to the Harris-Jacobson raw score conversion table to obtain the probable grade level of the reading material.

Results

The results of both the content validity analysis and the readability analysis are reported in the following sections.

Content validity results. The teachers in the present study were asked to match each of the 17 dilemmas composing the test with the value goal they thought the dilemma best represented (see Appendix A for the 12 value goals). A percentage of agreement among the teachers was calculated. Table 10 presents the results of the content validity analysis. In the left hand column of the table are the dilemmas, numbered 1 through 17 as they are numbered on the test (see Appendix I). In the center column the numbers corresponding to the

Table 10
 Percentage of Agreement Among Teachers Regarding the
 Matching of the Value Goals and the 17 Dilemmas
 Constructed to Represent These Values

| Dilemma Number | Value Number | % Agreement |
|----------------|--------------|-------------|
| 1 | 4 | 80 |
| 2 | 4 | 50 |
| 3 | 7 | 70 |
| 4 | 2 | 60 |
| 5 | 2 | 60 |
| 6 | 6 | 70 |
| 7 | 7 | 80 |
| 8 | 1 | 60 |
| 9 | 12 | 50 |
| 10 | 10 | 50 |
| 11 | 8 | 90 |
| 12 | 10 | 80 |
| 13 | 9 | 90 |
| 14 | 4 | 80 |
| 15 | 11 | 90 |
| 16 | 5 | 50 |
| 17 | 5 | 40 |

12 value goals in Appendix A are presented. The right hand column shows the percentage of agreement among the teachers that the dilemma in the left hand column represents the co-responding value in the center column.

Readability results. Using the Harris-Jacobson Readability Formula (formula 2), the raw scores for the three samples obtained from the test were 5.76, 4.34, and 4.76. The average of these raw

is 4.95. This raw score mean is within the critical raw score limits (4.81 - 5.28) given for a fifth grade reading level on the Harris-Jacobson raw score conversion table.

Stability

Reliability is an extremely important characteristic of a test. Reliability is usually defined as "the level of consistency of the measuring device" (Borg & Gall, 1976, p. 142). The reliability of a test may be obtained using several different approaches, and each type of reliability has a somewhat different meaning. One form of reliability, internal consistency, has already been established. A measure of internal consistency is based upon the average correlation among the items of the test. A coefficient of internal consistency indicates the measurement error within the test, that is, error from item to item. Other measures of reliability indicate measurement error between testings. In other words, these measures indicate the stability of the test. One such method of determining the stability of a test is known as the "test retest" method.

The procedures used in determining the stability of the test are detailed below.

Subjects

The subjects were 25 tenth grade students who had completed the preliminary final form of the test in May, 1979, as a part of cross-

validation and internal consistency. There were 17 female students and eight male students.

Procedure

The subjects used in this study were part of the subject pool used in the cross-validation of the test. These subjects were administered the cross-validation test form on May 9, 1979, according to the procedures described in the cross-validation study.

In September 1979, school district officials were given a list of the tenth grade students who took the test in May. They were asked to readminister this test to 25 of these students. This was done on September 20, 1979, using the same procedures of administration used in the cross-validation study. The interval between testings was four months and 11 days.

The tests for each subject for both administrations were scored using the weighted scoring procedure described in the cross-validation study. The scores obtained from the two administrations were correlated in order to obtain the coefficient of stability.

Data Analysis

The scores from the two administrations were correlated using a Pearson Product-Moment correlation formula. There were no missing data on the items scored in this analysis. Therefore, the tests of all 25 students were included in this analysis. The findings of this analysis are reported in the results section below.

Results

A Pearson r of .818 was obtained, using the procedures outlined above. The mean score for the first administration is 90.6 (SD = 4.6). The mean score of the second administration is 91.2 (SD = 4.2).

Social Desirability

It is a longstanding observation that scores on self-descriptive tests (especially personality tests) are influenced by factors other than those reflected in the content of the test. In a classic paper in the field of testing, Cronbach (1946) demonstrated that responses to a test typically reflect the systematic operation of one or more variables other than that which is to be measured by the test. That is, subjects seem to have a disposition toward giving a particular kind of response and this disposition is not necessarily related to the variable that is being measured. Cronbach called these dispositions "response sets."

Since the publishing of Cronbach's original paper, many investigators have studied the problem of response sets. One of the focuses has been on social desirability. That is, the tendency on the part of the test taker to give answers that will create a good impression. A number of investigators have discussed ways in which the factor of social desirability can influence outcomes in personality testing and social psychological research (Edwards, 1957; Crowne & Marlowe, 1964; Fiske, 1971). These investigators suggest that a subject's

responses (either on a test or in an experiment) often reflect what the subject perceives as a socially desirable response rather than what he "truly" feels.

Because of this previous research on the influence of social desirability on test responses and the possibility of such influence with regard to the test under consideration in the present research, it was deemed necessary to study the relationship between scores of social desirability and scores on the present instrument. Therefore, the purpose of the present procedures is to examine the relationship between scores obtained on the test developed in the present investigation and those obtained using a scale of social desirability. The following procedures were used to investigate this relationship.

Subjects

There were 35 of the 37 subjects participating in the social desirability study who completed both instruments that were administered. These subjects were 35 undergraduate students enrolled in an introductory human development class at Utah State University during the Winter Quarter of 1980. There were 34 female subjects and one male subject. The mean age of the subjects were 20.4.

Measures

The final form (Appendix I) consisting of 17 value dilemmas and 35 scored alternatives was used. The second measure used is the

Marlow-Crowne Social Desirability Scale (Crowne & Marlowe, 1964). This scale attempts to identify individuals who describe themselves in favorable, socially desirable terms in order to achieve approval of others. This scale consists of 33 items, 18 of which are keyed in the true direction and 15 in the false direction. One point is scored for each response in the socially desirable direction. Total scores vary between 0 (no social desirability) to 33 (highest social desirability). Test-retest reliability (interval one month) is reported as .88. The internal consistency of the scale (Kuder-Richardson 20) is likewise reported to be .88.

Procedures

The subjects were administered the tests during a regular weekly class period. They were given the final test form with the social desirability scale attached, as if they were one test (see Appendix K). The final test form contained the same instructions that were given in the cross-validation study (p. 69 of this dissertation). The social desirability test was preceded by the following written instructions:

Listed below are a number of statements concerning personal attitudes and traits. Read each item and decide whether the statement is true or false as it pertains to your personality.

The subjects were told that the test they were taking was a values test being developed for high school students, and that their responses

were needed as part of an adult norm group. All subjects were given enough time to complete the entire test.

The final test form was scored using the weighted scoring system described in the cross-validation study. The social desirability scale was scored according to the author's directions.

Data Analysis

The scores from the two tests were correlated using a Pearson Product-Moment correlation formula. The two subjects who did not complete both instruments were dropped from the data analysis. The results of this analysis are reported in the following results section.

Results

A Pearson r of $-.093$ was obtained, using the procedures and analysis described previously. The mean score on the values test is 100.5 ($SD = 3.4$). The mean score on the Marlow-Crowne Social Desirability Scale is 15.03 ($SD = 6.5$).

Fake Good

A factor highly related to the social desirability factor examined in the previous study is how susceptible the test is to "faking good." By "faking good", it is meant that a subject answers the questions of a test in such a manner that he/she appears in a favorable or socially desirable way. In order to appear favorably,

subjects may choose the socially desirable response to the items of a test rather than respond frankly about the item.

An important question about any self-report instrument then, is "how susceptible are the test scores to intentional faking?" In response to this question, the present procedures are designed to determine whether subjects can manipulate their scores on the values test, developed in this dissertation, by intentional faking.

Subjects

The subjects participating in the fake good study were 31 sixth grade students enrolled in the Salt Lake City public schools. There were 16 male students and 15 female students.

Procedures

The subjects were administered the final form (Appendix I) of the test during a regular class period. The students were asked by their teacher to intentionally fake good on the test by the following verbal instructions:

Try to answer the questions to this test as you would imagine your teacher, principal, or parents might answer them. Pick the answers that you think these people might want you to pick.

The test was accompanied by the regular instructions described in the cross-validation study. The students were allowed as much time as they required to complete the test.

The tests were scored using the weighted scoring procedures described in the cross-validation section of this dissertation.

Data Analysis

The mean, standard deviation, and variance was computed for the "fake good" group of students. A t test for independent samples was computed between the scores of the "fake good" group, and the scores of the 63 sixth grade students not a part of the criterion groups in the cross-validation study. These subjects were administered the test according to the regular instructions.

Results

Table 11 shows the means, standard deviations, and variance estimates for the "fake good" and regular instructions groups.

Table 11

Means, Standard Deviations and Variance Estimates for the
"Fake Good" and Regular Instruction Groups

| "Fake Good" Instructions | | | | Regular Instructions | | | |
|--------------------------|-------|-----------|-------|----------------------|-------|-----------|-------|
| N | mean | <u>SD</u> | S^2 | N | mean | <u>SD</u> | S^2 |
| 31 | 92.96 | 7.7 | 59.3 | 61 | 92.10 | 7.7 | 59.3 |

A t -test for independent samples between the "fake good" and the regular instructions groups yielded a t of .089. A t of 1.65 is needed for significance at the .05 level with 92 degrees of freedom.

Supplementary Test Data

In the present section, mean test scores and standard deviations are presented by grade and sex for 381 students on which complete test data were obtained during item selection and validation, and cross-validation studies. These students were not a part of the test validation procedures (i.e., were not included in the exemplary or non-exemplary criterion groups). In addition, the mean test score and standard deviation are reported for a parent group who were administered the test.

Subjects

During the development of the present instrument, test data were obtained for 434 subjects who were not included in the exemplary or non-exemplary criterion groups. Data for 207 of these students in grades 5, 7, 9 and 11 were collected during the item selection and validation study. Data for 227 students in grades 6, 8, 10, and 12 were collected during the cross-validation study. However, complete data was not available for all of these students (i.e., some tests had missing responses on some of the items scored). Table 12 shows the number of students by grade from whom there were no missing data on the items scored.

In addition to these students, the test was administered to 30 parents whose children attend school in the Salt Lake City School

Table 12

Number of Students by Grade and Sex for Whom Complete
Test Data is Available in the Normative Groups

| Grade | Male | Female | Total |
|-------|------|--------|-------|
| 5* | 23 | 21 | 44 |
| 6 | 27 | 34 | 61 |
| 7* | 13 | 29 | 42 |
| 8 | 12 | 12 | 24 |
| 9* | 28 | 21 | 49 |
| 10 | 24 | 34 | 58 |
| 11* | 23 | 24 | 43 |
| 12 | 23 | 39 | 60 |

* Data collected during item selection and validation. All other data collected during the cross-validation.

District. All the parents who took this test are female. The mean age of this group is 37.7 ($SD = 3.9$). The mean number of school aged children of this parent group is 3.1 ($SD = 1.3$).

Procedures

The procedures utilized in administering the test to the student groups are described in the procedures sections of the item selection and validation, and cross-validation studies.

The parent group was administered the final form of the test according to the following procedures. Parents attending a Salt Lake City School District PTA meeting were told that a Democratic Values test was currently being developed for use in the schools. The parents were told that their responses to the test were needed to determine how adults responded to items on the test. At the end of

the meeting, parents who wished to volunteer to take the test were asked to stay to complete the instrument.

Data Analysis

All tests were scored using the weighted scoring system described in the cross-validation study. The items scored are the 35 discriminating items shown in Appendix L. Means and standard deviations by grade and sex were obtained using these scores.

Results

The results presented in the present section are the mean scores and standard deviations by grade and sex for those 381 students who were not a part of the test validation procedure, and for whom complete test data were available. The mean score and standard deviation for the parent group are also reported in the present section.

In the item selection and validation study, students were administered the item selection and validation form of the test, which was a much longer form of the test (180 items) than the cross-validation form (85 items). Because of this difference in test format, there are a number of difficulties in comparing the data obtained from these two test forms (see discussion of supplementary test data in the following chapter). Therefore, the test data obtained during the item selection and validation, and cross-validation studies, are presented in separate tables. The test data from the item selection and validation study are presented first (by grade and sex), followed by the presentation of the test data from the cross-validation study (by grade and sex).

Table 13 presents the score means and standard deviations by grade and sex for the 178 students administered the item selection and validation test form.

Table 13
Score Means and Standard Deviations by Grade and Sex for
Students Administered the Item Selection
and Validation Test Form

| Grade | Sex | N | Mean | <u>SD</u> |
|-------|-------|----|------|-----------|
| 5 | M | 23 | 86.6 | 9.6 |
| | F | 21 | 93.5 | 6.2 |
| | Total | 44 | 89.9 | 8.8 |
| 7 | M | 13 | 93.9 | 9.2 |
| | F | 29 | 97.8 | 4.2 |
| | Total | 42 | 96.6 | 6.4 |
| 9 | M | 28 | 88.5 | 9.7 |
| | F | 21 | 92.2 | 8.3 |
| | Total | 49 | 90.1 | 9.1 |
| 11 | M | 23 | 85.0 | 10.6 |
| | F | 24 | 94.9 | 7.9 |
| | Total | 47 | 89.1 | 11.0 |

The overall mean score for these students is 91.5 (SD = 9.3).
The overall mean for male students in this group is 87.9 (SD = 10.1).
The overall mean for females is 94.9 (SD = 6.9).

Table 14 presents the score means and standard deviations by grade of the 203 students administered the cross-validation test form.

Table 14
 Score Means and Standard Deviations by Grade and Sex for
 Students Administered the Cross-Validation Test Form

| Grade | Sex | N | Mean | <u>SD</u> |
|-------|-------|----|------|-----------|
| 6 | M | 27 | 88.2 | 9.2 |
| | F | 34 | 95.1 | 4.4 |
| | Total | 61 | 92.1 | 7.7 |
| 8 | M | 12 | 88.6 | 10.9 |
| | F | 12 | 95.3 | 4.2 |
| | Total | 24 | 92.3 | 8.8 |
| 10 | M | 24 | 88.4 | 8.9 |
| | F | 34 | 94.8 | 5.8 |
| | Total | 58 | 92.1 | 7.9 |
| 12 | M | 23 | 94.7 | 6.9 |
| | F | 39 | 97.0 | 5.0 |
| | Total | 62 | 96.1 | 5.8 |

The overall mean score for this group of students is 93.3 (SD = 7.6). The overall mean for males in this group is 90.1 (SD = 9.1). The overall mean for females is 95.6 (SD = 5.1).

A test of significant differences for the mean test scores for grades 5 through 12 was conducted. However, since an Fmax test of homogeneity of variance among the grades was significant ($F = 3.6$, $p < .05$), an approximate test of the equality of the means across grade levels was conducted using a technique suggested by Snedecor (1956). This test of significance takes into consideration the

assumption of heterogeneity of variances. Table 15 shows the results of this analysis.

Table 15
Approximate Test of Equality of Mean Scores for
Grades 5 through 12 of the Normative Group

| Source of Variation | df | MS | F |
|---------------------|-------|------|-------|
| Between groups | 7.0 | 7.98 | 7.76* |
| Error | 143.0 | 1.03 | |

* $p < .05$

Finally, the mean and standard deviation for the parent group is 99.4 (SD = 4.3).

Summary of Methods and Results

In the present section, a summary of the methodology and findings of the seven studies reported in this chapter is presented.

Preliminary Item Construction and Analysis

Following a review of the literature, it was decided that the most appropriate format for the test under construction was the hypothetical dilemma format. In addition, since the test is to be a group test, it was decided that objective responses to the dilemmas were appropriate.

The initial dilemmas reflecting the 12 value goals proposed by educators within the Salt Lake City School District were written by a team of experts from that district. The alternative solutions to these dilemmas were also written by this group. This preliminary test was administered to 106 students in the Salt Lake City public schools. The purposes of this administration were to obtain preliminary information concerning the appropriateness of the test format, the sensitivity of the test to group differences, and the difficulty level of the items. Based upon the results of this administration, it was determined that students could complete the task required in a reasonable length of time. However, it was also determined that (1) some of the items were too easy, (2) some of the dilemmas needed better distractor items, and (3) the overall test score did not discriminate between grade levels.

Item Selection and Validation

Based on the results of the pilot study, the multiple-choice response format of the test was rejected. Instead, an item rating format was developed by which students would rate each dilemma alternative as "good", "maybe", or "poor." It was felt that such a format would be more sensitive to group differences. In addition, many of the dilemma alternatives were rewritten on the basis of the response frequencies obtained in the preliminary item analysis. Also, the pool of dilemmas was expanded to 36 to accommodate expected attrition of dilemmas during later phases of the research.

The major purpose of the item selection and validation study was to establish a method of determining the validity of the items to be used in the final form of the test. The method used was the identification of students who were judged (by teachers) to exemplify the 12 district values (Appendix A) in their lives, and those who did not exemplify these values. These groups of exemplary and non-exemplary students were then administered the revised form of the test (Appendix I). An item analysis was then conducted to determine which items discriminated between these two groups. The statistical technique used was a chi-square analysis.

Based upon the chi-square item analysis, 35 items (contained within 17 dilemmas) were identified that discriminated between the exemplary and non-exemplary criterion groups at a significance level of $p < .10$. These 35 items and 17 dilemmas in which they are contained were retained in the preliminary final form of the test (Appendix G).

Cross-validation and Internal Consistency

Although 35 items were identified that discriminated between the exemplary and non-exemplary criterion groups, it was felt that these items needed to be cross-validated with a second sample, independent of the first. The aim of the cross-validation study was to determine whether the same items that discriminated between the criterion groups in the item selection and validation study would also discriminate between a new sample of exemplary and non-exemplary

students. In addition to the cross-validation, data concerning the scoring system to be used on the test and an internal consistency estimate were obtained.

New and larger groups of exemplary and non-exemplary students were identified using the same nomination procedure used in the item selection and validation study. These criterion groups were then administered the cross-validation form of the test.

In the analysis, the tests were separately scored using three different sets of items. First, the tests were scored using all 35 items. Second, the tests were scored using only the 22 items discriminating between the criterion groups in the cross-validation and internal consistency study at $p < .05$. Finally, the tests were scored using only the seven items that discriminated at $p = .01$ or better during the item selection and validation study. Finally, a test of significance was computed between the scores of the exemplary and non-exemplary groups for each set of items. The results showed that the scores for the exemplary and non-exemplary groups were significantly different for all item sets. The largest difference in scores was obtained using all 35 items. Therefore, all 35 items (17 dilemmas) were included in the final test form.

Two scoring systems were also considered, a dichotomous system and a weighted system. The results indicated that the weighted scoring system consistently resulted in larger differences in scores

between the exemplary and non-exemplary criterion groups. Therefore, the weighted scoring system was adopted as the best method of scoring the test.

Finally an internal consistency estimate for the test was calculated using the Kuder-Richardson formula 20. Using this formula, a reliability estimate of .919 was obtained.

Content Validation

The issue of the content validity of the test was addressed. Since the intent of the test is to assess student exemplification of the particular values identified by educators of the Salt Lake City School District, it must be shown that the dilemmas that compose the test represent situations involving these values. In addition, the reading difficulty level of the test was assessed and reported. First, the procedures and results of the content validity analysis are summarized, followed by the findings of the readability analysis.

Ten teachers working in the Salt Lake City School District were asked to read each of the 17 dilemmas included in the final form of the test, and match each to one of the 12 values (Appendix A) they thought it best represented. All teachers made these judgements independently. Teacher agreement regarding the dilemmas and the value each represents ranged from 40% agreement to 90% agreement.

Using the Harris-Jacobson Readability formula to determine the reading difficulty level of the final form of the test, an average

raw score (over three text samples) of 4.76 was obtained. This raw score fell well within the limits of a fifth grade reading level, according to the Harris-Jacobson raw score conversion table.

Stability

An analysis was conducted in an attempt to obtain an estimate of the stability of test scores over time. A test-retest approach was used.

Using the test-retest approach, 25 tenth grade students were administered the final form of the test twice, with an interval of approximately four months between administrations. The scores of the two administrations were correlated using a Pearson-Product Moment correlation formula. A test-retest correlation of .82 was obtained using these procedures.

Social Desirability

The effects of socially desirable response sets on test scores was studied. There were 35 undergraduate college students administered the final form of the test, along with the Marlowe-Crowne Social Desirability Scale. The Marlowe-Crowne scale attempts to identify individuals who describe themselves in socially desirable terms. The scores obtained on the two instruments were correlated to determine whether high scorers on the Marlowe-Crowne scale were also high scorers on the test developed in the present dissertation. A Pearson r of .093 was obtained.

Fake Good

A factor highly related to the social desirability factor is how susceptible the test is to intentional faking. In other words, can an individual obtain high scores on the test by intentionally "faking good."

