An observation of the personal growth of the teachers and students of an open education teacher preparation program.

Deborah Marie Forster

University of Massachusetts Amherst

Follow this and additional works at: https://scholarworks.umass.edu/dissertations_1

Recommended Citation
https://scholarworks.umass.edu/dissertations_1/2592
AN OBSERVATION OF THE PERSONAL GROWTH OF THE TEACHERS AND
STUDENTS OF AN OPEN EDUCATION TEACHER PREPARATION PROGRAM

A Dissertation Presented

By
Deborah Marie Forster

Submitted to the Graduate School of the
University of Massachusetts in
partial fulfillment of the requirements for the degree of
DOCTOR OF EDUCATION

July 30, 1972

Major Subject: Teacher Education
AN OBSERVATION OF THE PERSONAL GROWTH OF THE TEACHERS
AND STUDENTS OF AN OPEN EDUCATION TEACHER PREPARATION
PROGRAM

A Dissertation

by

Deborah Marie Forster

Submitted to the Graduate School of
the University of Massachusetts in
Partial Fulfillment of the requirements for the degree of
DOCTOR OF EDUCATION

July 1972

Major Subject: Teacher Education

Approved as to style and content by:

[Signatures]

July 1972

(Month) (Year)
ACKNOWLEDGMENTS

The author wishes to express her sincere appreciation to all those whose encouragement and assistance made the completion of this study possible.

The members of the doctoral committee are noted for their support and assistance.

Committee chairman, Dr. R. Mason Bunker, was extremely helpful and supportive throughout the planning and writing of this dissertation.

Dr. Masha Rudman, Dr. Horace Reed, and Dr. Jim Fortune all contributed to this study in support and aid.

This study would not have been possible without the constant secretarial aid and friendship of Joyce Grill.

The guidance and support of Duane Yazarian, dear friend and colleague, aided greatly in the completion of this dissertation.
PREFACE

Although this investigator believes people can solve their own problems and direct their lives in ways that contribute to their personal growth as well as to the growth of groups in which they participate, she also has found that many people feel powerless to exercise such control over their lives. Further, the institutions of our society have been caught up in encouraging the dependency of the client on the institution. For example, we have spent a good deal of time in churches, schools, hospitals, and prisons taking responsibility for the client rather than helping him to learn responsibility. Even though the goal of this care may be to develop autonomy (self-governance) in the client, too often our means of controlling and directing his activities directly oppose the development of autonomy; therefore we fail to achieve our goal. Our client increases in outer-directedness while foreclosing on his own potential, thus becoming dependent upon the institution for guidance and control. Hence the powerlessness felt by many people today is real, having been nurtured by their various lifelong social contacts. It is this externally induced powerlessness which causes many people to seriously doubt whether they can effect positive changes in their own lives. This investigator feels that our capabilities as humans are infinite and we have only begun to scratch the surface of our potentialities, particularly in the
areas of personal and social development.

One of the first considerations in breaking the cycle of dependency is to examine our basic assumptions about man and develop goals and means which support these assumptions. For example, if one of the basic assumptions about man were that he could do an effective and responsible job of directing and controlling his own life, then a supporting goal becomes that of gaining control of everyday life by means of using facilitating and guidance skills which help the client in his efforts to gain such control. That is, rather than directing and arranging his life for him, the helping person becomes an active participant in assisting the client to acquire the skills needed for directing and arranging his own life. Thus in the educational setting, the teacher would support student participation in those activities which interest the student. Encouraging him to stretch his thinking and broaden his horizons so that he sees ever-increasing possibilities in whatever he is doing would be part of the teacher's responsibility. Helping the student guide his energies into activities which continue his movement toward his personal and social goals requires a meaningful relationship between the student and the teacher.

This investigator's personal and professional interests focus on helping people develop increasingly positive self concepts, stronger relationships with others, and a sense of power in directing their own lives through offering
them support in nurturing and utilizing their own abilities and creativity in solving life's problems. This investigator has had the most success in helping others toward increased independence by facilitating students' involvement in their own lives. In educational environments this is accomplished when a sense of community develops and "learning how to learn" skills are emphasized. In such an environment students become increasingly responsible for the decisions and evaluation of their own learning. Both students and teachers grow personally and socially in educational environments where they are cared about and valued as unique individuals.
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACKNOWLEDGEMENTS</td>
<td>iii</td>
</tr>
<tr>
<td>PREFACE</td>
<td>iv</td>
</tr>
<tr>
<td>LIST OF TABLES</td>
<td>ix</td>
</tr>
<tr>
<td>ABSTRACT</td>
<td>xi</td>
</tr>
<tr>
<td>Chapter</td>
<td></td>
</tr>
<tr>
<td>I. THE PROBLEM AND PURPOSE OF THE STUDY</td>
<td>1</td>
</tr>
<tr>
<td>The Problem Defined</td>
<td></td>
</tr>
<tr>
<td>The Focus of This Study</td>
<td></td>
</tr>
<tr>
<td>The Purpose of This Study</td>
<td></td>
</tr>
<tr>
<td>Chapter Summary</td>
<td></td>
</tr>
<tr>
<td>II. REVIEW OF RELATED LITERATURE</td>
<td>13</td>
</tr>
<tr>
<td>Categories of Related Literature</td>
<td></td>
</tr>
<tr>
<td>Influence of Teacher Attitudes and Beliefs</td>
<td></td>
</tr>
<tr>
<td>Persons Who Are Self-Actualized</td>
<td></td>
</tr>
<tr>
<td>Leadership Styles of Teachers and Student Growth</td>
<td></td>
</tr>
<tr>
<td>Making Subject Matter Meaningful</td>
<td></td>
</tr>
<tr>
<td>Education for Personal and Community Growth</td>
<td></td>
</tr>
<tr>
<td>Open Education</td>
<td></td>
</tr>
<tr>
<td>Teacher Effectiveness in Open Education</td>
<td></td>
</tr>
<tr>
<td>Significance of the Study</td>
<td></td>
</tr>
<tr>
<td>III. DESIGN OF THE STUDY</td>
<td>41</td>
</tr>
<tr>
<td>The Population Studied</td>
<td></td>
</tr>
<tr>
<td>Hypotheses of the Study</td>
<td></td>
</tr>
<tr>
<td>Instruments</td>
<td></td>
</tr>
<tr>
<td>The Research Design</td>
<td></td>
</tr>
<tr>
<td>Administration of the Study Instruments</td>
<td></td>
</tr>
<tr>
<td>METEP Teacher Preparation Experiences</td>
<td></td>
</tr>
<tr>
<td>Statistical Treatment and Data Analysis</td>
<td></td>
</tr>
<tr>
<td>IV. FINDINGS</td>
<td>68</td>
</tr>
<tr>
<td>Self-Actualization</td>
<td></td>
</tr>
<tr>
<td>Personal and Community TORI</td>
<td></td>
</tr>
<tr>
<td>Correlation Between the POI and TORI Items</td>
<td></td>
</tr>
<tr>
<td>Subject Matter</td>
<td></td>
</tr>
</tbody>
</table>