There were 31 sixth grade students asked to intentionally "fake good" on the test. That is, the students were asked to answer the questions on the test in a way they imagined their teacher or parents might. The mean score on the test for this "fake good" group of students was compared to the mean score of another group of sixth grade students taking the test with the regular instructions. A t-test was conducted to determine whether these score means were significantly different. A t of .089 was obtained, which is non-significant at the .05 level.

Supplementary Test Data

Mean test scores and standard deviations (by grade and sex) were presented for 381 students in grades 5 through 12. These students are those students who were administered the test during the item selection and validation, and cross validation studies, but were not included in the criterion groups, and, therefore, were not a part of the analyses in these studies.

A discussion of the findings related to the development of the present instrument are presented in the following chapter.

CHAPTER IV

DISCUSSION

In the present chapter, the findings reported in Chapter III related to the development of the present instrument (which shall henceforward be referred to as the Ethical Democratic Values Test) are discussed. The discussion of these findings is presented in the general sequence in which they were reported in the previous chapter. Also included in the present chapter is a discussion of the limitations of the present research, suggestions for further research, and a discussion of the uses of the Ethical Democratic Values Test (EDVT).

Review and Discussion of Findings

The discussion centers around five major areas. They are (1) the development of the test's format, (2) findings related to the validity of the test, (3) findings related to the reliability of the test, (4) findings regarding the effects of social desirability on test responses, and (5) a discussion of the supplementary test data.

The Format of the Ethical Democratic Values Test

Based upon a review of the literature in the area of values

assessment, the decision was made to utilize a hypothetical dilemma format for the Ethical Democratic Values Test. Such a format seemed to best meet the criteria set forward for the purposes of the test. Additionally, it was decided that student responses to the test stimuli must be objective in nature, since the test was to be a group test. Therefore, a preliminary test was developed that presented the students with hypothetical dilemmas and required the student to choose the best alternative solution to the dilemma. This multiple-choice format was tried out in a pilot study. Based upon this pilot study, it was determined that the multiple-choice format was not sensitive enough to detect group differences. Therefore, a new response format was developed by which the students were asked to rate the attractiveness of each alternative solution to the dilemmas. Such a format allowed an analysis of the acceptability of each of the alternative solutions to each dilemma.

To determine whether such a format would be useful in discriminating between criterion groups (i.e., students judged to exemplify the values proposed by educators of the Salt Lake City School District and students judged not to exemplify these values), the test was administered to teacher-nominated exemplary and non-exemplary students. Using a chi-square analysis of item responses, 35 items were found to discriminate between these groups at $p \leq .10$.

In examining these discriminating items, it was found that seven of the items were keyed "good" and 28 of the items were keyed "poor"

(see Appendix L). That is, seven of the items that were seen as the best alternative by the exemplary students were chosen significantly less often as the best alternative by the non-exemplary students. Unexpectedly, 28 of the items that were typically rated as "poor" alternatives by the exemplary students were significantly less often rated as "poor" by the non-exemplary students. These findings seem to indicate that exemplification of the values involves not only an ability to recognize and select a "good" solution to the dilemma (i.e., those consistent with the values), but also the ability to recognize "poor" alternatives (i.e., those inconsistent with the values). The conclusion that the responses of the exemplary students are consistent with district values is supported by a comparison of the criterion group responses with the responses of the parent group. For all 35 discrimination items, the responses of the parent group are consistent with the exemplary group responses. The mean score of the parent group on the test is somewhat higher ($\bar{X} = 100$) than the mean score of the exemplary group ($\bar{X} = 96$). Both of these scores are significantly higher than the mean score of the non-exemplary group ($\bar{X} = 90$).

These findings appear to support the conclusion that the test format and items used for the EDVT are effective in discriminating between criterion groups. The findings also support the conclusion that higher scores on the test indicate the choice of solutions that are more congruent with the proposed values than lower scores.

The Validity of the Ethical

Democratic Values Test

A major portion of the research in the present investigation was directed at determining the validity of the Ethical Democratic Values Test (EDVT). Evidence relating to the concurrent and content validity of the test was offered in the preceding chapter. A discussion of this evidence is presented in the present section.

Concurrent validity. Based upon the theoretical assumption of the direct approach to moral education that students should not only know the values of the community, but also exemplify these values in their behavior, it was concluded that a suitable test of these values should be able to discriminate between exemplary and non-exemplary students.

A nomination procedure was utilized to identify exemplary and non-exemplary students. According to this procedure, the teachers of the students taking the test were asked to identify students who, in the teacher's judgement, most exemplified the proposed values and students who least exemplified these values. The items included in the preliminary final form and used for scoring purposes were those items that discriminated well between these two criterion groups.

To determine whether the items selected by this procedure were indeed useful in discriminating between students identified as exemplary and non-exemplary, a cross-validation procedure was conducted. By this procedure, a new and independent group of

students were identified (i.e., nominated by their teachers) as exemplary and non-exemplary of the district values. The cross-validation form of the test, composed of the items that previously discriminated between the criterion groups, was administered to this new group of students. The tests were scored and a t-test was conducted to determine whether the test scores for the exemplary group were significantly different from the test scores of the non-exemplary group. The results indicated that the test scores for the two criterion groups were significantly different. The mean score for the exemplary group was higher.

Although the mean score difference between these two criterion groups is statistically significant, the actual difference in scores is relatively small. The exemplary group mean is about six points higher than the non-exemplary group mean. Therefore, even though the difference between these groups is statistically significant, one may question whether this difference is meaningful.

One important point to consider in discussion the meaningfulness of this difference is whether the difference could be due to measurement error inherent in the test itself. That is, the error of measurement of the test may be as large or larger than the score differences between the two groups. If this were the case, the differences could be a function of the test and not a function of actual group differences. In order to address this concern, a standard error of measurement was calculated for the EDVT. The

standard error of measurement represents an estimate of the standard deviation of errors obtained in repeated sampling. That is, it is an index of the variable error of the test. A standard error of measurement of 3.3 was obtained for the EDVT. (This standard error was calculated using the lowest reliability figure obtained for the EDVT, .82, and, therefore, may be an overestimate of error.) Since the obtained mean difference between the exemplary and non-exemplary groups is about twice the standard error (six points), there is a good chance that this score difference between the groups was not due to measurement error. This supports the conclusion that the mean differences in test scores between the criterion groups is a function of the characteristics of the groups, and not a function of the characteristics of the test.

A second point to consider in discussing the meaningfulness of this difference between criterion groups is the possible influence of sex differences in response. It is possible that one of the sexes in the exemplary group scored significantly higher than the other sex students, therefore pulling the mean exemplary group score up. Likewise, it is possible that one of the sexes in the non-exemplary group scored very low as a group, pulling the non-exemplary mean score down. If this were the case, then the difference in scores between the groups could be a function of sex differences, and not total group differences.

An analysis of variance by criterion group and sex was conducted to test for these sex differences. The analysis revealed no

significant difference for sex. These data provide evidence that the overall differences in scores between the criterion groups are not a function of sex differences.

A final point to consider in discussing the meaningfulness of the score differences between the criterion groups on the EDVT is whether this difference is a function of the grade level of the students. It is possible that the score difference between the criterion groups is the result of a difference between the groups at only one grade level. For example, it could be the case that score differences between the criterion groups occurred only at the eight grade, while there were no differences at the other grade levels. This difference could have been large enough to cause a significant difference in the overall means across grade levels.

In the cross-validation study, data was presented regarding the scores of the exemplary and non-exemplary groups for each grade level (6, 8, 10, and 12). Consistent and fairly large differences between the criterion groups were found for grades 6, 8, and 10. A smaller difference was found between the criterion groups in grade 12. All these differences, however, are in the expected direction (i.e., exemplary high, non-exemplary low). Therefore, it seems that the overall difference in criterion groups scores may not be attributed to a single difference at a single grade level. Rather, the overall score difference between the criterion groups appears to be the result of score differences between the exemplary and non-exemplary groups at all grade levels tested.

Overall, these data provide evidence for the concurrent validity of the EDVT. The test scores seem to be in agreement with teachers' judgements of student exemplification of the district's values. The score differences between the criterion groups do not appear to be a function of sex differences or grade differences. It must be noted here that the usefulness of this evidence regarding the validity of the EDVT is dependent upon the validity of the criterion (i.e., teachers' judgements). This issue is discussed in the limitations section of this chapter.

Content validity. Another validity consideration concerning the EDVT is the degree to which the dilemmas used in the test represent the values identified by district personnel (Appendix A). In order to provide evidence regarding the content validity of the EDVT, it must be shown that the dilemmas used in the test are logically derived from and related to the 12 values proposed by the educators of the school district.

Evidence was obtained regarding the content validity of the EDVT. Ten teachers, who have worked in the Salt Lake City School District for a number of years ($\bar{X} = 15.7$ years), were asked to independently match each dilemma included in the final form of the EDVT with the value (Appendix A) they thought it best represented. It is reasoned that the degree of agreement among those teachers regarding the dilemmas and the values these dilemmas represent provides some index of the degree of face validity of each dilemma. For example, 80%

of the teachers agreed that dilemma No. 1 of the EDVT reflects value number 4 (Appendix A). This provides some evidence that dilemma No. 1 describes a situation in which value 4 have a high degree of applicability. In this way an index of the face validity of each dilemma was obtained.

The percentage of agreement among the teachers varied from 40% (dilemma No. 17) to 90% (dilemma Nos. 11, 13, and 15). The percentage of agreement for most of the dilemmas fell between 50% and 80%.

This evidence lends some support to the contention that the dilemmas used in the EDVT are reasonably related to the values identified by educators of the Salt Lake City School District. The evidence likewise indicates that all but one of the vlaues are represented by the test content. Therefore, overall, the test appears to present the student with situations in which the identified values are involved. However, these data also suggest that some of the dilemmas for which lower levels of agreement were obtained could be improved to more clearly represent one of the values.

A factor also related to the content validity of the EDVT is the readability of the test. Since the test is targeted at grades 5 through 12, it is desirable to determine whether the test is readable at lower grade levels. In order to determine the reading difficulty level of the test, a Harris-Jacobson Readability analysis was conducted. The Harris-Jacobson Readability Formula provides a method of determining the approximate grade level of the reading

material. The application of the Harris-Jacobson Readability formula to the EDVT showed that the test is readable at approximately the fifth grade level. Therefore, it appears that students at lower grade levels should have had little difficulty in reading the test.

The Reliability of the Ethical

Democratic Values Test

Reliability is usually defined as the "level of consistency of the measuring device (Borg & Gall, 1976, p. 142). Two types of reliability estimates were obtained for the Ethical Democratic Values Test (EDVT). An estimate of the stability of EDVT scores was obtained using a test-retest procedure. In addition, the calculation of an internal consistency coefficient was reported in the cross-validation study of the previous chapter. These findings regarding the reliability of the EDVT are discussed in the following sections.

Test-retest reliability. The EDVT was administered to 25 tenth grade students and subsequently readministered to the same group of students approximately four months later. The scores obtained from the two administrations were correlated using a Pearson Product Moment correlation technique. A Pearson r of .82 was obtained. This coefficient indicates that scores on the EDVT are relatively stable over time.

Internal consistency. An internal consistency estimate is a measure of the homogeneity of the test materials. If the items in a test have high intercorrelations with each other and measure much

the same attribute, then the internal consistency estimate will be high (Ferguson, 1976). The calculation of a Kuder-Richardson Formula 20 estimate of internal consistency for the EDVT revealed a reliability coefficient of .919. This suggests that the test items are somewhat homogeneous.

The Effects of Socially Desirable

Response Sets on EDVT Scores

Two studies were conducted in an attempt to assess the effects of social desirability on EDVT test scores. The scores obtained from students on the EDVT were correlated with scores obtained from the same students on a measure of social desirability. Students were also asked to "fake good" on the EDVT. The scores of the "fake good" group of students were then compared to the scores of students who took the EDVT following the regular instructions. The findings of these two studies are discussed in the following sections.

Correlation between EDVT scores and scores of social desirability.

There were 35 university undergraduate students administered the EDVT along with the Marlowe-Crowne Social Desirability Scale. The Marlowe-Crowne scale attempts to identify individuals who describe themselves in socially desirable terms in order to appear in the best light. It is expected that subjects with high scores on the Marlowe-Crowne scale should also respond in a socially desirable manner on the EDVT. Therefore, a high correlation between the scores on the two tests would indicate that EDVT scores are subject to the influences of

socially desirable responses. The correlation actually obtained between the two test scores was $-.093$. This coefficient indicates that there is almost no correlation between the scores obtained on the EDVT and the scores obtained on the Marlowe-Crowne Social Desirability Scale.

However, caution must be exercised in interpreting this finding, since the scores attained by the college students on the EDVT were very high ($\bar{X} = 100.5$) with little variation ($SD = 3.4$). This "ceiling" effect on the EDVT scores may account for the low correlation obtained between the two tests. That is, the variation of scores on the EDVT among students was small, while the variation in scores on the Marlowe-Crowne Social Desirability Scale was somewhat greater ($\bar{X} = 15.03$, $SD = 6.5$).

In future research on the effects of social desirability on EDVT scores, it is suggested that a lower grade level is tested, since variability on EDVT scores in lower grade levels is greater.

"Fake good" research on the EDVT. In a second study designed to assess the effects of socially desirable responses on EDVT scores, 31 sixth grade students were asked to "fake good" on the test. That is, these students were asked to respond to the test in a way in which the students thought their parents, teacher, or principal would. The mean score on these "fake good" tests was compared to the mean score of other sixth grade students who took the test according to

to the regular instructions. The means for these two groups were not significantly different ("fake good" group, $\bar{X} = 92.9$; regular instruction group, $\bar{X} = 92.4$).

These results provide evidence that students (at least at the sixth grade level) are unable to obtain significantly higher scores when "faking good" on the EDVT as compared to students taking the test under regular instructions. This conclusion is subject to at least two alternative explanations. The first explanation is that it may not be obvious to students (sixth grade) which scored responses on the EDVT are the socially desirable ones. Therefore, it is difficult to increase one's score by faking good. This explanation may be especially applicable to sixth grade students, as these students may not be sophisticated enough (in terms of test taking) to "fake good" on the test. An alternative explanation is that it is possible that students tend to always respond to the kind of task presented in the EDVT in socially desirable ways. Therefore, the scores are not highly influenced by "fake good" instructions, since the students are prone to respond in that manner anyway.

Given the present data, it is impossible to determine which explanation may account for the results obtained. However, regardless of which explanation is correct, the basic conclusion regarding this data still remains. That is, students (at the sixth grade level) do not score significantly higher on the EDVT when asked to "fake good" than students who take the test under regular instructions.

Discussion of Supplementary Test Data

During the development of the EDVT, normative test data was collected and analyzed for 411 subjects who were not included in the exemplary or non-exemplary criterion groups. These subjects included 178 students in grades 5, 7, 9 and 11 (item selection and validation); 203 students in grades 6, 8, 10 and 12 (cross-validation); and 30 parents of children in the Salt Lake City School District. The test data regarding these groups were reported in the previous chapter in the section entitled Supplementary Test Data. The following is a discussion of these data regarding grade and sex differences on EDVT scores.

Before discussing these data regarding grade and sex differences, several cautions pertaining to these data must be mentioned. First, the 178 students (5, 7, 9, and 11), for whom data were collected during the item selection and validation phase, were administered the item selection and validation test form of the EDVT. On the other hand, the 203 students (grades 6, 8, 10, and 12) for whom data were collected during the cross-validation phase, were administered the cross-validation test form of the test. This test form (which is identical to the final form) contained 85 items in 17 dilemmas. All of the dilemmas contained in the cross-validation form of the test were also contained (although embedded among other dilemmas) in the item selection and validation form. Even though the items scored on the two forms of the test were identical, the differences in form length may have influenced the test scores

obtained. Because these two groups of students were not administered the same test form, it could be argued that the results obtained from the two groups are not directly comparable. A number of factors may have differentially influenced the responses of the students to the two test forms. The major factor being fatigue on the longer form. It is expected that fatigue would result in lower overall test scores for the students taking the longer form of the test.

The overall mean for the students taking the item selection and validation test form (long form) is 91.5 (SD = 8.8), while the overall mean for the students taking the cross-validation test form (short form) is 93.3 (SD = 7.7). The overall mean for the long form is somewhat lower than the mean for the cross-validation form. The lower overall mean on the long form would be consistent with fatigue effects. It is possible that the scores for the students taking the long form are slightly deflated. It is interesting to note that the mean score for the students taking the short form (93.3) falls very close to the midpoint between the scores of the exemplary (96.5) and non-exemplary (90.5) criterion groups. This tends to support the contention that the exemplary and non-exemplary groups represent extreme groups.

A second consideration that may confound the comparison of the data obtained from these two groups (odd grades vs. even grades) is that the tests were administered at different points in time. The item selection and validation form (long form) was administered in

the winter, while the cross-validation form (short form) was administered four months later in the spring. One of the basic assumptions underlying the comparison of cross-sectional data is that the samples of behavior compared were obtained at approximately the same time. Factors which may influence data obtained at different times include maturation with regard to the attribute being measured, and differences in test taking attitude related to the time of year. Therefore, with regard to the present data, the time of measurement differences may also hamper direct comparisons of the scores for grades taking the test at different times.

These two confounding influences (test form differences and time of measurement differences) must be considered when comparing the data obtained from the two administrations. Therefore, the discussion of these data, which follows, is speculative in nature and must be viewed in that light. The data are presented because they may serve as a starting point for more methodologically rigorous research which may confirm or disconfirm the present findings.

Grade differences on EDVT scores. Figure 1 presents the means and standard deviations obtained on the two forms of the EDVT for grade levels 5 through 12, plus the parent group.

A test of significance is in order to determine whether significant differences in scores on the EDVT occur across grade levels. It is suspected, however, that the variances of the different grade levels are not homogeneous and, therefore, the assumptions of analysis

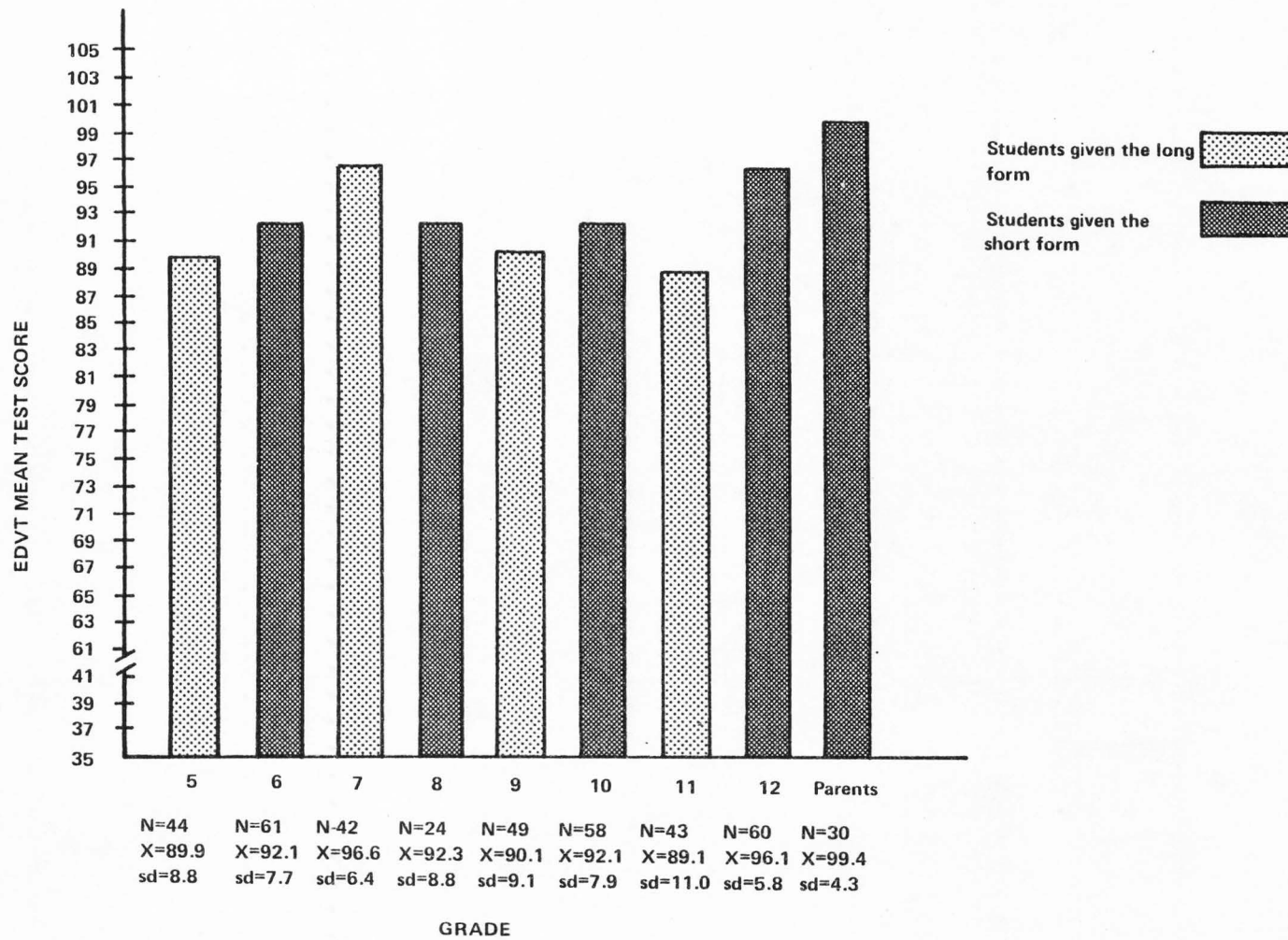


Figure 1. EDVT score means and standard deviations for students in grades 5 through 12, plus a parent group.

of variance may be violated. In order to determine whether the variances across grade level are homogeneous, an Fmax test was computed. An F ratio of 3.6 was obtained, which is significant at the .05 level of significance, indicating that the variances among the grade levels are heterogeneous. This test was conducted using the 11th grade variance (highest) and the 12th grade variance (lowest). When the next highest variance is used in the computation (ninth grade), no significant differences were obtained. Therefore, it appears that the 11th grade is the only grade with a variance significantly different from the other grades.

Given the heterogeneity of variance among the grades, an approximate test of the equality of the means across grades was conducted using a technique suggested by Snedecor (1956). This test of significance takes into consideration the assumption of heterogeneity of variances. This approximate test showed significant differences among the means.

Keeping in mind the limitations mentioned previously regarding the methodology used in collecting the data presented in Figure 1, it must be recognized that the data are somewhat confounded and tentative in nature. Therefore, the following interpretation of these data is speculative and is offered only as a hypothesis to be tested in future research with the EDVT.

In viewing the data presented in Figure 1, it may be noticed that there is an increase in scores from the fifth to the seventh

grade. Scores then drop from the eight grade through the 11th grade, then rise again in the 12th grade where scores approach those obtained by the parent group. One may wonder what has occurred in the eight through 11th grades that might account for this lowering of scores. It could be speculated that this drop in scores reflects the turmoil of adolescence. As Douvan and Adelson (1966) have stated:

Adolescence is a decisive period for the fate of personal morality. . . the youngster must construct an individual moral philosophy, a system of values and moral conduct which, however tacit, is his own, his own in the sense that it is not a simple copy of what he has been told to believe, but rather a guide to conduct and valuation appropriate to his own circumstances (p. 79).

Therefore, continuing the speculation, it is possible that children steadily learn and exemplify community values up through the seventh grade. As they enter adolescence, however, they begin to question and challenge these values in an attempt to define their own personal morality. This speculation regarding the pattern of scores in Figure 1 seems to be congruent with the tasks of the adolescent as defined by Erik Erikson. Erikson (1963) has defined eight identifiable stages of psycho-social development which span from birth to adulthood. Erikson has entitled the stage that begins with puberty "Identity vs. Role Confusion." According to Erikson, it becomes imperative during this stage for the adolescent to construct his own personal and coherent view of life. In the adolescent's attempt to construct his own personal view of life, "all sameness and continuities relied on earlier are more or less questioned

again" (Erikson, 1963, p. 261). Adolescence, then, in Erikson's view, is a period of questioning what was once accepted and of trying new ways in search of a personal identity. As Erikson has said,

The adolescent mind is essentially a mind of the moratorium, a psychosocial stage between childhood and adulthood, and between the morality learned by the child and the ethics to be developed by the adult (pp. 262-263).

Again, this interpretation of the data that is presented in Figure 1 is highly speculative and must be viewed within the previously mentioned limitations of the research design. It is hoped that such speculation might stimulate further research with the EDVT, using sound cross-sectional methodology in an attempt to test this hypothesis.

Sex differences on the EDVT. As mentioned earlier, there are a number of difficulties involved in directly comparing the data obtained from the students who were administered the long form of the test (odd grades) and those students who were administered the shorter form (even grades). To avoid these difficulties in the present discussion regarding sex differences on the EDVT, the data obtained from the administration of the longer form will be considered as pilot data. These data can be compared to the data obtained using the shorter form, in a general way, to determine whether the results are consistent regarding sex differences.

The overall mean for male students taking the long form is 87.9 (SD = 10.1), while the overall mean for females taking the long form

is 94.9 ($SD = 6.9$). The males taking the shorter form obtained a mean score of 90.1 ($SD = 9.1$), while the females obtained a mean score of 95.6 ($SD = 5.1$). Therefore, on both administrations of the test (long and short forms) the female students, as a group scored considerably higher than the male students. If one looks at Tables 13 and 14, it can be seen that these sex differences are consistent across all grade levels for both administrations of the test. That is, female students consistently score higher than males at each grade level.

Two possible explanations are offered with regard to the difference in test scores between males and females. First, it is possible that females are more sensitive to the moral conscriptions of society, and, therefore, tend to behave in ways that are more congruent with those conscriptions. In other words, females may be more susceptible to the external controls of society than are males. Support of this explanation may be drawn from Aronfreed (1968) who has stated,

The two sexes. . . differ in the dominant direction of control which they experience in their interactions with a social environment. This difference can be described to some extent in terms of status, but it appears to embrace somewhat broader features of masculine and feminine sex roles. It seems to be a reasonably sound cross-cultural generalization that greater status and self-direction of action are associated with the masculine role. Men are permitted more control over their own behavior and over their external environment. In contrast, the feminine role calls not so much for self-reliance as it does for sensitivity and responsiveness to externally imposed events (p. 329).

Therefore, it may be that males are less dependent upon social approval than females, and consequently are less likely to conform to externally imposed values than females. These differences in EDVT scores between males and females may reflect a real difference in conformity to the values identified by the school district between the sexes.

A second possible explanation for these sex differences on EDVT scores is that the teachers who identified the exemplary and non-exemplary students may, in general, consider feminine behavior more exemplary than masculine behavior. Teachers may have been more prone to select students possessing more traditionally feminine qualities as exemplary students, and students possessing more traditionally masculine qualities as non-exemplary students. This point is supported by the fact that slightly more females were identified by teachers as exemplary in the item selection and validation study, while slightly more males were chosen as non-exemplary. However, contrary to this point, no significant differences were found with regard to sex in the scores obtained by the criterion groups in the cross-validation study.

A final point regarding sex differences on the EDVT must be mentioned. If one compares the scores obtained for the males and females of the exemplary and non-exemplary criterion groups with the overall scores obtained for the males and females in the normative

groups (Table 16), it may be seen that the males in the normative group scored about the same as the males in the non-exemplary criterion group.

Table 16

Comparison of Score Means and Standard Deviations of the Male and Female Criterion Group Students with the Score Means and Standard Deviations of the Male and Female Normative Group Students

| Group | Male | Female |
|-------------------------------|-------------|------------|
| Exemplary criterion group | 95.1 (6.3)* | 98.0 (5.5) |
| Non-exemplary criterion group | 89.0 (10.2) | 91.9 (8.7) |
| Normative group** | 90.1 (9.1) | 95.6 (5.1) |

*Standard deviation in parentheses

**Normative group data is for students administered the short form (6, 8, 10, and 12).

Since the criterion groups should represent extremes in the exemplification of the values identified by educators of the Salt Lake City School District, one would expect these criterion group subjects to obtain extreme scores on the EDVT. It would also be expected that the scores of the students not included in the criterion groups would fall near the midpoint of these extreme scores. This

appears to be the case for the females, however, less so for the males. The male students who were in the normative group obtained a mean score on the EDVT only one point higher than the mean score obtained by the non-exemplary male group. It appears that the test does not adequately discriminate non-exemplary male students.

Although the test does not seem to differentiate non-exemplary male students well, it does appear to differentiate exemplary male students fairly well. In Table 16 it may be seen that the exemplary male students obtained a mean test score that is much higher than the non-exemplary male students and the male students in the normative group.

Limitations

Possibly the greatest limiting factor concerning the development of the EDVT was the definition of the criterion groups used to validate the test. Since the test was validated using the responses of the groups that were identified as exemplary and non-exemplary, the ultimate validity of the test rests upon the validity of these criterion groups. In other words, the validity of the test rests upon whether the students who composed the criterion groups actually are students who exemplify and do not exemplify the values identified by educators in the Salt Lake City School District.

It will be recalled that the procedure used to identify the two criterion groups (exemplary and non-exemplary) was a nomination

procedure. By this procedure, teachers identified students who, in their judgement, exemplified or did not exemplify the specific values involved. Therefore, the identification of the criterion groups was based upon the judgement of teachers. Although the teachers were instructed to choose those students who most exemplified the 12 values and those who least exemplified these same values, it is difficult to determine how well teachers were able to make these judgements accurately. It is also difficult to determine to what extent the judgements were made on the basis of values exemplification.

Since the basis for such judgements (exemplary vs. non-exemplary) is vague and difficult to define, students may have been identified for the criterion groups based on a number of other characteristics. Some teachers, for example, may have selected students for inclusion in the criterion groups based on the intelligence, likeability, or achievement of the student. Therefore, it is difficult to determine to what extent the criterion groups truly represented students who exemplify or do not exemplify the values identified by district educators. Only further research with the EDVT can address this problem. Research with the EDVT regarding the relationship between scores obtained on the test and measures of intelligence or achievement, for example, would be useful in further assessment of the validity of the test.

A second limitation of the present research is the lack of adequate normative data regarding EDVT test scores for grade and sex.

As pointed out previously, a number of methodological problems exist with regard to collection of the normative data reported in the previous chapter (supplementary test data). Because of these methodological problems, the normative data reported must be viewed as tentative in nature. Of primary concern in further research with the EDVT is the collection of such normative data using sound methodological design.

A third limiting factor concerning the EDVT is that the test is apparently not discriminative for non-exemplary male students. The overall scores obtained for the identified non-exemplary students do not differ remarkably from the overall scores obtained for the normative male students. This fact, coupled with the findings of general sex differences in test scores, suggests that the interpretation of test scores for males and females may differ. This point is discussed more fully in the following section entitled "Uses of the EDVT."

A fourth limitation of the EDVT is an apparent ceiling effect regarding test scores. In general, scores on the EDVT seem to cluster in the upper limits of the range of test scores. Further, there seems to be a negative relationship between the degree of elevation of mean test scores and the degree of variability of scores around the mean (standard deviation). Low mean scores on the EDVT are generally associated with large standard deviations, and high mean scores are associated with smaller standard deviations. This relationship appears to be a result of the ceiling effect. However, this ceiling effect may be somewhat advantageous with this particular kind of test.

Since the test appears to be relatively easy for most students, particularly low scores may be seen as more meaningful. That is, the test appears to err in the direction of false positive rather than false negative evaluation.

A final limitation of the test developed in the present research is that it was constructed using the specific values delineated by the educators of the Salt Lake City School District. Although these values are general "democratic" values, the use of the test may be limited to the Salt Lake City School District. An additional limitation in this regard is the fact that the test was validating using students from the Salt Lake City School District and, therefore, may be limited to this particular population. Therefore, the test would be suitable for use only in other school districts in which the value structure is similar to that of Salt Lake City, and for which adequate normative and validity data were collected.

Although the EDVT itself may be of limited use in other school districts, the general approach in test construction described in this dissertation may be highly useful to other school districts in search of assessment devices in the area of moral education.

Further Research

As suggested throughout the foregoing discussion of the EDVT, a number of areas for further research regarding the EDVT are indicated.

First and foremost, in terms of further research with the EDVT, is the collection of normative data using sound cross-sectional methodology. Given the difficulties of the normative data reported in the present research, it is desirable that solid normative data be obtained. Such data should be collected using a stratified sampling technique to obtain data for each sex in grades 5 through 12. In addition, the data for these samples should be collected at one point in time, with the testing settings standardized as far as possible.

In addition, further research regarding the validity of the EDVT is strongly suggested. As mentioned previously, the relationships between EDVT scores and measures of achievement, intelligence, likeability, and locus of control (for example) may be very helpful in exploring the nature of what the test measures. Also, further work regarding the concurrent validity of the test is suggested. For example, it may prove useful to administer the test to a group of known delinquents (who presumably do not exemplify community values) and a matched group of high school students. According to the logic of the test, the delinquents should score significantly lower on the EDVT than the high school students.

Finally, longitudinal studies using the EDVT may help provide evidence as to the developmental nature of values exemplification. Such evidence may be related to theoretical notions regarding developmental patterns occurring in grades 5 through 12, and may, therefore, provide support for the construct validity of the instrument.

Uses of the EDVT

Any test can be abused. The danger of abuse is especially high when a test is used to make decisions about individuals. A prominent example of the potential danger of testing individuals is provided by the intelligence testing movement. Experience in intelligence testing has shown that in many instances the use of intelligence tests has led to mere labeling of individuals. Such labels have consistently become value laden and may potentially have devastating and long-lasting effects on the lives of those individuals so labeled. It is the opinion of the author that the potential for abuse of the instrument developed in the present research is clearly a danger. This seems especially true given the socially sensitive area the test purports to measure, moral values. Because of this potential for the misuse of the EDVT, the following guidelines for its use are offered.

First, it must be recognized that the development of the EDVT was an exploratory exercise to determine whether the test construction approach used could be useful in developing an objective test of values exemplification. Because of the exploratory nature of this research, the EDVT, at this point in its development, should be regarded as highly experimental. Therefore, the primary use of the test, at the current stage of its development, is in research aimed at further validation of the test. Some suggestions for further research in this regard were offered in the previous section. It must be understood that no single series of investigations should be

considered as providing final evidence regarding the validity and reliability of an instrument. Therefore, further research addressed to these concerns of validity and reliability, and subsequent refinements of the test based upon such research, is viewed as of primary importance.

The EDVT was not designed for, nor is it sensitive enough, to make decisions about individuals. Any use of the test for decisions regarding individuals, in the author's opinion, is a blatant misuse of the test. However, the test was designed for, and may prove useful for, making decisions about the effectiveness of curriculum in moral education (using the direct approach to moral education). The test may be useful in curriculum assessment by using it as a measure in experimental studies designed to test the effectiveness of curriculum interventions on exemplification of values. For example, matched experimental groups of students, one which receives a particular curriculum program in moral education and one which does not, may be tested to determine the effectiveness of the program. Other such experimental studies may provide the school district (using the direct approach) with valuable information about how to improve curriculum programs in moral education.

It must also be noted that the EDVT must be considered a global measure of exemplification of the 12 values identified by the educators of the Salt Lake City School District. Because the studies reported in this dissertation regarding the validity and reliability of the

EDVT were conducted using all the scored items, and because some of the values are represented more heavily in terms of scored items in the total score, it is not possible to assess the exemplification of the values individually.

Administration

The EDVT should be administered according to the directions provided on the face sheet of the final form of the test (Appendix I). It is strongly suggested that the test is administered anonymously. That is, students should not be required to identify themselves on the test. This is suggested as a precaution against the use of the EDVT for individual assessment.

The test is not a speeded test, therefore the students should be allowed enough time to finish the instrument.

Scoring

The test is scored using the weighted scoring system described in and administration of the item selection and validation test form study discussed in the Methodology and Results chapter. Only those 35 items shown in Appendix I are scored. Appendix I also shows the direction in which the 35 items are keyed. If the item is keyed "poor", then a student circling "poor" on that item receives three points for that item. If the student circles "maybe", he receives two points, and if he circles "good" he receives one point. On the other hand, if the item is keyed "good", then a student circling "good" on that item receives three points. If he circles "maybe", he receives two points,

and if he circles "poor" he receives one point. Score each of the 35 items in this way. Add the points for all 35 items together to get the total score.

The highest possible score on the test is 105 points, and the lowest possible score on the test is 35 points. Therefore, the actual range on the test is 70 points.

Interpretation of Scores

Again, it is stressed that the test scores of individuals should not be interpreted. Therefore, the scores that are interpreted will be means and standard deviations of groups of students.

Given the logic of the construction of the EDVT, in general, higher mean test scores indicate exemplification of the district values, while lower mean scores indicate less exemplification of these values. In other words, high mean test scores indicate that the group tested tend to implement in their lives the district values in situations in which these values are involved. Low mean test scores, on the other hand, indicate that the group tested implement these values to a lesser extent.

There is evidence to suggest that scores for males and females should be interpreted separately, since females in general seem to score somewhat higher on the test. The average score for females in the normative sample (supplementary data section) using the short form (even grades) is 95.6 ($SD = 5.1$). The average score for the males in this sample is 90.1 ($SD = 9.1$).

The standard deviation (SD) gives an indication of the variability of the scores about the means in terms of points on the test. It is suggested that these standard deviations may be used to give a rough indication of high and low scores for the male and female groups. Therefore, a male score of 99 (mean + SD) could be considered a high score, while a score of 81 (mean - SD) could be considered a low score. Likewise, for females a score of 100 could be considered a high score, while 90 could be considered a low score.

As suggested earlier, the collection of further normative data is necessary to confirm and/or improve these interpretive suggestions.

Summary and Conclusions

It will be recalled that the major purposes of the present research were two-fold. The first purpose was the development of a test construction strategy by which an objective assessment device, based upon the unique goals of moral education within a specific school district, may be developed. The second purpose was the actual development of a psychometrically sound instrument based upon these goals. In the present summary section, an assessment is made of the extent to which these purposes were successfully achieved.

The first purpose was the development of a test construction strategy. In the introductory chapter, three objectives were stated regarding the first purpose. These three objectives included (1) time efficiency, (2) data efficiency, and (3) ease of data analysis.

Although a successful test construction strategy was developed which culminated in an instrument which appears to measure the unique goals of moral education of the Salt Lake City School District, the specific objectives related to the strategy were met with somewhat less success.

First, it was stated that the test construction strategy should be time efficient enough to allow the complete development of the final test within a period of nine months. The development of the present instrument actually required about 12 months. However, since the primary investigator was unable to devote full time to the development of the test because of other time commitments, it is felt that 12 months is not an accurate estimate of the time needed. It is felt that such an instrument could easily be developed in under nine months by using a team of investigators or one primary investigator who could devote full time to the project.

The second objective related to the test construction strategy is that the strategy should allow for efficient use of the data. In an attempt to achieve this purpose, normative data was collected for grades 5, 7, 9, and 11 during the item analysis, and for grades 6, 8, 10 and 12 during the cross-validation purposes. However, this procedure resulted in a number of confounds regarding the comparison of the data across grade levels. It is suggested that such data be collected after development of the final form of the test.

The third objective related to the test construction strategy was that the statistical treatment of data should be within the resources and capabilities of most school districts. By and large, the statistical techniques utilized in treating the data were not advanced statistical techniques. However, because of the large quantity of data that must be analyzed, access to a computer is, without a doubt, a necessity. Therefore, statistical and computer programming consultants would probably be required by most school district personnel in order to carry out the test construction strategy.

Although the general strategy of test construction reported in this dissertation is somewhat more difficult and time consuming than was anticipated, it is hoped that the present strategy will provide valuable guidelines to others interested in developing a similar type of instrument.

In the introductory chapter, several objectives were stated regarding the specific characteristics of the test itself. These objectives were, in general, successfully met.

The instrument developed in this dissertation is an objective group test applicable to grades 5 through 12. The test requires less than one class period (50 minutes) to complete. A content validity study provided reasonable evidence that the dilemmas that compose the test are logically related to the 12 value goals proposed by district personnel. Studies of the reliability of the test revealed reliability coefficients from .82 (stability) to .92 (internal consistency). The concurrent validity of the test was established by selecting

items that discriminated between groups of students who were identified by their teachers as either exemplary of district values or non-exemplary of district values. These items were then successfully cross-validated on an independent sample of similar criterion groups. In addition, two studies related to the effects of socially desirable response sets on test scores were conducted. Finally, normative data regarding sex, grade and a parent group were presented. A number of methodological flaws and interpretive cautions related to the normative data were offered.

In conclusion, it must be remembered that no single series of investigations can provide final evidence of the validity and reliability of an instrument. Therefore, the test developed in the present dissertation must be considered experimental in nature. It is hoped that further research concerning the validity of the test will be conducted and refinements to the test made based upon such research.

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APPENDICES

Appendix A

Twelve Ethical Democratic Values of the
Salt Lake City School District

1. Each Individual has Dignity and Worth.
2. A Free Society Requires Respect for Persons, Property and Principles.
3. Each Individual has a Right to Learn and the Freedom to Achieve.
4. Each Individual, Regardless of Race, Creek, Color, Sex, Ethnic Background or Economic Status, has Equal Opportunity.
5. Each Individual has the Right to Personal Liberties.
6. Each Individual is Reponsible for his/her own Actions.
7. Each Individual has a Responsibility to the Group as Well as to the Total Society.
8. Democratic Governments Govern by Majority Vote.
9. Democratic Societies are Based on Law.
10. Problems are Solved Through Reason and Orderly Processes.
11. An Individual Should be Tolerant of Other Religious Beliefs and Should Have Freedom to Exercise his/her Own.
12. Each Individual has the Right to Work, to Pursue an Occupation, and to Gain Satisfaction from Personal Efforts.

Appendix B

Preliminary Form of the EDVT

Please check one: Administrator
or Teacher
 Parent
 Student

ETHICS EDUCATION TEST

Instruction Sheet

The purpose of these questions is to assess your thinking about citizenship.

Below is a practice question. Please read this incident involving John and select the answer you consider best.

EACH INDIVIDUAL HAS DIGNITY AND WORTH.

John is a new student. He is physically handicapped. The other students ignore him and call him names behind his back. Allan would like to be John's friend, but is afraid his classmates will tease him. What is he to do?

- A. See John after school when he's alone.
- B. Ask several classmates to go talk to John and welcome him to school.
- C. Take the initiative and talk to John.
- D. Ignore John until John earns the right to be welcomed.

You may notice that more than one answer seems suitable. Some answers are more suitable than others. No one answer is the only correct answer.

If you are having a problem answering the question, then guess, for any answer will give you some credit. Mark only one answer for

each question. For example, in John's decision, A is the best answer; however, B and C are also valuable. Your answers will be confidential. It is important to answer each question. Use the entire class period, if you need it, to complete the 24 questions. Please write your full name on the answer sheet.

Now turn the page and begin working.

1. EACH INDIVIDUAL HAS DIGNITY AND WORTH

You and a group of your friends have dinner at the Skyroom one Saturday night. The first person you see in the dining room is a classmate who is bussing tables. Harold, the clown of your crowd, spots him immediately and begins to mimic him at his job. Sally, one of the girls in your group, comments that cleaning the tables is really an appropriate job for such a low individual. You think that Bob, the busboy, is a nice person who is industrious, ambitious, and pleasant to be around. Should you:

- A. Ignore the actions and remarks of your friends.
- B. Agree with Sally that Bob is less worthy than your crowd.
- C. Start an argument with Harold about his actions.
- D. Tell your friends what you think of Bob.
- E. Pretend you don't see or hear what the others are doing.

In August of 1975 there was a garbage strike in the city of New York. The garbage men were making at the time \$14,800 a year and wanted a 10% raise. Mr. McIntire, upon reading the news item, became very irate. He figured that this was out of line, because he, a University professor, after many years of study and experience was making that amount himself, without any hope of getting a 10% raise. Select the statement you feel is the most suitable.

- A. If garbage men are entitled to a 10% raise, so should Mr. McIntire.
- B. Garbage men do hard physical work and should get paid more than those who work with their minds.
- C. Garbage men are not educated and should make less money than professors.
- D. From a health point of view it is more important for a town to have garbage men than educators.
- E. A town can do without garbage men or educators.

2. A FREE COUNTRY REQUIRES RESPECT FOR PERSONS, PROPERTY AND PRINCIPLES.

Bill loves to play baseball. One day Bill and Tom are practicing ball in the street in front of Bill's house. Bill is up to bat and Tom pitches a perfect ball to Bill. He bats the ball squarely. Moments later they hear the shattering of glass as the ball hits the windshield of a neighbor's new car. Hastily, the boys pick up the bat and run into Bill's house.

What should the boys have done?

- A. Both should have informed the neighbor about the broken window.
- B. Bill should have told the neighbor he broke the car window.
- C. Neither should tell the neighbor.
- D. Tom should tell the neighbor Bill broke the window.

As you walk along the hall at school you notice Susan and Janice, girls you know from class, writing on a hall locker. The school has had a real problem with vandalism of this type and the principal has asked that any student report the names of people writing on lockers to the office. You would:

- A. Go to class and forget what you saw.
- B. Go over and tell the girls to stop writing on the locker.
- C. Report it to the principal immediately.
- D. Tell a teacher that you saw some girls writing on a locker and have him check it out.
- E. Talk to the girls and when you find the locker belongs to someone you don't like, help them write on it.

3. EACH INDIVIDUAL HAS A RIGHT TO LEARN AND THE FREEDOM TO ACHIEVE.

Calvin, a pesky neighborhood kid, is having trouble at school. The other kids, including your own little brother, tease Calvin unmercifully because he can't play football, basketball, and other games as well as they. You've seen him run crying from the play field and Calvin's sister has told you that Calvin is so miserable that he refuses to go to school. When Calvin does go to school, the kids even tease him in classes so that he no longer tries to participate. What course of action should you take so that Calvin can go to school and learn all that he is capable of learning?

- A. Talk to Calvin's parents.
- B. Help Calvin learn to play one game well.
- C. Tell your little brother and his pals to "knock it off."
- D. Advise Calvin's sister to go to school with him.

A small group of students in math class interrupts the teacher every day. When she moves to quiet one group, the other side of the room starts trouble. You are not doing well in math and need all the help you can get. One day, the teacher explains an important formula but you miss it because the group makes so much noise. You should:

- A. Go to the guidance counselor and request a transfer to a different class.
- B. Say nothing and try to pick up the explanation on your own from the book.
- C. Go to the principal and complain that the teacher can't teach.
- D. Ask your parents to get you a tutor because you can't get math.
- E. Get a group of students in class together to go to the teacher and ask that something be done about students that disrupt the class.

4. EACH INDIVIDUAL, REGARDLESS OF RACE, CREED, COLOR, SEX, ETHNIC BACKGROUND OR ECONOMIC STATUS HAS EQUAL OPPORTUNITY.

Two young women you know applied for a position on a local newspaper. Both are well-qualified, personable people with approximately equal training and experience. The managing editor has asked you for advice on which girl to hire, since one is a black girl and they have never had a black on the staff. Will you:

- A. Advise him to hire the white girl to avoid having a black on the staff.
- B. Suggest that he hire the black girl to avoid criticism from the Equal Rights Organization.
- C. Propose that he have each girl do a feature article and make his judgement on the basis of their work.
- D. Tell him to solve his own problem.

You are part of the student group that screens applicants for cheerleader. One girl is as good as the others, but you are approached by a committee member who says, "Don't vote for Lori because I understand she believes in going to church on Saturday instead of Sunday." You would:

- A. Agree that a person with weird ideas like that shouldn't be a cheerleader representing the students of the school.
- B. Listen politely and say nothing.
- C. Remind the person, and later the group, that a person's ideas should not be held against them.
- D. Tell the person that they should never say things like that.

5. EACH INDIVIDUAL HAS THE RIGHT TO PERSONAL LIBERTIES.

Andrew is the toughest boy in school. He often strikes and injures his classmates. Andrew also collects "protection money" from his classmates. If one doesn't pay Andrew a nickel a day, Andrew beats him up. What are the members of the class to do?

- A. Tell the principal.
- B. Gang up against Andrew and beat him up.
- C. All the classmates should quit paying the nickel.
- D. Pay the nickel, since it isn't very much money.

David is unhappy about a decision made by the school principal. He believes that the principal did not have all the information needed to make a good decision. What should David do?

- A. Tell his parents that the principal does not like him.
- B. Forget it, because the principal will be upset.
- C. Talk with the superintendent of schools.
- D. Organize a boycott of the school.
- E. Write a letter to the principal requesting that the decision be reconsidered.

6. EACH INDIVIDUAL IS RESPONSIBLE FOR HIS/HER OWN ACTIONS.

When your best friend, Tom, was taking you home after a double date the other night, he turned a corner sharply and didn't notice a car parked too near the corner. He sideswiped the car, but did not stop to see what damage had been done to either car. When he let you out at your house he examined his car and learned that the front bumper had only a slight dent. However, there was quite an accumulation of blue paint from the other car on the front edge of his bumper. Should you:

- A. Persuade him to go back and leave a note for the other car owner.
- B. Laugh it off.
- C. Tell him it serves the guy right for parking where he did.
- D. Call the police as soon as your friend leaves.

When you were shopping for your mother, the grocery clerk gave you change for a \$10 bill instead of a \$5 bill. Would you:

- A. Give the extra \$5 to your mother.
- B. Keep it because you've been shortchanged before.
- C. Return it to the grocery clerk.
- C. Spend it for groceries the next time you are shopping.

7. EACH INDIVIDUAL HAS A RESPONSIBILITY TO THE GROUP AS WELL AS TO THE TOTAL SOCIETY.

You recently attended an important school basketball game with a group of friends. The gymnasium was crowded and a student from another school accidentally bumped one of your group hard enough to push him against the wall. Your friend was very angry and said that he would see the offender in the parking lot after the game. If your friend gets into a fight, he will be expelled from school, and the school authorities have said that they will cancel future games if any fights occur. Should you:

- A. Call the police.
- B. Leave your friend at the game so you will not become involved.
- C. Report your friend's plan to the nearest school official.
- D. Explain to your friend the seriousness of what he is planning and persuade him not to go through with it.

You are a scoutmaster and returning home with the troop after a 20-day camp. A storm is gathering. Everyone is tired and in a hurry to get home. Finally, Jim, the largest and most forceful boy in the troop, decided he did not have to hurry home and that he was just too tired to go on. He would not move and so everybody had to wait because the troop could not leave him alone in the mountains. The younger children in the troop just could not spend another night in the woods, and besides, their parents would be there to meet them that evening. What should you do?

Select two:

- A. Tell him something bad may happen to him, if left behind.
- B. Twist his arm to the point that he will walk.
- C. Convince him that others are also tired, but that if he will walk, the rest of the boys will carry his pack.
- D. Explain to him that as a scout he is capable of taking care of himself and can follow the trail home.

8. DEMOCRATIC GOVERNMENTS GOVERN BY MAJORITY VOTE.

Jim and Clem were running for class president. They are also very close friends. Both boys really wish to be president of the class. After the first election, the votes are tied. A new election will be held tomorrow. Jim tells Clem that if Clem doesn't vote for him, he won't be his friend any more. What should Clem do?

- A. Vote for Jim, since he is his friend.
- B. Convince one of the kids who voted for Jim to vote for you to break the tie.
- C. Don't come to school tomorrow so Jim will win.
- D. Tell the teacher about Jim's threat.

You belong to the Wasatch Mountain Club, and your organization has recently gone on record as supporters of legislation to preserve wilderness areas. A bill has been introduced in the U.S. Senate to use part of the Uintah Mountain wilderness area for grazing and use an electrical plant. You should:

- A. Do nothing about it.
- B. Write letters to your senators explaining the stand of the Wasatch Mountain Club and urging them not to support the bill.
- C. Call your attorney.
- D. Write to the Governor.

9. DEMOCRATIC SOCIETIES ARE BASED ON LAW.

Yesterday you witnessed an auto-pedestrian accident while driving your own car. You do not know the driver of the automobile or the pedestrian, but you did get the license number on the automobile. Although you do not yet know whether the pedestrian sustained any injuries, what should you do with your knowledge of the incident?

- A. Tell your priest or minister.
- B. Wait until you know the seriousness of the pedestrian's injuries before doing anything.
- C. Get the name of the driver from the state office and call the driver and ask him to report the accident.
- D. Give the information to the police department.
- E. Do nothing.

Under what conditions would you try to pass a toll machine without paying the fee?

- A. Only if I was certain I would not get caught.
- B. Never under any circumstances.
- C. If I felt I had a good chance of not getting caught.
- D. Only if I did not have exact change.

10. PROBLEMS ARE SOLVED THROUGH REASON AND ORDERLY PROCESSES.

Your neighbor has decided that he wants more privacy in his back yard, which adjoins yours. He has, at a time when you were not home, erected a chain link fence and planted some grape vines along it. In checking your plot map you discover that he has built the fence $1\frac{1}{2}$ feet over your property line. What should you do?

- A. Have a "knock-down drag-out" fight.
- B. Call your attorney.
- C. Build another fence $1\frac{1}{2}$ feet inside his property line.
- D. Since the fence is already in place, try to persuade him to buy that much of your property.

Lydia is always borrowing money from her friend, Jennifer. Jennifer likes Lydia very much, but feels she is being used; that unless she lends the money to Lydia, their friendship will end. Jennifer, therefore, decides to talk to Lydia about paying back her loans and about not borrowing any more money. Is Jennifer doing the right thing?

- A. No. A friendship is more dear than money.
- B. Yes. Jennifer is solving a problem.
- C. Perhaps Jennifer should wait awhile and see if Lydia will pay.
- D. Jennifer should start borrowing money from Lydia until they are even.
- E. Jennifer should take the money from Lydia's purse.

11. AN INDIVIDUAL SHOULD BE TOLERANT OF OTHER RELIGIOUS BELIEFS AND SHOULD HAVE FREEDOM TO EXERCISE HIS/HER OWN.

Mr. Steiner is of the Jewish faith. The Sabbath is a day of rest and prayer. The Sabbath is to the Jewish people what Sundays are to Christians. Mr. Steiner works for a company which is open seven days a week. He has asked his supervisor not to assign him to do work on Saturdays because it deprives him of his right to worship as his religion calls for. If you were Mr. Steiner's supervisor, would you:

- A. Tell Mr. Steiner that if you were to do that for him, you would have to do it for all the Christians who did not want to work on Sundays.
- B. Tell Mr. Steiner that if he does not like the way things are he ought to get another job with another company.
- C. Tell Mr. Steiner that you will try to make arrangements with a Christian employee so that employee works on Saturdays and Mr. Steiner works on Sundays.
- D. Tell Mr. Steiner that in a Christian society he has no choice.
- E. Convince Mr. Steiner to forget his idiosyncracies and work on Saturdays.

Recently your parents have learned that your best friend does not belong to the same church as you do. Although they have not told you not to associate with your friend, they have indicated in earlier discussions that they would like it best if your friends were members of your church. What should you do?

- A. Tell your parents that you have a right to choose your own friends.
- B. Try to convert your friend to your church.
- C. Tell your parents you are no longer seeing your friend, when nothing has actually changed between you.
- D. Convince your parents that your friend is a fine person and that his church affiliation cannot change that.
- E. Do nothing.

12. EACH INDIVIDUAL HAS THE RIGHT TO WORK, TO PURSUE AN OCCUPATION, AND TO GAIN SATISFACTION FROM PERSONAL EFFORTS.

You live in an upper middle income community where most of the residents are professional people--doctors, lawyers, teachers, etc. However, your neighbor and friend operates a service station for a large chain company. He is an honest and industrious man. Soon there will be a bond election to improve city and county streets. You have been asked to serve on the committee to contact voters in your area to come to a special meeting prior to the election. The committee chairman, however, has said that you must not invite your service station attendant friend. Should you:

- A. Follow the instructions of the committee chairman without question.
- B. Refuse to have anything to do with the bond election without giving any reason for your action.
- C. Tell your neighbor about the instruction you received and explain that there is nothing you can do about it.
- D. Ignore the whole thing and hope for rain on the day of the meeting.
- E. Explain to the chairman that unless all qualified voters in your area are involved in the special meeting, you believe the meeting should not be held.

One of the students in your art class has a problem with hand-eye coordination. She has worked on a color wheel and has finally completed it and is very proud of it. She shows it to you and a group of your friends. You notice that the lines are crooked and the colors run into each other. You would:

- A. Compliment her on her good work.
- B. Walk away when she asks what you think of her work.
- C. Tell her that it is crummy, the lines are crooked, and the paint runs together.
- D. Change the subject and ignore her with your friends.
- E. Tell her she needs to do it over.

Appendix C
 Response Frequencies by Grade to the Preliminary
 Form of the EDVT

Table 17
 Preliminary Test Response Frequencies
 Grade 6

| Dilemma No. | Item | | | | | Omitted |
|-------------|---------|--------|--------|--------|--------|---------|
| | A | B | C | D | E | |
| 1 | 13(46)* | 2(7) | - | 12(43) | - | 1(4) |
| 2 | 20(71) | 4(14) | - | 4(14) | - | - |
| 3 | 20(71) | 8(29) | - | - | - | - |
| 4 | - | 6(21) | 16(58) | 6(21) | - | - |
| 5 | 6(21) | 13(47) | 9(32) | - | - | - |
| 6 | 1(4) | 3(10) | 1(4) | 2(8) | 21(75) | - |
| 7 | - | 2(7) | 25(89) | 1(4) | - | - |
| 8 | 2(8) | 3(10) | 13(47) | 10(35) | - | - |
| 9 | 19(68) | 3(10) | 4(14) | 2(8) | - | - |
| 10 | - | 3(10) | 1(4) | 24(86) | - | - |
| 11 | 21(75) | - | - | 7(25) | - | - |
| 12 | 1(4) | - | 26(92) | 1(4) | - | - |
| 13 | - | 2(8) | 6(21) | 20(71) | - | - |
| 14 | 2(8) | 1(4) | 19(68) | 6(21) | - | - |
| 15 | 1(4) | 3(10) | - | 23(82) | - | 1(4) |
| 16 | - | 18(65) | - | 10(35) | - | - |
| 17 | - | 3(10) | 2(80) | 22(78) | - | 1(4) |
| 18 | 2(8) | 20(71) | 1(4) | 3(10) | - | 2(8) |
| 19 | - | 12(43) | 2(8) | 14(49) | - | - |
| 20 | 3(10) | 14(49) | 10(35) | 1(4) | - | - |
| 21 | 4(14) | 1(4) | 19(68) | 2(8) | 1(4) | 1(4) |
| 22 | 4(14) | 8(29) | - | 14(49) | 1(4) | 1(4) |
| 23 | 4(14) | 1(4) | 4(14) | - | 19(68) | - |
| 24 | 23(82) | - | 1(4) | 4(14) | - | - |

*Response percentage in parentheses

Table 18
 Preliminary Test Response Frequencies
 Grade 8

| Dilemma No. | Item | | | | | |
|-------------|--------|--------|--------|--------|--------|---------|
| | A | B | C | D | E | Omitted |
| 1 | 3(10)* | - | 2(6) | 25(80) | 1(3) | - |
| 2 | 20(65) | - | 7(23) | 4(13) | - | - |
| 3 | 20(65) | 11(35) | - | - | - | - |
| 4 | 5(16) | 16(52) | 5(16) | 5(16) | - | - |
| 5 | - | 14(45) | 17(55) | - | - | - |
| 6 | 3(10) | - | - | - | 28(90) | - |
| 7 | - | 2(6) | 29(98) | - | - | - |
| 8 | - | 6(19) | 22(71) | 3(10) | - | - |
| 9 | 21(68) | 1(3) | 9(29) | - | - | - |
| 10 | - | 1(3) | 3(10) | - | 27(87) | - |
| 11 | 25(81) | - | 2(6) | 4(13) | - | - |
| 12 | 2(6) | 2(6) | 27(87) | - | - | - |
| 13 | - | - | 2(6) | 29(94) | - | - |
| 14 | - | 3(10) | 18(58) | 10(32) | - | - |
| 15 | 5(16) | 6(19) | - | 18(58) | - | 2(6) |
| 16 | 1(3) | 24(78) | 2(6) | 4(13) | - | - |
| 17 | - | 6(19) | 2(6) | 23(75) | - | - |
| 18 | 2(6) | 25(82) | 2(6) | 2(6) | - | - |
| 19 | - | 7(23) | 2(6) | 22(71) | - | - |
| 20 | - | 18(58) | 10(32) | 3(10) | - | - |
| 21 | 5(16) | 1(3) | 25(82) | - | - | - |
| 22 | 4(13) | 5(16) | - | 22(71) | - | - |
| 23 | 1(3) | 1(3) | 4(13) | 1(3) | 24(78) | - |
| 24 | 27(87) | - | 1(3) | - | 3(10) | - |

*Response percentage in parentheses

Table 19
 Preliminary Test Response Frequencies
 Grade 10

| Dilemma No. | Item | | | | | Omitted |
|-------------|--------|--------|--------|--------|--------|---------|
| | A | B | C | D | E | |
| 1 | 6(13)* | 1(2) | 1(2) | 37(79) | 2(4) | - |
| 2 | 13(28) | 5(11) | 8(17) | 19(40) | - | 2(4) |
| 3 | 42(89) | 5(11) | - | - | - | - |
| 4 | 6(13) | 21(45) | 2(4) | 11(23) | 3(6) | - |
| 5 | 4(8) | 21(45) | 22(47) | - | - | - |
| 6 | 4(8) | 2(4) | 1(2) | - | 40(86) | - |
| 7 | - | 1(2) | 43(92) | 2(4) | - | 1(2) |
| 8 | 1(2) | 7(15) | 38(81) | - | - | 1(2) |
| 9 | 24(51) | 7(15) | 15(32) | - | - | 1(2) |
| 10 | 1(2) | 3(6) | 6(13) | - | 37(79) | - |
| 11 | 38(81) | 2(4) | 4(8) | 2(4) | 1(2) | - |
| 12 | 1(2) | 9(19) | 33(70) | 2(4) | - | - |
| 13 | - | - | 6(13) | 41(87) | - | - |
| 14 | 10(21) | 5(11) | 27(57) | 5(11) | - | - |
| 15 | 3(6) | 13(28) | 1(2) | 28(60) | - | 2(4) |
| 16 | 2(4) | 36(77) | - | 7(15) | - | 2(4) |
| 17 | - | 2(4) | 3(6) | 42(90) | - | - |
| 18 | 5(11) | 36(77) | 1(2) | 5(11) | - | - |
| 19 | 3(6) | 11(23) | 3(6) | 29(62) | - | 1(2) |
| 20 | 5(11) | 25(53) | 12(25) | 3(6) | - | 2(4) |
| 21 | 6(13) | 4(8) | 35(74) | - | 2(4) | - |
| 22 | 10(21) | 4(8) | 1(2) | 27(57) | 4(8) | 1(2) |
| 23 | 5(11) | 2(4) | 1(2) | 1(2) | 38(81) | - |
| 24 | 34(72) | 1(2) | - | 2(4) | 8(17) | 2(4) |

*Response percentage in parentheses

Appendix D

Item Selection and Validation Test Form

Name: _____
 First Middle Last

Sex: Male _____ Female _____ Age: _____

ETHICS EDUCATION TEST

INSTRUCTION SHEET

The purpose of these questions is to assess your thinking about citizenship.

Below is a practice question. Please read this incident about John and select the answer you consider best.

EACH INDIVIDUAL HAS DIGNITY AND WORTH

John is a new student. He is physically handicapped. The other students ignore him and call him names behind his back. Allan would like to be John's friend, but is afraid his classmates will tease him.

For each number you should circle either good, maybe, or poor, that best tells how you feel.

- GOOD MAYBE POOR 1. See John after school when he is alone.
- GOOD MAYBE POOR 2. Ask several classmates to go talk to John and welcome him to school.
- GOOD MAYBE POOR 3. Take the initiative and talk to John.
- GOOD MAYBE POOR 4. Ignore John until John earns the right to be welcomed.

If you have a problem answering the question, then guess. Any answer will give you some credit. It is important to answer each statement. Use the entire class period, if you need to. Please write your full name on the answer sheet.

Now turn the page and begin working.

Jim and Clem were running for class president. They are also very close friends. Both boys really wish to be president of the class. After the first election, the votes are tied. A new election will be held tomorrow. Jim tells Clem that if Clem doesn't vote for him, he won't be his friend any more. What should Clem do? How do you feel about the following ideas?

- | | | | | |
|------|-------|------|----|--|
| GOOD | MAYBE | POOR | 1. | Vote for Jim, since he is a friend. |
| GOOD | MAYBE | POOR | 2. | Convince one of the kids who voted for Jim to vote for you to break the tie. |
| GOOD | MAYBE | POOR | 3. | Don't come to school tomorrow so Jim will win. |
| GOOD | MAYBE | POOR | 4. | Tell the teacher about Jim's threat. |
| GOOD | MAYBE | POOR | 5. | Tell Jim that each person should vote form whom they want. |

1

Two young women you know applied for a position on local newspaper. Both are well qualified with equal training and experience. The managing editor has asked you for advice on which girl to hire since one is a black girl, and they have never had a black on the staff. How do you feel about the following ideas?

- | | | | | |
|------|-------|------|-----|---|
| GOOD | MAYBE | POOR | 6. | Advise him to hire the white girl to avoid having a black on the staff. |
| GOOD | MAYBE | POOR | 7. | Suggest that he hire the black girl to avoid criticism from other minority people. |
| GOOD | MAYBE | POOR | 8. | Propose that he have each girl do a feature article and make his judgement on the basis of their work. |
| GOOD | MAYBE | POOR | 9. | Hire the girl who has a skin color like most of the other people who work for the newspaper so that they will get along better. |
| GOOD | MAYBE | POOR | 10. | Tell one of the girls that she would be happier if she worked at another newspaper. |

2

You live in a rich neighborhood where most of the people are doctors, lawyers, teachers, etc. However, your neighbor and friend only mows lawns for a living. He is an honest and industrious man. Soon there will be a bond election to improve city and county streets. You have been asked to serve on the committee to contact voters in your area to come to a special meeting prior to the election. The committee chairman, however, has said that you must not invite your friend. What do you think you should do? How do you feel about the following ideas?

- | | | | | |
|------|-------|------|-----|---|
| GOOD | MAYBE | POOR | 11. | Follow the instructions of the chairman without question. |
| GOOD | MAYBE | POOR | 12. | Refuse to have anything to do with the bond election without giving any reason for your action. |
| GOOD | MAYBE | POOR | 13. | Tell your friend about the instruction you received and explain that there is nothing you can do about it. |
| GOOD | MAYBE | POOR | 14. | Ignore the whole thing and hope for rain on the day of the meeting. |
| GOOD | MAYBE | POOR | 15. | Explain to the chairman that unless all qualified voters in your area are involved in the special meeting you believe the meeting should not be held. |

3

Andrew is the toughest boy in school. He often strikes and injures his classmates. Andrew also collects "protection money" from his classmates. If one doesn't pay Andrew a nickel a day, Andrew beats him up. What are the members of the class to do? How do you feel about the following ideas?

- | | | | | |
|------|-------|------|-----|---|
| GOOD | MAYBE | POOR | 16. | Tell the principal. |
| GOOD | MAYBE | POOR | 17. | Gang up against Andrew and beat him up. |
| GOOD | MAYBE | POOR | 18. | All the classmates should quit paying the nickel. |
| GOOD | MAYBE | POOR | 19. | Pay the nickel, since it isn't very much money. |
| GOOD | MAYBE | POOR | 20. | Have all the boys, all at once, tell Andrew that he must quit hurting others. |

4

You recently attended an important school basketball game with a group of friends. The gymnasium was crowded and a student from another school accidentally bumped Joe of your group hard enough to push him against the wall. Joe was very angry and said that he would see the other kid in the parking lot after the game. If Joe gets into a fight, he will be expelled from school, and the school authorities have said that they will cancel future games if any fights occur. What do you think you should do? How do you feel about the following ideas?

- GOOD MAYBE POOR 21. Call the police.
- GOOD MAYBE POOR 22. Leave Joe at the game so you will not become involved.
- GOOD MAYBE POOR 23. Report Joe's plan to the nearest teacher.
- GOOD MAYBE POOR 24. Explain to Joe the seriousness of what he is planning, and persuade him not to go through with it.
- GOOD MAYBE POOR 25. Find other friends from your school and then all of you do something more fun with Joe after the game.

5

Mr. Steiner is a religious man who believes Saturday is a holy day. Mr. Steiner works for a company which is open seven days a week. He has asked his supervisor not to assign him to do work on Saturdays because it deprives him of his right to worship as his religion calls for. If you were Mr. Steiner's supervisor, would you: How do you feel about the following ideas?

- GOOD MAYBE POOR 26. Tell Mr. Steiner that if you were to do that for him you would have to do it for all members of his religion and that would be too much.
- GOOD MAYBE POOR 27. Tell Mr. Steiner that if he doesn't like the way things are, he ought to get a job with another company.
- GOOD MAYBE POOR 28. Tell Mr. Steiner that you will try to make arrangements with a Christian employee so that employee works on Saturdays and Mr. Steiner works on Sundays.

- | | | | | |
|------|-------|------|-----|--|
| GOOD | MAYBE | POOR | 29. | Tell Mr. Steiner that in a Christian society he has no choice. |
| GOOD | MAYBE | POOR | 30. | Convince Mr. Steiner to forget his idiosyncracies and work on Saturdays. |

Bill loves to play baseball. One day Bill and Tom are practicing ball in the street in front of Bill's house. Bill is up to bat, and Tom pitches a perfect ball to Bill. He bats the ball squarely. Moments later they hear the shattering of glass as the ball hits the windshield of a neighbor's new car. Hastily the boys pick up the bat and run into Bill's house. What do you think of the following ideas?

- GOOD MAYBE POOR 31. Both should have informed the neighbor about the broken window.
- GOOD MAYBE POOR 32. Bill should have told the neighbor he broke the car window.
- GOOD MAYBE POOR 33. Neither should tell the neighbor and let an insurance company pay for the window.
- GOOD MAYBE POOR 34. Tom should tell the neighbor Bill broke the window.
- GOOD MAYBE POOR 35. Send the neighbor money to pay for the window.

7.

When your best friend Tom was driving you home, he turned a corner sharply and didn't notice a car parked too near the corner. He hit the car, but did not stop to see what damage had been done to either car. When he let you out at your house, he examined his car and learned that the front bumper had only a slight dent. However, there was the other car's blue paint on the front edge of the bumper. What do you think you should do? How do you feel about the following ideas?

- GOOD MAYBE POOR 36. Persuade him to go back and leave a note for the other car owner.
- GOOD MAYBE POOR 37. Tell him that in a case like this where nobody would notice, that most people would not report the accident.
- GOOD MAYBE POOR 38. Tell him it serves the guy right for parking where he did.
- GOOD MAYBE POOR 39. Call the police as soon as your friend leaves.
- GOOD MAYBE POOR 40. Tell your friend that it wasn't his fault because the other car was parked too near the corner. It would not be right for him to get a ticket for something he didn't deserve, so he need not report the accident.

8

Your neighbor has decided that he wants more privacy in his back yard which adjoins yours. When you were not home, he put up a fence. In checking your plot map you discover that he has built the fence $1\frac{1}{2}$ feet over your property line. What should you do? How do you feel about the following ideas?

- GOOD MAYBE POOR 41. Have a "knock-down drag-out" fight.
- GOOD MAYBE POOR 42. Call the police.
- GOOD MAYBE POOR 43. Build another fence $1\frac{1}{2}$ feet inside his property line.
- GOOD MAYBE POOR 44. Since the fence is already in place, try to persuade him to buy that much of your property.
- GOOD MAYBE POOR 45. Ask him if he has any ideas about treating you fairly.

9

Calvin, a pesky neighborhood kid, is having trouble at school. The other kids, including your own little brother, tease Calvin cruelly because he can't play football, basketball, and other games as well as they. You have seen him go crying from the field. Calvin's sister has told you that Calvin is so miserable that he even refuses to go to school. What do you think you could do to help Calvin? How do you feel about the following ideas?

- GOOD MAYBE POOR 46. Talk to Calvin's parents.
- GOOD MAYBE POOR 47. Help Calvin learn to play one game well.
- GOOD MAYBE POOR 48. Tell your little brother and his pals to "knock it off."
- GOOD MAYBE POOR 49. Advise Calvin's sister to go to school with him.
- GOOD MAYBE POOR 50. Be a good friend to Calvin and let him know you think he is important.

10

You and your friends go out to dinner. The first person you see in the dining room is Bob, a classmate, who is cleaning tables. Harold, the clown of your crowd, spots him immediately and begins to make fun of him at his job. Sally, one of the girls in your group, comments that cleaning tables is really a low job for an unimportant person. You think that Bob is a nice person who is hard working, ambitious, and pleasant to be around. Tell what you think about the following ideas by circling either good, maybe, or poor.

- GOOD MAYBE POOR 51. Ignore the actions and remarks of your friends.
- GOOD MAYBE POOR 52. Agree with Sally that Bob is less worthy than your crowd.
- GOOD MAYBE POOR 53. Criticize Harold about his actions.
- GOOD MAYBE POOR 54. Tell your friends what you think of Bob.
- GOOD MAYBE POOR 55. Pretend you don't see or hear what the others are doing.

11

Yesterday you saw an auto hit a person. You do not know the driver of the automobile or the person who was hit, but you did get the license number on the automobile. What should you do with knowledge of the incident? How do you feel about the following ideas?

- GOOD MAYBE POOR 56. Tell your teacher.
- GOOD MAYBE POOR 57. Wait until you know the seriousness of the injuries before doing anything.
- GOOD MAYBE POOR 58. Get the name of the driver from the license and call the driver and ask him to report the accident himself.
- GOOD MAYBE POOR 59. Give the information to the police department.
- GOOD MAYBE POOR 60. Do nothing.

12

When you were shopping for your mother, the grocery clerk gave you change for a \$10 bill instead of a \$5. What would you do? How do you feel about the following ideas?

- GOOD MAYBE POOR 61. Give the extra \$5 to your mother.
- GOOD MAYBE POOR 62. Keep it, because you've been shortchanged before.
- GOOD MAYBE POOR 63. Return it to the grocery clerk.
- GOOD MAYBE POOR 64. Spend it for groceries at the same store the next time you are shopping.
- GOOD MAYBE POOR 65. Keep the money, because everyone has a right to be lucky once in a while.

13

You are part of the student group that screens applicants for cheerleader. One girl is as good as the others, but you are approached by a committee member who says, "Don't vote for Lori, because I understand she believes in going to church on Saturday instead of Sunday." What would you do? How do you feel about the following ideas?

- GOOD MAYBE POOR 66. Agree that a person with wrong ideas like that should not be representing the students of the school.
- GOOD MAYBE POOR 67. Listen politely and say nothing.
- GOOD MAYBE POOR 68. Remind the person and later the group that a person's ideas should not be held against them.
- GOOD MAYBE POOR 69. Tell the person that they should never say things like that.
- GOOD MAYBE POOR 70. In private, tell Lori that she should keep her ideas like that to herself so that others won't hold her ideas against her.

14

A small group of students in math class interrupts the teacher every day. When she moves to quiet one group, the other side of the room starts trouble. You are not doing well in math and need all the help you can get. One day, the teacher explains something important but you miss it because the group makes so much noise. What should you do? How do you feel about the following ideas?

- GOOD MAYBE POOR 71. Go to the guidance counselor and request a transfer to a different class.
- GOOD MAYBE POOR 72. Say nothing, and try to pick up the explanation on your own from the book.
- GOOD MAYBE POOR 73. Go to the principal and complain that the teacher cannot teach.
- GOOD MAYBE POOR 74. Ask your parents to get you a tutor because you can't get math.
- GOOD MAYBE POOR 75. Get a group of students in class together and go to the teacher and ask that something be done about students that disrupt the class.

15

Under what conditions would you try to get a piece of gum or candy out of a machine without paying? How do you feel about the following ideas?

- GOOD MAYBE POOR 76. Only if I was certain that I would not get caught.
- GOOD MAYBE POOR 77. Never under any circumstances.
- GOOD MAYBE POOR 78. If I felt I had a good chance of not getting caught.
- GOOD MAYBE POOR 79. Only if I did not have exact change.
- GOOD MAYBE POOR 80. If I could do it without breaking anything.

16

As you walk along the hall at school you notice Susan and Janice, girls you know from class, writing on a hall wall. The school has had a real problem with vandalism of this type, and the principal has asked that any student report the names of people writing on walls to the office. What would you do? How do you feel about the following ideas?

- | | | | | |
|------|-------|------|-----|--|
| GOOD | MAYBE | POOR | 81. | Go to class and forget what you saw. |
| GOOD | MAYBE | POOR | 82. | Go over and tell the girls to stop writing on the wall, then go to class. |
| GOOD | MAYBE | POOR | 83. | Report it to the principal immediately. |
| GOOD | MAYBE | POOR | 84. | Tell a teacher that you saw some girls writing on a wall and have him check it out. |
| GOOD | MAYBE | POOR | 85. | Talk to the girls and when you find the locker belongs to someone you don't like, help them write on it. |

17

One of the students in your art class has a problem with moving her hands smoothly. She has worked hard on a color wheel and has finally completed it, and is very proud of it. She shows it to you and a group of your friends, and you notice that the lines are crooked and the colors run into each other. What would you do? How do you feel about the following ideas?

- | | | | | |
|------|-------|------|-----|---|
| GOOD | MAYBE | POOR | 86. | Compliment her on her good work. |
| GOOD | MAYBE | POOR | 87. | Walk away when she asks what you think of her work. |
| GOOD | MAYBE | POOR | 88. | Tell her that it is crummy, the lines are crooked, and the paint runs together. |
| GOOD | MAYBE | POOR | 89. | Change the subject and ignore her with your friends. |
| GOOD | MAYBE | POOR | 90. | Nicely tell her she needs to do it over. |

18

The garbage men said they would not go to work unless they were given 10% more money. Mr. McIntire, upon reading this, became very angry. He thought that this was wrong. Mr. McIntire was a teacher who, after many years of studies and experience was making no more money than the garbage men, and he had no hopes of getting 10% more. What do you think about the following ideas?

- GOOD MAYBE POOR 91. Garbage men should wait until Mr. McIntire makes more money before asking for themselves.
- GOOD MAYBE POOR 92. Garbage men do hard physical work, and should get paid more than those who work with their minds.
- GOOD MAYBE POOR 93. Garbage men are not educated, and should make less money than teachers.
- GOOD MAYBE POOR 94. From a health point of view, it is more important for a town to have garbage men than educators, so they should have the extra money.
- GOOD MAYBE POOR 95. Garbage men have as much right to seek more money as anyone else.

19

Lydia is always borrowing money from her friend, Jennifer. Jennifer likes Lydia very much, but feels she is being forced; unless she lends the money to Lydia, their friendship will end. Jennifer, therefore, decides to talk to Lydia about paying back her loans and about not borrowing any more money. Is Jennifer doing the right thing? How do you feel about the following ideas?

- GOOD MAYBE POOR 96. No. A friendship is more dear than money.
- GOOD MAYBE POOR 97. Yes. Jennifer is solving a problem.
- GOOD MAYBE POOR 98. Perhaps Jennifer should wait awhile and see if Lydia will pay.
- GOOD MAYBE POOR 99. Jennifer should start borrowing money from Lydia until they are even.
- GOOD MAYBE POOR 100. Jennifer should take the money from Lydia's purse when Lydia is gone.

20

You belong to a club with all your friends, and they voted for Dave to be president. Dave has always been your worst enemy, and you know that he is unfair and dishonest. What should you do? How do you feel about the following ideas?

- GOOD MAYBE POOR 101. Quit the club.
- GOOD MAYBE POOR 102. Wait until the next election and try to get everyone to vote for someone else.
- GOOD MAYBE POOR 103. Try to cause him as much trouble as possible.
- GOOD MAYBE POOR 104. Get one of your friends to tell Dave that if he doesn't say no to being president, he will be sorry.
- GOOD MAYBE POOR 105. Tell everyone that unless they can elect someone you like, you won't belong.

21

Recently your parents have learned that your best friend does not belong to the same church that you do. Although they have not told you not to associate with your friends, they have indicated in earlier discussions that they would like it best if your friends were members of your church. What should you do? How do you feel about the following ideas?

- GOOD MAYBE POOR 106. Tell your parents that you have a right to choose your own friends.
- GOOD MAYBE POOR 107. Try to convert your friend to your church.
- GOOD MAYBE POOR 108. Do as your parents say.
- GOOD MAYBE POOR 109. Convince your parents that your friend is a fine person and that his church affiliation cannot change that.
- GOOD MAYBE POOR 110. Do nothing.

22

You are a scoutmaster and returning home with a troop after a 20-day camp. A storm is coming. Everyone is tired and in a hurry to get home. Finally, Jim, the largest and strongest boy in the troop, decided he did not have to hurry home and he was just too tired to go on. He would not move, and so everybody had to wait because the troop could not leave him alone in the mountains. The younger children in the troop just could not spend another night in the woods, and besides, their parents would be there to meet them that evening. What should you do? How do you feel about the following ideas?

- GOOD MAYBE POOR 111. Tell him something bad may happen to him if he were left behind.
- GOOD MAYBE POOR 112. Twist his arm so that he will walk.
- GOOD MAYBE POOR 113. Convince him that others are also tired, but that if he will just walk, the other boys will carry his pack for him.
- GOOD MAYBE POOR 114. Explain to him that as a scout he is capable of taking care of himself, and can follow the trail home alone, if he doesn't come now.
- GOOD MAYBE POOR 115. Have the other boys tell him that he will be voted out of the troop if he doesn't cooperate.

23

David is unhappy about a decision made by the teacher. He believes that the teacher did not have all the information needed to make a good decision. What do you think David should do? How do you feel about the following ideas?

- GOOD MAYBE POOR 116. Tell his parents that the teacher does not like him.
- GOOD MAYBE POOR 117. Do nothing, because the teacher will be upset.
- GOOD MAYBE POOR 118. Talk with the principal of the school.
- GOOD MAYBE POOR 119. Tell the other kids to misbehave in class.
- GOOD MAYBE POOR 120. Talk to the teacher and request that the decision be reconsidered.

24

At Joe's school there is only one small playing field. Joe's friends want to play football, but Ned's friends want to play dodgeball. They always fight and argue. What do you think they should do? How do you feel about the following ideas?

- | | | | | |
|------|-------|------|------|--|
| GOOD | MAYBE | POOR | 121. | Flip a coin, and whoever wins can have the playing field. |
| GOOD | MAYBE | POOR | 122. | Let the principal decide once and for all. |
| GOOD | MAYBE | POOR | 123. | In class, both Joe and Ned's friends decide a plan so that each game can be played the same number of times. |
| GOOD | MAYBE | POOR | 124. | Each side should try to get more kids on their side, and let the most popular game be played each day. |
| GOOD | MAYBE | POOR | 125. | They should try to find other games that everyone likes. |

25

After school a group of your friends tell you that they have a funny idea. Cheerleader elections are tomorrow, and they want you to vote for Sharon, who is a shy, fat and ugly classmate. They think it would be funny to have a "fat, ugly" cheerleader who would cause everyone to laugh at her. What should you do? How do you feel about the following ideas?

- | | | | | |
|------|-------|------|------|---|
| GOOD | MAYBE | POOR | 126. | Vote for Sharon. |
| GOOD | MAYBE | POOR | 127. | Tell your friends you will vote for Sharon, then vote for someone else. |
| GOOD | MAYBE | POOR | 128. | Tell Sharon what they are planning to do. |
| GOOD | MAYBE | POOR | 129. | Tell your friends that you don't think it would be very funny or very fair to Sharon. |
| GOOD | MAYBE | POOR | 130. | Ask one of your teachers what you should do. |

26

Suppose the President of the United States has been caught stealing money from the government. What action should be taken against him? How do you feel about the following ideas?

- | | | | | |
|------|-------|------|------|--|
| GOOD | MAYBE | POOR | 131. | He should be removed from his job immediately and never be allowed to run again. |
| GOOD | MAYBE | POOR | 132. | He should be excused, because it is his first time and he is president. |
| GOOD | MAYBE | POOR | 133. | He should have a trial and be sentenced by a judge, if he is found guilty. |
| GOOD | MAYBE | POOR | 134. | He should keep his job, but be made to pay back the money. |
| GOOD | MAYBE | POOR | 135. | He should be sent to jail without a trial to make an example of him, because he might be able to influence the jury or judge and get out of going to jail. |

27

Your company needs a new secretary. You advertised the opening and 12 people applied. It was decided that the fairest way to select the new secretary was to give all the applicants a typing test and hire the one that typed the fastest. When you looked at the results of the test, you found that two applicants had tied for the highest score; one was a man and the other a woman. To select between the two, what would you do? How do you feel about the following ideas?

- | | | | | |
|------|-------|------|------|--|
| GOOD | MAYBE | POOR | 136. | Hire the woman, because women make better secretaries. |
| GOOD | MAYBE | POOR | 137. | Hire the man, because he typed very fast for a man. |
| GOOD | MAYBE | POOR | 138. | Flip a coin. |
| GOOD | MAYBE | POOR | 139. | Test them both on the other secretarial skills, and hire the one with the best overall qualifications. |
| GOOD | MAYBE | POOR | 140. | Ask the rest of the company whether they would rather hire a man or a woman. |

28

You are Dena's mother, and Dena is always late for school. Dena's teacher is getting frustrated with Dena, and says she will have to punish Dena by making her stay after school. How do you feel about the following ideas?

- | | | | | |
|------|-------|------|------|--|
| GOOD | MAYBE | POOR | 141. | The mother should write a note so that the teacher can excuse Dena. |
| GOOD | MAYBE | POOR | 142. | The mother should go to school and tell the teacher that Dena is trying, but is just naturally slow, and help the teacher understand and have more patience with Dena. |
| GOOD | MAYBE | POOR | 143. | The teacher should help Dena after school with the work she missed in the morning. |
| GOOD | MAYBE | POOR | 144. | The teacher should have Dena stay after school each day until she is on time. |
| GOOD | MAYBE | POOR | 145. | The mother should not let Dena have special privileges at home, if she does not meet her school responsibilities. |

29

You have just walked into the restroom at your junior high school when you find two tough ninth graders making Billy Jones, give them his lunch money. Billy is a small, weak seventh grader who lives in your neighborhood. What should you do. How do you feel about the following ideas?

- | | | | | |
|------|-------|------|------|--|
| GOOD | MAYBE | POOR | 147. | Pretend you did not see what was going on and walk out. |
| GOOD | MAYBE | POOR | 147. | Rush to Billy's aid by jumping on one of the tough boys. |
| GOOD | MAYBE | POOR | 148. | Talk to Billy later and try to convince him to tell the principal. |
| GOOD | MAYBE | POOR | 149. | Run down to the principal's office and report what you saw. |
| GOOD | MAYBE | POOR | 150. | Ask the ninth graders for a share of the money, so you won't tell what they are doing. |

30

You have a friend of a different religion from your own. He tells you that he wishes you would attend church with him because he really cares about you and wants you to go to heaven. He says he knows that if only you would come once you would discover that he is right. What should you do? How do you feel about the following ideas?

- GOOD MAYBE POOR 151. Stay away from him until he stops talking about his church so much.
- GOOD MAYBE POOR 152. Thank him for caring about you, and tell him that you are fully satisfied with your present beliefs.
- GOOD MAYBE POOR 153. Go to church with him, because you don't want to lose him as a friend.
- GOOD MAYBE POOR 154. Tell him you know that his beliefs are wrong, and that he should come to your church instead.
- GOOD MAYBE POOR 155. Tell him no, and that until he learns about the true church you won't play with him.

31

Danny brought his father's camera that cost \$300 to English class for a report he was giving. He put the camera out of sight in the desk when the class went to lunch. Everyone noticed the hiding place. Later that it was discovered that the camera was stolen. Only class members could have taken the camera, but they all said, "No, I didn't take it." The teacher decided that it was the whole class's responsibility to help Danny. What would be the best thing to do? How do you feel about the following ideas?

- GOOD MAYBE POOR 156. Have everyone pay a little to Danny.
- GOOD MAYBE POOR 157. Punish everyone until someone confesses.
- GOOD MAYBE POOR 158. Tell the teacher that you are not responsible until proven guilty.
- GOOD MAYBE POOR 159. Pay if the whole class votes that they want to pay for the camera.
- GOOD MAYBE POOR 160. Stick up for your rights not to pay for someone else's crime, even if the class votes to contribute money to Danny.

32

You have a younger brother, Tony, who loves to play the drums. He always seems to play them early on Saturday morning when you want to sleep and also on weekday evenings when you want to watch television. The only time you can sleep is on Saturdays, and you can only watch TV in the evenings. To solve this problem, what should you do? How do you feel about the following ideas?

- | | | | | |
|------|-------|------|------|---|
| GOOD | MAYBE | POOR | 161. | Tell your parents to make Tony stop playing the drums. |
| GOOD | MAYBE | POOR | 162. | Ask Tony yourself to stop playing the drums. |
| GOOD | MAYBE | POOR | 163. | Convince Tony to take up another instrument. |
| GOOD | MAYBE | POOR | 164. | Decide with Tony and other family members upon a time that he can play that is suitable to both of you. |
| GOOD | MAYBE | POOR | 165. | Try to ignore the noise, because he has the right to play the drums. |

33

A new service station has just opened down the street. You like to go there because it is close, the gas is reasonable, and the service is good. Your neighbor tells you one day that he doesn't go there because the new owner has just been released from the State Penitentiary where he served 15 years for robbery. What should you do? How do you feel about the following ideas?

- | | | | | |
|------|-------|------|------|---|
| GOOD | MAYBE | POOR | 166. | Stop buying gas there, because you don't want that kind of person in your neighborhood. |
| GOOD | MAYBE | POOR | 167. | Warn others not to go there, and try to run him out of business. |
| GOOD | MAYBE | POOR | 168. | Keep going because it is convenient. |
| GOOD | MAYBE | POOR | 169. | Keep going because the owner has already paid his debt to society and has the right to make an honest living. |
| GOOD | MAYBE | POOR | 170. | Keep going to his station because it is your moral duty to the community to keep watch over this robber. |

34

There is not enough money in the city treasury this year to pay all the workers. The mayor feels that they either need more tax money or less men working on the fire fighting and garbage crews. What do you think the mayor should do? How do you feel about the following ideas?

- | | | | | |
|------|-------|------|------|--|
| GOOD | MAYBE | POOR | 171. | Raise taxes equally for everyone so the city can continue its present services. |
| GOOD | MAYBE | POOR | 172. | Borrow the money. |
| GOOD | MAYBE | POOR | 173. | Hire some experts to make a decision. |
| GOOD | MAYBE | POOR | 174. | Ask the people of the city to decide the matter in a special vote. |
| GOOD | MAYBE | POOR | 175. | The mayor should ask his brother and friends, whom he can trust, what would be the best thing to do. |

35

Your grandfather, who is 70 years old, has decided that he wants to go back to college and get a degree in biology. He is able to pay for it himself and has his own car to travel to school. Your family thinks your grandfather is too old to go to college and that it would be a waste of money. Anyway, what would he do with a college degree at his age? What should you do? How do you feel about the following ideas?

- | | | | | |
|------|-------|------|------|--|
| GOOD | MAYBE | POOR | 176. | Agree with your family and try to convince your grandfather not to go to college. |
| GOOD | MAYBE | POOR | 177. | Stay out of the argument, because it is really none of your business. |
| GOOD | MAYBE | POOR | 178. | Agree with your grandfather and try to convince your family that everyone has the right to learn. |
| GOOD | MAYBE | POOR | 179. | Explain to your grandfather that not everyone should go to college because of the expense, and that he already had his chance. |
| GOOD | MAYBE | POOR | 180. | Try and find out why he wants a degree in biology so you have more information on which to base a decision. |

36

Appendix E

Exemplary and Non-Exemplary Student Nomination Form

(Item Selection and Validation)

MEMO TO TEACHER:

Please select the three students in your class who are present today whose lives best exemplify the 12 values found on the attached sheet.

Also indicate the three students who have the most difficult time putting these values into practice. Make certain the students identified below are taking the test today. Thank you.

Exemplary Students

| Name: | School: | Grade: |
|-------|---------|--------|
| _____ | _____ | _____ |
| _____ | _____ | _____ |
| _____ | _____ | _____ |

Non-Exemplary Students

| | | |
|-------|-------|-------|
| _____ | _____ | _____ |
| _____ | _____ | _____ |
| _____ | _____ | _____ |

ETHICAL DEMOCRATIC VALUES

WE BELIEVE:

1. THAT EACH INDIVIDUAL HAS DIGNITY AND WORTH.
2. THAT A FREE SOCIETY REQUIRES RESPECT FOR PERSONS, PROPERTY, AND PRINCIPLES.
3. THAT EACH INDIVIDUAL HAS A RIGHT TO LEARN AND THE FREEDOM TO ACHIEVE.
4. THAT EACH INDIVIDUAL, REGARDLESS OF RACE, CREED, COLOR, SEX, ETHNIC BACKGROUND OR ECONOMIC STATUS, HAS EQUAL OPPORTUNITY.
5. THAT EACH INDIVIDUAL HAS THE RIGHT TO PERSONAL LIBERTIES.
6. THAT EACH INDIVIDUAL IS RESPONSIBLE FOR HIS/HER OWN ACTIONS.
7. THAT EACH INDIVIDUAL HAS A RESPONSIBILITY TO THE GROUP AS WELL AS TO THE TOTAL SOCIETY.
8. THAT DEMOCRATIC GOVERNMENTS GOVERN BY MAJORITY VOTE.
9. THAT DEMOCRATIC SOCIETIES ARE BASED ON LAW.
10. THAT PROBLEMS ARE SOLVED THROUGH REASON AND ORDERLY PROCESSES.
11. THAT AN INDIVIDUAL SHOULD BE TOLERANT OF OTHER RELIGIOUS BELIEFS AND SHOULD HAVE FREEDOM TO EXERCISE HIS/HER OWN.
12. THAT EACH INDIVIDUAL HAS THE RIGHT TO WORK, TO PURSUE AN OCCUPATION, AND TO GAIN SATISFACTION FROM PERSONAL EFFORTS.

SALT LAKE CITY SCHOOL DISTRICT
440 EAST FIRST SOUTH STREET
SALT LAKE CITY, UTAH 84111

Appendix F

Chi-Square Analysis by Item
(Item Selection and Validation)

Table 20

Chi-Square Analysis by Item

| Dilemma No. | Item No. | Raw Chi-square | <u>df</u> | Significance |
|-------------|----------|----------------|-----------|--------------|
| 1 | 1 | 3.49 | 2 | .1747 |
| 1 | 2 | 0.87 | 2 | .6478 |
| 1 | 3 | 4.51 | 2 | .1047 |
| 1 | 4 | 0.36 | 2 | .8351 |
| 1 | 5 | 3.87 | 2 | .1444 |
| 2 | 6 | 6.11 | 2 | .0472** |
| 2 | 7 | 5.47 | 2 | .0647** |
| 2 | 8 | 3.79 | 2 | .1501 |
| 2 | 9 | 4.42 | 2 | .1095 |
| 2 | 10 | 3.55 | 2 | .1698 |
| 3 | 11 | 0.84 | 2 | .6564 |
| 3 | 12 | 2.88 | 2 | .2373 |
| 3 | 13 | 0.99 | 2 | .6083 |
| 3 | 14 | 5.82 | 2 | .0536** |
| 3 | 15 | 5.27 | 2 | .0716* |
| 4 | 16 | 0.54 | 2 | .7624 |
| 4 | 17 | 4.84 | 2 | .0889* |
| 4 | 18 | 0.44 | 2 | .8016 |
| 4 | 19 | 2.31 | 2 | .3150 |
| 4 | 20 | 0.57 | 2 | .7536 |
| 5 | 21 | 4.38 | 2 | .1117 |
| 5 | 22 | 2.77 | 2 | .2507 |
| 5 | 23 | 4.16 | 2 | .1249 |
| 5 | 24 | 1.21 | 2 | .5448 |
| 5 | 25 | 8.42 | 2 | .0149*** |
| 6 | 26 | 2.72 | 2 | .2563 |
| 6 | 27 | 1.17 | 2 | .5574 |
| 6 | 28 | 3.20 | 2 | .2018 |
| 6 | 29 | 3.10 | 2 | .2124 |
| 6 | 30 | 3.42 | 2 | .1806 |
| 7 | 31 | 1.72 | 2 | .4240 |
| 7 | 32 | 1.27 | 2 | .5309 |
| 7 | 33 | 5.27 | 2 | .0716* |
| 7 | 34 | 2.38 | 2 | .3041 |

Table 20 (Continued)

| Delimma No. | Item No. | Raw Chi-square | df | Significance |
|-------------|----------|----------------|----|--------------|
| 7 | 35 | 2.78 | 2 | .2489 |
| 8 | 36 | 2.85 | 2 | .2410 |
| 8 | 37 | .34 | 2 | .0419** |
| 8 | 38 | 2.91 | 2 | .2333 |
| 8 | 39 | 3.52 | 2 | .1724 |
| 8 | 40 | 13.05 | 2 | .0015*** |
| 9 | 41 | 1.35 | 2 | .5081 |
| 9 | 42 | 4.38 | 2 | .1117 |
| 9 | 43 | 2.62 | 2 | .2698 |
| 9 | 44 | 2.08 | 2 | .3529 |
| 9 | 45 | 1.72 | 2 | .4237 |
| 10 | 46 | 0.06 | 2 | .9697 |
| 10 | 47 | 4.52 | 2 | .1040 |
| 10 | 48 | 1.90 | 2 | .3867 |
| 10 | 49 | 1.79 | 2 | .4085 |
| 10 | 50 | 3.06 | 2 | .2159 |
| 11 | 51 | 0.19 | 2 | .9135 |
| 11 | 52 | 1.13 | 2 | .2884 |
| 11 | 53 | 0.53 | 2 | .7665 |
| 11 | 54 | 0.75 | 2 | .6886 |
| 11 | 55 | 1.73 | 2 | .4206 |
| 12 | 56 | 2.54 | 2 | .2812 |
| 12 | 57 | 0.85 | 2 | .7473 |
| 12 | 58 | 0.39 | 2 | .8204 |
| 12 | 59 | 2.05 | 2 | .3591 |
| 12 | 60 | 2.93 | 2 | .2309 |
| 13 | 61 | 4.76 | 2 | 0.923* |
| 13 | 62 | 11.16 | 2 | .0038*** |
| 13 | 63 | 4.94 | 2 | .0845* |
| 13 | 64 | 1.97 | 2 | .3735 |
| 13 | 65 | 7.40 | 2 | .0247** |
| 14 | 66 | 3.50 | 2 | .1735 |
| 14 | 67 | 3.97 | 2 | .1374 |
| 14 | 68 | 1.15 | 2 | .5621 |
| 14 | 69 | 0.04 | 2 | .9797 |
| 14 | 70 | 3.62 | 2 | .1639 |
| 15 | 71 | 3.98 | 2 | .1370 |
| 15 | 72 | 3.46 | 2 | .1772 |
| 15 | 73 | 3.89 | 2 | .1429 |
| 15 | 74 | 3.99 | 2 | .1361 |
| 15 | 75 | 4.49 | 2 | .1060 |
| 16 | 76 | 4.54 | 2 | .1033 |
| 16 | 77 | 0.77 | 2 | .6814 |
| 16 | 78 | 2.04 | 2 | .3605 |

Table 20 (Continued)

| Dilemma No. | Item No. | Raw Chi-square | df | Significance |
|-------------|----------|----------------|----|--------------|
| 16 | 79 | 3.52 | 2 | .1725 |
| 16 | 80 | 4.34 | 2 | .1144 |
| 17 | 81 | 5.04 | 2 | .0806* |
| 17 | 82 | 0.55 | 2 | .7599 |
| 17 | 83 | 4.72 | 2 | .0943* |
| 17 | 84 | 1.77 | 2 | .4126 |
| 17 | 85 | 6.13 | 2 | .0467** |
| 18 | 86 | 6.52 | 2 | .0385** |
| 18 | 87 | 6.13 | 2 | .0465** |
| 18 | 88 | 3.70 | 2 | .1575 |
| 18 | 89 | 6.83 | 2 | .0328** |
| 18 | 90 | 0.36 | 2 | .8344 |
| 19 | 91 | 7.69 | 2 | .0214** |
| 19 | 92 | 4.61 | 2 | .1000* |
| 19 | 93 | 8.44 | 2 | .0144*** |
| 19 | 94 | 2.62 | 2 | .2704 |
| 19 | 95 | 0.57 | 2 | .7504 |
| 20 | 96 | 3.03 | 2 | .2192 |
| 20 | 97 | 5.00 | 2 | .0822* |
| 20 | 98 | 0.56 | 2 | .7571 |
| 20 | 99 | 5.10 | 2 | .0798* |
| 20 | 100 | 7.65 | 2 | .0218** |
| 21 | 101 | 0.34 | 2 | .8422 |
| 21 | 102 | 0.54 | 2 | .7647 |
| 21 | 103 | 2.02 | 2 | .3642 |
| 21 | 104 | 6.43 | 2 | .0401** |
| 21 | 105 | 7.47 | 2 | .0239** |
| 22 | 106 | 3.80 | 2 | .1496 |
| 22 | 107 | 1.14 | 2 | .5647 |
| 22 | 108 | 0.30 | 2 | .8610 |
| 22 | 109 | 3.51 | 2 | .1728 |
| 22 | 110 | 0.21 | 2 | .8981 |
| 23 | 111 | 0.83 | 2 | .6593 |
| 23 | 112 | 2.46 | 2 | .2910 |
| 23 | 113 | 3.46 | 2 | .1775 |
| 23 | 114 | 1.94 | 2 | .3800 |
| 23 | 115 | 3.23 | 2 | .1991 |
| 24 | 116 | 9.72 | 2 | .0077*** |
| 24 | 117 | 3.02 | 2 | .2205 |
| 24 | 118 | 0.87 | 2 | .6470 |
| 24 | 119 | 10.55 | 2 | .0051*** |

Table 20 (Continued)

| Dilemma No. | Item No. | Raw Chi-square | df | Significance |
|-------------|----------|----------------|----|--------------|
| 24 | 120 | 1.38 | 2 | .5020 |
| 25 | 121 | 3.41 | 2 | .1815 |
| 26 | 126 | 2.97 | 2 | .2268 |
| 26 | 127 | 3.78 | 2 | .1510 |
| 26 | 128 | 1.64 | 2 | .4400 |
| 26 | 129 | 3.35 | 2 | .1873 |
| 26 | 130 | 1.63 | 2 | .4422 |
| 27 | 131 | 1.57 | 2 | .4546 |
| 27 | 132 | 6.34 | 2 | .0419** |
| 27 | 133 | 13.02 | 2 | .0015*** |
| 27 | 134 | 4.59 | 2 | .1006 |
| 27 | 135 | 2.80 | 2 | .2465 |
| 28 | 136 | 5.43 | 1 | .0660* |
| 28 | 137 | 6.84 | 2 | .0327** |
| 28 | 138 | 4.27 | 2 | .1181 |
| 28 | 139 | 3.18 | 2 | .2040 |
| 28 | 140 | 3.89 | 2 | .1429 |
| 29 | 141 | 0.70 | 2 | .7058 |
| 29 | 142 | 0.27 | 2 | .8720 |
| 29 | 143 | 2.38 | 2 | .3041 |
| 29 | 144 | 3.46 | 2 | .1775 |
| 29 | 145 | 0.51 | 2 | .7753 |
| 30 | 146 | 1.00 | 2 | .6052 |
| 30 | 147 | 3.40 | 2 | .1823 |
| 30 | 148 | 4.34 | 2 | .1140 |
| 30 | 149 | 1.25 | 2 | .5359 |
| 30 | 150 | 3.56 | 2 | .1684 |
| 31 | 151 | 2.62 | 2 | .2701 |
| 31 | 152 | 3.62 | 2 | .1636 |
| 31 | 153 | 1.69 | 2 | .4302 |
| 31 | 154 | 0.91 | 2 | .6350 |
| 31 | 155 | 6.72 | 2 | .0347** |
| 32 | 156 | 0.41 | 2 | .8142 |
| 32 | 157 | 1.81 | 2 | .4052 |
| 32 | 158 | 1.72 | 2 | .4234 |
| 32 | 159 | 1.27 | 2 | .5295 |
| 32 | 160 | 1.02 | 2 | .6010 |
| 33 | 161 | 2.70 | 2 | .2588 |
| 33 | 162 | 1.40 | 2 | .4959 |
| 33 | 163 | 4.67 | 2 | .0966* |
| 33 | 164 | 1.30 | 2 | .5985 |
| 33 | 165 | 2.80 | 2 | .2465 |

Table 20 (Continued)

| Dilemma No. | Item No. | Raw Chi-square | <u>df</u> | Significance |
|-------------|----------|----------------|-----------|--------------|
| 34 | 166 | 1.03 | 2 | .5985 |
| 34 | 167 | 4.10 | 2 | .1285 |
| 34 | 168 | 0.03 | 2 | .9824 |
| 34 | 169 | 3.03 | 2 | .2200 |
| 34 | 170 | 2.46 | 2 | .2916 |
| 35 | 171 | 0.14 | 2 | .9338 |
| 35 | 172 | 0.38 | 2 | .8271 |
| 35 | 173 | 0.73 | 2 | .6939 |
| 35 | 174 | 1.25 | 2 | .5344 |
| 35 | 175 | 1.63 | 2 | .4422 |
| 36 | 176 | 3.31 | 2 | .1913 |
| 36 | 177 | 3.07 | 2 | .2158 |
| 36 | 178 | 3.64 | 2 | .1620 |
| 36 | 179 | 3.13 | 2 | .2094 |
| 36 | 180 | 0.18 | 2 | .9135 |

*p < .10

**p < .05

***p < .01

Appendix G

Cross-Validation Test Form

Name: _____
 First Middle Last

Sex: Male: _____ Female: _____ Age: _____

ETHICS EDUCATION TEST

INSTRUCTION SHEET

The purpose of these questions is to assess your thinking about citizenship.

Below is a practice question. Please read this incident about John and select the answer you consider best.

EACH INDIVIDUAL HAS DIGNITY AND WORTH.

John is a new student. He is physically handicapped. The other students ignore him and call him names behind his back. Allan would like to be John's friend, but is afraid his classmates will tease him.

For each number, you should circle either good, maybe, or poor that best tells how you feel. How do you feel about the following ideas?

- | | | | |
|------|-------|------|---|
| GOOD | MAYBE | POOR | 1. See John after school when he is alone. |
| GOOD | MAYBE | POOR | 2. Ask several classmates to go talk to John and welcome him to school. |
| GOOD | MAYBE | POOR | 3. Take the initiative and talk to John. |
| GOOD | MAYBE | POOR | 4. Ignore John until John earns the right to be welcomed. |

If you are having a problem answering the question, then guess. Any answer will give you some credit. It is important to answer each statement. Use the entire class period if you need to. Please write your full name on the answer sheet.

Now turn the page and begin working.

Two young women you know applied for a position on a local newspaper. Both are well qualified with equal training and experience. The managing editor has asked you for advice on which girl to hire, since one is a black girl and they have never had a black on the staff. How do you feel about the following ideas:

- | | | | |
|------|-------|------|---|
| GOOD | MAYBE | POOR | 1. Advise him to hire the white girl to avoid having a black on the staff. |
| GOOD | MAYBE | POOR | 2. Suggest that he hire the black girl to avoid criticism from other minority people. |
| GOOD | MAYBE | POOR | 3. Propose that he have each girl do a feature article and make his judgement on the basis of their work. |
| GOOD | MAYBE | POOR | 4. Hire the girl who has a skin color like most of the other people who work for the newspaper so they will get along better. |
| GOOD | MAYBE | POOR | 5. Tell one of the girls that she would be happier if she worked at another newspaper. |

1

You live in a rich neighborhood where most of the people are doctors, lawyers, teachers, etc. However, your neighbor and friend only mows lawns for a living. He is an honest and industrious man. Soon there will be a bond election to improve city and county streets. You have been asked to serve on the committee to contact voters in your area to come to a special meeting prior to the election. The committee chairman, however, has said that you must not invite your friend. What do you think you should do? How do you feel about the following ideas?

- | | | | |
|------|-------|------|--|
| GOOD | MAYBE | POOR | 6. Follow the instructions of the committee chairman without question. |
| GOOD | MAYBE | POOR | 7. Refuse to have anything to do with the bond election without giving any reason for your action. |

- | | | | |
|------|-------|------|---|
| GOOD | MAYBE | POOR | 8. Tell your friend about the instruction you received and explain that there is nothing you can do about it. |
| GOOD | MAYBE | POOR | 9. Ignore the whole thing and hope for rain on the day of the meeting. |
| GOOD | MAYBE | POOR | 10. Explain to the chairman that unless all qualified voters in your area are involved in the special meeting you believe the meeting should not be held. |

You recently attended an important school basketball game with a group of friends. The gymnasium was crowded and a student from another school accidentally bumped Joe of your group hard enough to push him against the wall. Joe was very angry and said that he would see the other kid in the parking lot after the game. If Joe gets into a fight, he will be expelled from school, and the school authorities have said that they will cancel future games if any fights occur. What do you think you should do? How do you feel about the following ideas?

- | | | | |
|------|-------|------|---|
| GOOD | MAYBE | POOR | 11. Call the police. |
| GOOD | MAYBE | POOR | 12. Leave Joe at the game so you will not become involved. |
| GOOD | MAYBE | POOR | 13. Report Joe's plan to the nearest teacher. |
| GOOD | MAYBE | POOR | 14. Explain to Joe the seriousness of what he is planning and persuade him not to go through with it. |
| GOOD | MAYBE | POOR | 15. Find other friends from your school, and then all of you do something more fun with Joe after the game. |

3

Bill loves to play baseball. One day Bill and Tom are practicing ball in the street in front of Bill's house. Bill is up to bat and Tom pitches a perfect ball to Bill. He bats the ball squarely. Moments later they hear the shattering of glass as the ball hits the windshield of a neighbor's new car. Hastily the boys pick up the bat and run into Bill's house. What do you think of the following ideas?

- | | | | |
|------|-------|------|--|
| GOOD | MAYBE | POOR | 16. Both should have informed the neighbor about the broken window. |
| GOOD | MAYBE | POOR | 17. Bill should have told the neighbor he broke the car window. |
| GOOD | MAYBE | POOR | 18. Neither should tell the neighbor and let the insurance company pay for the window. |

- | | | | | |
|------|-------|------|-----|---|
| GOOD | MAYBE | POOR | 19. | Tom should tell the neighbor Bill broke the window. |
| GOOD | MAYBE | POOR | 20. | Send the neighbor money to pay for the window. |

When your best friend, Tom, was driving you home, he turned a corner sharply and didn't notice a car parked too near the corner. He hit the car, but did not stop to see what damage had been done to either car. When he let you out at your house, he examined his car and learned that the front bumper had only a slight dent. However, there was the other car's blue paint on the front edge of his bumper. What do you think you should do? How do you feel about the following ideas?

- | | | | | |
|------|-------|------|-----|--|
| GOOD | MAYBE | POOR | 21. | Persuade him to go back and leave a note for the other car owner. |
| GOOD | MAYBE | POOR | 22. | Tell him that in a case like this wehre nobody would notice, that most people would not report the accident. |
| GOOD | MAYBE | POOR | 23. | Tell him it serves the guy right for parking where he did. |
| GOOD | MAYBE | POOR | 24. | Call the police as soon as your friend leaves. |
| GOOD | MAYBE | POOR | 25. | Tell your friend that it wasn't his fault, because the other car was prked too near the corner. It would not be right for him to get a ticket for something he didn't deserve, so he need not report the accident. |

5

When you were shopping for your mother, the grocery clerk gave you change for a \$10 bill instead of a \$5 bill. What would you do? How do you feel about the following ideas?

- | | | | | |
|------|-------|------|-----|--|
| GOOD | MAYBE | POOR | 26. | Give the extra \$5 to your mother. |
| GOOD | MAYBE | POOR | 27. | Keep it, because you've been shortchanged before. |
| GOOD | MAYBE | POOR | 28. | Return it to the grocery store. |
| GOOD | MAYBE | POOR | 29. | Spend it for groceries at the same store the next time you are shopping. |
| GOOD | MAYBE | POOR | 30. | Keep the money because everyone has a right to be lucky once in a while. |

6

As you walk along the hall at school you notice Susan and Janice, girls you know from class, writing on a hall wall. The school has had a real problem with vandalism of this type, and the principal has asked that any student report the names of people writing on walls to the office. What would you do? How do you feel about the following ideas?

- | | | | |
|------|-------|------|---|
| GOOD | MAYBE | POOR | 31. Go to class and forget what you saw. |
| GOOD | MAYBE | POOR | 32. Go over and tell the girls to stop writing on the wall, then go to class. |
| GOOD | MAYBE | POOR | 33. Report it to the principal immediately. |
| GOOD | MAYBE | POOR | 34. Tell a teacher that you saw some girls writing on a wall, and have him check it out. |
| GOOD | MAYBE | POOR | 35. Talk to the girls, and when you find the locker belongs to someone you don't like, help them write on it. |

7

One of the students in your art class has a problem with moving her hands smoothly. She has worked hard on a color wheel and has finally completed it and is very proud of it. She shows it to you and a group of your friends, and you notice that the lines are crooked and the colors run into each other. What would you do? How do you feel about the following ideas?

- | | | | |
|------|-------|------|---|
| GOOD | MAYBE | POOR | 36. Compliment her on her good work. |
| GOOD | MAYBE | POOR | 37. Walk away when she asks what you think of her work. |
| GOOD | MAYBE | POOR | 38. Tell her that it is crummy, the lines are crooked, and the paint runs together. |
| GOOD | MAYBE | POOR | 39. Change the subject and ignore her with your friends. |
| GOOD | MAYBE | POOR | 40. Nicely tell her she needs to do it over. |

8

The garbage men said they would not go to work unless they were given 10% more money. Mr. McIntire, upon reading about this, became very angry. He thought that this was wrong. Mr. McIntire was a teacher who, after many years of studies and experience, was making no more money than the garbage men and had no hopes of getting 10% more. What do you think about the following ideas?

- | | | | | |
|------|-------|------|-----|---|
| GOOD | MAYBE | POOR | 41. | Garbage men should wait until Mr. McIntire makes more money before asking for themselves. |
| GOOD | MAYBE | POOR | 42. | Garbage men do hard physical work and should get paid more than those who work with their minds. |
| GOOD | MAYBE | POOR | 43. | Garbage men are not educated and should make less money than teachers. |
| GOOD | MAYBE | POOR | 44. | From a health point of view, it is more important for a town to have garbage men than educators, so they should have the extra money. |
| GOOD | MAYBE | POOR | 5%. | Garbage men have as much right to seek more money as anyone else. |

9

Lydia is always borrowing money from her friend, Jennifer. Jennifer likes Lydia very much, but feels she is being forced; unless she lends the money to Lydia, their friendship will end. Jennifer, therefore, decides to talk to Lydia about paying back her loans and about not borrowing any more money. Is Jennifer doing the right thing? How do you feel about the following ideas?

- | | | | | |
|------|-------|------|-----|---|
| GOOD | MAYBE | POOR | 46. | No. A friendship is more dear than money. |
| GOOD | MAYBE | POOR | 47. | Yes. Jennifer is solving a problem. |
| GOOD | MAYBE | POOR | 48. | Perhaps Jennifer should wait awhile and see if Lydia will pay. |
| GOOD | MAYBE | POOR | 49. | Jennifer should start borrowing money from Lydia until they are even. |
| GOOD | MAYBE | POOR | 50. | Jennifer should take the money from Lydia's purse when Lydia is gone. |

10

You belong to a club with all your friends, and they voted for Dave to be president. Dave has always been your worst enemy, and you know that he is unfair and dishonest. What should you do? How do you feel about the following ideas?

- | | | | |
|------|-------|------|--|
| GOOD | MAYBE | POOR | 51. Quit the club. |
| GOOD | MAYBE | POOR | 52. Wait until the next election, and try to get everyone to vote for someone else. |
| GOOD | MAYBE | POOR | 53. Try to cause him as much trouble as possible. |
| GOOD | MAYBE | POOR | 54. Get one of your friends to tell Dave that if he doesn't say no to being president, he will be sorry. |
| GOOD | MAYBE | POOR | 55. Tell everyone that unless they can elect someone you like, you won't belong. |

11

David is unhappy about a decision made by the teacher. He believes that the teacher did not have all the information needed to make a good decision. What do you think David should do? How do you feel about the following ideas?

- | | | | |
|------|-------|------|--|
| GOOD | MAYBE | POOR | 56. Tell his parents that the teacher does not like him. |
| GOOD | MAYBE | POOR | 57. Do nothing, because the teacher will be upset. |
| GOOD | MAYBE | POOR | 58. Talk with the principal of the school. |
| GOOD | MAYBE | POOR | 59. Tell the other kids to misbehave in class. |
| GOOD | MAYBE | POOR | 60. Talk to the teacher, requesting that the decision be reconsidered. |

12

Suppose the President of the United States has been caught stealing money from the government. What action should be taken against him? How do you feel about the following ideas?

- | | | | | |
|------|-------|------|-----|--|
| GOOD | MAYBE | POOR | 61. | He should be removed from his job immediately and never allowed to run again. |
| GOOD | MAYBE | POOR | 62. | He should be excused because it is his first time and he is the President. |
| GOOD | MAYBE | POOR | 63. | He should have a trial and be sentenced by a judge, if he is found guilty. |
| GOOD | MAYBE | POOR | 64. | He should keep his job, but be made to pay back the money. |
| GOOD | MAYBE | POOR | 65. | He should be sent to jail without a trial to make an example of him, because he might be able to influence the jury or judge and get out of going to jail. |

13

Your company needs a new secretary. You advertised the opening and had 12 people apply. It was decided that the fairest way to select the new secretary was to give all the applicants a typing test and hire the one that typed the fastest. When you looked at the results of the test you found that two applicants had tied for the highest score; one was a man and the other a woman. To select between the two, what should you do? How do you feel about the following ideas?

- | | | | | |
|------|-------|------|-----|--|
| GOOD | MAYBE | POOR | 66. | Hire the woman, because women make better secretaries. |
| GOOD | MAYBE | POOR | 67. | Hire the man, because he typed very fast for a man. |
| GOOD | MAYBE | POOR | 68. | Flip a coin. |
| GOOD | MAYBE | POOR | 69. | Test them both on the other secretarial skills, and hire the one with the best overall qualifications. |
| GOOD | MAYBE | POOR | 70. | Ask the rest of the company whether they would rather hire a man or a woman. |

14

You have a friend of a different religion from your own. He tells you that he wishes you would attend church with him, because he really cares about you and wants you to go to heaven. He says he knows that if only you would come once you would discover that he is right. What should you do? How do you feel about the following ideas?

- | | | | | |
|------|-------|------|-----|---|
| GOOD | MAYBE | POOR | 71. | Stay away from him until he stops talking about his church so much. |
| GOOD | MAYBE | POOR | 72. | Thank him for caring about you and tell him that you are fully satisfied with your present beliefs. |
| GOOD | MAYBE | POOR | 73. | Go to church with him because you don't want to lose him as a friend. |
| GOOD | MAYBE | POOR | 74. | Tell him you know that his beliefs are wrong, and that he should come to your church instead. |
| GOOD | MAYBE | POOR | 75. | Tell him no, and that until he learns about the true church you won't be playing with him. |

15

You have a younger brother, Tony, who loves to play the drums. He always seems to play them early on Saturday morning when you want to sleep, and also on weekday evenings when you want to watch television. The only time you can sleep in is on Saturdays, and you can only watch TV in the evenings. To solve this problem, what should you do? How do you feel about the following ideas?

- | | | | | |
|------|-------|------|-----|--|
| GOOD | MAYBE | POOR | 76. | Tell your parents to make Tony stop playing the drums. |
| GOOD | MAYBE | POOR | 77. | Ask Tony yourself to stop playing. |
| GOOD | MAYBE | POOR | 78. | Convince Tony to take up another instrument. |
| GOOD | MAYBE | POOR | 79. | Decide with Tony and other family members upon a time that he can play that is suitable for both of you. |
| GOOD | MAYBE | POOR | 80. | Try to ignore the noise, because he has the right to play the drums. |

16

Andrew is the toughest boy in school. He often strikes and injures his classmates. Andrew also collects "protection money" from his classmates. If one doesn't pay Andrew a nickel a day, Andrew beats him up. What are the members of the class to do? How do you feel about the following ideas?

- | | | | |
|------|-------|------|--|
| GOOD | MAYBE | POOR | 81. Tell the principal. |
| GOOD | MAYBE | POOR | 82. Gang up against Andrew and beat him up. |
| GOOD | MAYBE | POOR | 83. All the classmates should quit paying the nickel. |
| GOOD | MAYBE | POOR | 84. Pay the nickel, since it isn't very much money. |
| GOOD | MAYBE | POOR | 85. Have all the boys quit, all at once. Tell Andrew that he must quit hurting others. |

Appendix H

Exemplary and Non-exemplary Student Nomination Form

(Cross-Validation)

Teacher: _____

Date: _____

School: _____

Grade: _____

MEMO TO TEACHER:

Please select the four (2 male and 2 female) students in your class who are present today whose lives best exemplify the 12 values found on the attached sheet.

Also indicate the four (2 male and 2 female) students who have the most difficult time putting these values into practice. Make certain the students identified below are taking the test today. Thank you.

Exemplary Students

Name:

Non-Exemplary Students

Name:

ETHICAL DEMOCRATIC VALUES

WE BELIEVE:

1. THAT EACH INDIVIDUAL HAS DIGNITY AND WORTH.
2. THAT A FREE SOCIETY REQUIRES RESPECT FOR PERSONS, PROPERTY, AND PRINCIPLES.
3. THAT EACH INDIVIDUAL HAS A RIGHT TO LEARN AND THE FREEDOM TO ACHIEVE.
4. THAT EACH INDIVIDUAL, REGARDLESS OF RACE, CREED, COLOR, SEX, ETHNIC BACKGROUND OR ECONOMIC STATUS, HAS EQUAL OPPORTUNITY.
5. THAT EACH INDIVIDUAL HAS THE RIGHT TO PERSONAL LIBERTIES.
6. THAT EACH INDIVIDUAL IS RESPONSIBLE FOR HIS/HER OWN ACTIONS.
7. THAT EACH INDIVIDUAL HAS A RESPONSIBILITY TO THE GROUP AS WELL AS TO THE TOTAL SOCIETY.
8. THAT DEMOCRATIC GOVERNMENTS GOVERN BY MAJORITY VOTE.
9. THAT DEMOCRATIC SOCIETIES ARE BASED ON LAW.
10. THAT PROBLEMS ARE SOLVED THROUGH REASON AND ORDERLY PROCESSES.
11. THAT AN INDIVIDUAL SHOULD BE TOLERANT OF OTHER RELIGIOUS BELIEFS AND SHOULD HAVE FREEDOM TO EXERCISE HIS/HER OWN.
12. THAT EACH INDIVIDUAL HAS THE RIGHT TO WORK, TO PURSUE AN OCCUPATION, AND TO GAIN SATISFACTION FROM PERSONAL EFFORTS.

SALT LAKE CITY SCHOOL DISTRICT
440 EAST FIRST SOUTH STREET
SALT LAKE CITY, UTAH 84111

Appendix I

Final Form of the EDVT

Name: _____
 First Middle Last

Sex: Male _____ Female _____ Age: _____

ETHICS EDUCATION TEST

INSTRUCTION SHEET

The purpose of these questions is to assess your thinking about citizenship.

Below is a practice question. Please read this incident about John and select the answer you consider best.

EACH INDIVIDUAL HAS DIGNITY AND WORTH.

John is a new student. He is physically handicapped. The other students ignore him and call him names behind his back. Allan would like to be John's friend, but is afraid his classmates will tease him.

For each number you should circle either good, maybe, or poor that best tells how you feel. How do you feel about the following ideas?

- | | | | |
|------|-------|------|---|
| GOOD | MAYBE | POOR | 1. See John after school when he's alone. |
| GOOD | MAYBE | POOR | 2. Ask several classmates to go talk to John and welcome him to school. |
| GOOD | MAYBE | POOR | 3. Take the initiative and talk to John. |
| GOOD | MAYBE | POOR | 4. Ignore John until John earns the right to be welcomed. |

If you are having a problem answering the question, then guess. Any answer will give you some credit. It is important to answer each statement. Use the entire class period if you need to. Please write your full name on the answer sheet.

Now turn the page and begin working.

Two young women you know applied for a position on a local newspaper. Both are well qualified with equal training and experience. The managing editor has asked you for advice on which girl to hire, since one is a black girl and they have never had a black on the staff. How do you feel about the following ideas?

- | | | | |
|------|-------|------|--|
| GOOD | MAYBE | POOR | 1. Advise him to hire the white girl to avoid having a black on the staff. |
| GOOD | MAYBE | POOR | 2. Suggest that he hire the black girl to avoid criticism from other minority people. |
| GOOD | MAYBE | POOR | 3. Propose that he have each girl do a feature article and make his judgement on the basis of their work. |
| GOOD | MAYBE | POOR | 4. Hire the girl who has a skin color like most of the other people who work for the newspaper so that they will get along better. |
| GOOD | MAYBE | POOR | 5. Tell one of the girls that she would be happier if she worked at another newspaper. |

1

You live in a rich neighborhood where most of the people are doctors, lawyers, teachers, etc. However, your neighbor and friend only mows lawns for a living. He is an honest and industrious man. Soon there will be a bond election to improve city and county streets. You have been asked to serve on the committee to contact voters in your area to come to a special meeting prior to the election. The committee chairman, however, has said that you must not invite your friend. What do you think you should do? How do you feel about the following ideas?

- | | | | |
|------|-------|------|---|
| GOOD | MAYBE | POOR | 6. Follow the instructions of the committee chairman without question. |
| GOOD | MAYBE | POOR | 7. Refuse to have anything to do with the bond election without giving any reason for your action. |
| GOOD | MAYBE | POOR | 8. Tell your friend about the instruction you received and explain that there is nothing you can do about it. |

- | | | | | |
|------|-------|------|-----|--|
| GOOD | MAYBE | POOR | 9. | Ignore the whole thing and hope for rain on the day of the meeting. |
| GOOD | MAYBE | POOR | 10. | Explain to the chairman that unless all qualified voters in your area are involved in the special meeting, you believe the meeting should not be held. |

You recently attended an important school basketball game with a group of friends. The gymnasium was crowded and a student from another school accidentally bumped Joe of your group hard enough to push him against the wall. Joe was very angry and said that he would see the other kid in the parking lot after the game. If Joe gets into a fight, he will be expelled from school, and the school authorities have said that they will cancel future games if any fights occur. What do you think you should do? How do you feel about the following ideas?

- | | | | |
|------|-------|------|--|
| GOOD | MAYBE | POOR | 11. Call the police. |
| GOOD | MAYBE | POOR | 12. Leave Joe at the game so you will not become involved. |
| GOOD | MAYBE | POOR | 13. Report Joe's plan to the nearest teacher. |
| GOOD | MAYBE | POOR | 14. Explain to Joe the seriousness of what he is planning, and persuade him not to go through with it. |
| GOOD | MAYBE | POOR | 15. Find other friends from your school and then all of you do something more fun with Joe after the game. |

3

Bill loves to play baseball. One day Bill and Tom are practicing ball in the street in front of Bill's house. Bill is up to bat and Tom pitches a perfect ball to Bill. He bats the ball squarely. Moments later they hear the shattering of glass as the ball hits the windshield of a neighbor's new car. Hastily the boys pick up the bat and run into Bill's house. What do you think of the following ideas?

- | | | | |
|------|-------|------|---|
| GOOD | MAYBE | POOR | 16. Both should have informed the neighbor about the broken window. |
| GOOD | MAYBE | POOR | 17. Bill should have told the neighbor he broke the car window. |
| GOOD | MAYBE | POOR | 18. Neither should tell the neighbor and let an insurance company pay for the window. |
| GOOD | MAYBE | POOR | 19. Tom should tell the neighbor Bill broke the window. |
| GOOD | MAYBE | POOR | 20. Send the neighbor money to pay for the window. |

4

When your best friend, Tom, was driving you home, he turned a corner sharply and didn't notice a car parked too near the corner. He hit the car, but did not stop to see what damage had been done to either car. When he let you out at your house, he examined his car and learned that the front bumper had only a slight dent. However, there was the other car's blue paint on the front edge of his bumper. What do you think you should do? How do you feel about the following ideas?

- | | | | | |
|------|-------|------|-----|--|
| GOOD | MAYBE | POOR | 21. | Persuade him to go back and leave a note for the other car owner. |
| GOOD | MAYBE | POOR | 22. | Tell him that in a case like this where nobody would notice, that most people would not report the accident. |
| GOOD | MAYBE | POOR | 23. | Tell him it serves the guy right for parking where he did. |
| GOOD | MAYBE | POOR | 24. | Call the police as soon as your friend leaves. |
| GOOD | MAYBE | POOR | 25. | Tell your friend that it wasn't his fault because the other car was parked too near the corner. It would not be right for him to get a ticket for something he didn't deserve, so he need not report the accident. |

5

When you were shopping for your mother, the grocery clerk gave you change for a \$10 bill instead of a \$5 bill. What would you do? How do you feel about the following ideas?

- | | | | | |
|------|-------|------|-----|---|
| GOOD | MAYBE | POOR | 26. | Give the extra \$5 to your mother. |
| GOOD | MAYBE | POOR | 27. | Keep it, because you've been shortchanged before. |
| GOOD | MAYBE | POOR | 28. | Return it to the grocery clerk. |
| GOOD | MAYBE | POOR | 29. | Spend it for groceries at the same store the next time you are shopping. |
| GOOD | MAYBE | POOR | 30. | Keep the money, because everyone has a right to be lucky once in a while. |

6

As you walk along the hall at school you notice Susan and Janice, girls you know from class, writing on a hall wall. The school has had a real problem with vandalism of this type, and the principal has asked that any student report the names of people writing on walls to the office. What would you do? How do you feel about the following ideas?

- | | | | |
|------|-------|------|---|
| GOOD | MAYBE | POOR | 31. Go to class and forget what you saw. |
| GOOD | MAYBE | POOR | 32. Go over and tell the girls to stop writing on the wall, then go to class. |
| GOOD | MAYBE | POOR | 33. Report it to the principal immediately. |
| GOOD | MAYBE | POOR | 34. Tell a teacher that you saw some girls writing on a wall and have him check it out. |
| GOOD | MAYBE | POOR | 35. Talk to the girls, and when you find the locker belongs to someone you don't like, help them write on it. |

7

One of the students in your art class has a problem with moving her hands smoothly. She has worked hard on a color wheel and has finally completed it and is very proud of it. She shows it to you and a group of your friends, and you notice that the lines are crooked and the colors run into each other. What would you do? How do you feel about the following ideas?

- | | | | |
|------|-------|------|---|
| GOOD | MAYBE | POOR | 36. Compliment her on her good work. |
| GOOD | MAYBE | POOR | 37. Walk away when she asks you what you think of her work. |
| GOOD | MAYBE | POOR | 38. Tell her that it is crummy, the lines are crooked, and the paint runs together. |
| GOOD | MAYBE | POOR | 39. Change the subject and ignore her with your friends. |
| GOOD | MAYBE | POOR | 40. Nicely tell her she needs to do it over. |

8

The garbage men said they would not go to work unless they were given 10% more money. Mr. McIntire, upon reading about this, became very angry. He thought that this was wrong. Mr. McIntire was a teacher who, after many years of studies and experience, was making no more money than the garbage men, and had no hopes of getting 10% more. What do you think about the following ideas?

- | | | | |
|------|-------|------|---|
| GOOD | MAYBE | POOR | 41. Garbage men should wait until Mr. McIntire makes more money before asking for themselves. |
| GOOD | MAYBE | POOR | 42. Garbage men do hard physical work and should get paid more than those who work with their minds. |
| GOOD | MAYBE | POOR | 43. Garbage men are not educated and should make less money than teachers. |
| GOOD | MAYBE | POOR | 44. From a health point of view, it is more important for a town to have garbage men than educators, so they should have the extra money. |
| GOOD | MAYBE | POOR | 45. Garbage men have as much right to seek more money as anyone else. |

9

Lydia is always borrowing money from her friend, Jennifer. Jennifer likes Lydia very much, but feels she is being forced; unless she lends the money to Lydia, their friendship will end. Jennifer, therefore, decides to talk to Lydia about paying back her loans and about not borrowing any more money. Is Jennifer doing the right thing? How do you feel about the following ideas?

- | | | | |
|------|-------|------|---|
| GOOD | MAYBE | POOR | 46. No. A friendship is more dear than money. |
| GOOD | MAYBE | POOR | 47. Yes. Jennifer is solving a problem. |
| GOOD | MAYBE | POOR | 48. Perhaps Jennifer should wait awhile and see if Lydia will pay. |
| GOOD | MAYBE | POOR | 49. Jennifer should start borrowing money from Lydia until they are even. |
| GOOD | MAYBE | POOR | 50. Jennifer should take the money from Lydia's purse when Lydia is gone. |

10

You belong to a club with all your friends, and they voted for Dave to be president. Dave has always been your worst enemy, and you know that he is unfair and dishonest. What should you do? How do you feel about the following ideas?

- | | | | |
|------|-------|------|--|
| GOOD | MAYBE | POOR | 51. Quit the club. |
| GOOD | MAYBE | POOR | 52. Wait until the next election and try to get everyone to vote for someone else. |
| GOOD | MAYBE | POOR | 53. Try to cause him as much trouble as possible. |
| GOOD | MAYBE | POOR | 54. Get one of your friends to tell Dave that if he doesn't say no to being president, he will be sorry. |
| GOOD | MAYBE | POOR | 55. Tell everyone that unless they can elect someone you like, you won't belong. |

11

David is unhappy about a decision made by the teacher. He believes that the teacher did not have all the information needed to make a good decision. What do you think David should do? How do you feel about the following ideas?

- | | | | |
|------|-------|------|--|
| GOOD | MAYBE | POOR | 56. Tell his parents that the teacher does not like him. |
| GOOD | MAYBE | POOR | 57. Do nothing, because the teacher will be upset. |
| GOOD | MAYBE | POOR | 58. Talk with the principal of the school. |
| GOOD | MAYBE | POOR | 59. Tell the other kids to misbehave in class. |
| GOOD | MAYBE | POOR | 60. Talk to the teacher, requesting that the decision be reconsidered. |

12

Suppose the President of the United States has been caught stealing money from the government. What action should be taken against him? How do you feel about the following ideas?

- | | | | | |
|------|-------|------|-----|--|
| GOOD | MAYBE | POOR | 61. | He should be removed from his job immediately and never allowed to run again. |
| GOOD | MAYBE | POOR | 62. | He should be excused because it is his first time, and is the President. |
| GOOD | MAYBE | POOR | 63. | He should have a trial and be sentenced by a judge, if he is found guilty. |
| GOOD | MAYBE | POOR | 64. | He should keep his job, but be made to pay back the money. |
| GOOD | MAYBE | POOR | 65. | He should be sent to jail without a trial to make an example of him, because he might be able to influence the jury or judge and get out of going to jail. |

13

Your company needs a new secretary. You advertised the opening and had 12 people apply. It was decided that the fairest way to select the new secretary was to give all the applicants a typing test and hire the one that typed the fastest. When you looked at the results of the test, you found that two applicants had tied for the highest score; one was a man and the other a woman. To select between the two, what should you do? How do you feel about the following ideas?

- | | | | | |
|------|-------|-------|-----|---|
| GOOD | MAYBE | POOR | 66. | Hire the woman because women make better secretaries. |
| GOOD | MAYBE | POOR | 67. | Hire the man, because he typed very fast for a man. |
| GOOD | MAYBE | POOR! | 68. | Flip a coin. |
| GOOD | MAYBE | POOR | 69. | Test them both on the other secretarial skills and hire the one with the best overall qualifications. |
| GOOD | MAYBE | POOR | 70. | Ask the rest of the company whether they would rather hire a man or a woman. |

14

You have a friend of a different religion from your own. He tells you that he wishes you would attend church with him because he really cares about you, and wants you to go to heaven. He says he knows that if only you would come once you would discover that he is right. What should you do? How do you feel about the following ideas?

- | | | | | |
|------|-------|------|-----|---|
| GOOD | MAYBE | POOR | 71. | Stay away from him until he stops talking about his church so much. |
| GOOD | MAYBE | POOR | 72. | Thank him for caring about you and tell him that you are fully satisfied with your present beliefs. |
| GOOD | MAYBE | POOR | 73. | Go to church with him, because you don't want to lose him as a friend. |
| GOOD | MAYBE | POOR | 74. | Tell him you know that his beliefs are wrong, and that he should come to your church instead. |
| GOOD | MAYBE | POOR | 75. | Tell him no, and that until he learns about the true church you won't be playing with him. |

15

You have a younger brother, Tony, who loves to play the drums. He always seems to play them early on Saturday morning when you want to sleep, and also on weekday evenings when you want to watch television. The only time you can sleep in is on Saturdays, and you can only watch TV in the evenings. To solve this problem, what should you do? How do you feel about the following ideas?

- | | | | | |
|------|-------|------|-----|---|
| GOOD | MAYBE | POOR | 76. | Tell your parents to make Tony stop playing the drums. |
| GOOD | MAYBE | POOR | 77. | Ask Tony yourself to stop playing. |
| GOOD | MAYBE | POOR | 78. | Convince Tony to take up another instrument. |
| GOOD | MAYBE | POOR | 79. | Decide with Tony and other family members upon a time that he can play that is suitable to both of you. |
| GOOD | MAYBE | POOR | 80. | Try to ignore the noise, because he has the right to play the drums. |

16

Andrew is the toughest boy in school. He often strikes and injures his classmates. Andrew also collects "protection money" from his classmates. If one doesn't pay Andrew a nickel a day, Andrew beats him up. What are the members of the class to do? How do you feel about the following ideas?

- | | | | |
|------|-------|------|---|
| GOOD | MAYBE | POOR | 81. Tell the principal. |
| GOOD | MAYBE | POOR | 82. Gang up against Andrew and beat him up. |
| GOOD | MAYBE | POOR | 83. All the classmates should quit paying the nickel. |
| GOOD | MAYBE | POOR | 84. Pay the nickel, since it isn't very much. |
| GOOD | MAYBE | POOR | 85. Have all the boys, all at once, tell Andrew that he must quit hurting others. |

Appendix J

Teacher Instruction Sheet for the Content Validity Procedure

Content Validity Form

Sex: M ____ F: ____

Number of years teaching in Salt Lake: ____

On the next page you will find a list of 12 Ethical Democratic Values. On the following pages are 17 hypothetical dilemmas. Each of these dilemmas was constructed to reflect one of the 12 values. Please read each dilemma and match it to the Ethical Democratic Value you think it best represents. Place the number of each dilemma opposite the value it seems to represent in the spaces provided below. Some of the values may have only one dilemma that represents it, some may have two, and some may have none. Thank you for considering this carefully.

VALUE NUMBER

DILEMMA NUMBER

| | | |
|----|-------|-------|
| 1 | _____ | _____ |
| 2 | _____ | _____ |
| 3 | _____ | _____ |
| 4 | _____ | _____ |
| 5 | _____ | _____ |
| 6 | _____ | _____ |
| 7 | _____ | _____ |
| 8 | _____ | _____ |
| 9 | _____ | _____ |
| 10 | _____ | _____ |
| 11 | _____ | _____ |
| 12 | _____ | _____ |

Appendix K

Marlowe-Crowne Social Desirability Scale

Listed below are a number of statements concerning personal attitudes and traits. Read each item and decide whether the statement is true or false, as it pertains to you personally

- T F 1. Before voting I thoroughly investigate the qualifications of all the candidates.
- T F 2. I never hesitate to go out of my way to help someone in trouble.
- T F 3. It is sometimes hard for me to go on with my work if I am not encouraged.
- T F 4. I have never intensely disliked anyone.
- T F 5. On occasion I have had doubts about my ability to succeed in life.
- T F 6. I sometimes feel resentful when I don't get my way.
- T F 7. I am always careful about my manner of dress.
- T F 8. My table manners at home are as good as when I eat out in a restaurant.
- T F 9. If I could get into a movie without paying for it, and be sure I was not seen, I would probably do it.
- T F 10. On a few occasions I have given up doing something because I thought too little of my ability.
- T F 11. I like to gossip at times.
- T F 12. There have been times when I felt like rebelling against people in authority even though I knew they were right.
- T F 13. No matter who I'm talking to, I'm always a good listener.
- T F 14. I can remember "playing sick" to get out of something.
- T F 15. There have been occasions when I took advantage of someone.
- T F 16. I'm always willing to admit it when I make a mistake.

- T F 17. I always try to practice what I preach.
- T F 18. I don't find it particularly difficult to get along with loud-mouthed, obnoxious people.
- T F 19. I sometimes try to get even, rather than forgive and forget.
- T F 20. When I don't know something, I don't at all mind admitting it.
- T F 21. I am always courteous, even to people who are disagreeable.
- T F 22. At times I have really insisted on having things my own way.
- T F 23. There have been occasions when I felt like smashing things.
- T F 24. I would never think of letting someone else be punished for my wrongdoings.
- T F 25. I never resent being asked to return a favor.
- T F 26. I have never been irked when people expressed ideas very different from my own.
- T F 27. I never make a long trip without checking the safety of my car.
- T F 28. There have been times when I was quite jealous of the good fortune of others.
- T F 29. I have almost never felt the urge to tell someone off.
- T F 30. I am sometimes irritated by people who ask favors of me.
- T F 31. I have never felt that I was punished without cause.
- T F 32. I sometimes think when people have a misfortune they only got what they deserved.
- T F 33. I have never deliberately said something that hurt someone's feelings.

Appendix L

Scored Items and Keying on the Final Form of the EDVT

Table 21

Scored Items and Keying on the Final Form of the EDVT

| Dilemma No. | Item | Keying |
|-------------|------|--------|
| 1 | 1 | Poor |
| 1 | 2 | Poor |
| 2 | 9 | Poor |
| 2 | 10 | Good |
| 3 | 15 | Good |
| 4 | 18 | Poor |
| 5 | 22 | Poor |
| 5 | 25 | Poor |
| 6 | 26 | Poor |
| 6 | 27 | Poor |
| 6 | 28 | Good |
| 6 | 30 | Poor |
| 7 | 31 | Poor |
| 7 | 33 | Good |
| 7 | 35 | Poor |
| 8 | 36 | Good |
| 8 | 37 | Poor |
| 8 | 39 | Poor |
| 9 | 41 | Poor |
| 9 | 42 | Poor |
| 9 | 43 | Poor |
| 10 | 47 | Good |
| 10 | 49 | Poor |
| 10 | 50 | Poor |
| 11 | 54 | Poor |
| 11 | 55 | Poor |
| 12 | 56 | Poor |
| 12 | 59 | Poor |
| 13 | 62 | Poor |
| 13 | 63 | Good |
| 14 | 66 | Poor |
| 14 | 67 | Poor |
| 15 | 75 | Poor |
| 16 | 78 | Poor |
| 17 | 82 | Poor |

VITA

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Page 2

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