vii
The Helping Relationship
Summary

V. DISCUSSION AND IMPLICATIONS OF FINDINGS ......... 94

Self-Actualization
Personal and Community TORI
The POI-TORI Correlation
Subject Matter
Helping Relationship
Implications for Teacher Education
Suggestions for Further Research

BIBLIOGRAPHY ........................................ 112
APPENDICES .......................................... 120
# LIST OF TABLES

<table>
<thead>
<tr>
<th>Table</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Origin of Scales and Factor Loadings of Scales Selected from the Thesaurus Study and used in the Semantic Differential Attitude Scaling under the Concept &quot;Subject Matter&quot;</td>
<td>120</td>
</tr>
<tr>
<td>2.</td>
<td>Origin of Scales and Factor Loadings of Scales Selected from the Thesaurus Study and Used in the Semantic Differential Attitude Scaling under the Concept &quot;Myself&quot;</td>
<td>121</td>
</tr>
<tr>
<td>3.</td>
<td>Origin of Scales and Factor Loadings of Scales Selected from the Thesaurus Study and used in the Semantic Differential Attitude Scaling under the Concept &quot;Others&quot;</td>
<td>122</td>
</tr>
<tr>
<td>4.</td>
<td>Origin of Scales and Factor Loadings of Scales Selected from the Thesaurus Study and used in the Semantic Differential Attitude Scaling under the Concept &quot;Helper Purposes&quot;</td>
<td>123</td>
</tr>
<tr>
<td>5.</td>
<td>Correlated T-Test Results for Three Sample Groups on Time-Competence and Inner-Directedness (Self-Actualization)</td>
<td>70</td>
</tr>
<tr>
<td>6.</td>
<td>POI Scale Means for Three Sample Groups Compared with POI Scale Means for &quot;Criterion&quot; Groups of Self-Actualizing (S.A.) and Non-Self Actualizing (non S.A.) Adults</td>
<td>73</td>
</tr>
<tr>
<td>7.</td>
<td>Correlated T-Tests and Means for Three Sample Groups on Pre-test and Post-test of the TORI Personal and Community Growth Inventory</td>
<td>77</td>
</tr>
<tr>
<td>8.</td>
<td>TORI Scale Means for Three Sample Groups as Shown with the Poles and Middle Points of the TORI Scale</td>
<td>79</td>
</tr>
<tr>
<td>9.</td>
<td>Correlation Coefficients for POI Scales and TORI Scales for all Sample Subjects for Pre-testing and Post-testing</td>
<td>81</td>
</tr>
<tr>
<td>10.</td>
<td>Correlated T-Values and Mean Scores for Two Student Groups on the Semantic Differential Concept of &quot;My Perceptions of the Subject Matter&quot;</td>
<td>84</td>
</tr>
</tbody>
</table>
11. Correlated T-Values and Mean Scores for Three Sample Groups on the Semantic Differential Concept of "My Perceptions of Myself" ........................................ 87

12. Correlated T-Values and Mean Scores for Three Sample Groups on the Semantic Differential Concept of "My Perceptions of Others" ........................................ 88

13. Correlated T-Values and Mean Scores for Three Sample Groups on the Semantic Differential Concept of "My Perceptions of My Purposes as a Teacher" .................. 89

14. The Direction of the Mean Score Changes from Pre-testing to Post-testing for All Three Groups on All Fifty-Seven Scales under the Attitude Concepts Myself, Others, and Purposes of the Helping Relationship ........................................ 92
ABSTRACT

AN OBSERVATION OF THE PERSONAL GROWTH OF THE TEACHERS AND STUDENTS OF AN OPEN EDUCATION TEACHER PREPARATION PROGRAM (July 1972)

Deborah Marie Forster, B. S., University of Minnesota
M. Ed., Stanford University
Directed by: Dr. R. Mason Bunker

The Focus of This Study

This study focuses on the development of positive beliefs about self in students preparing to become teachers. It examines the growth in self-actualization, personal and community trust, openness, and attitudes toward subject matter and the helping relationship of thirty-five undergraduates, fourteen graduates, and eight faculty during the fall semester (1971) of an open education teacher preparation program at the University of Massachusetts. This study examines changes in participant perceptions as a function of the program experiences.

Specifically the study addressed itself to the following questions:

A. Self-Actualization:

Will the teachers' and students' perceptions of their self-actualization (inner-directedness and time competence) increase positively from pre-test to post-test as manifested on the Personal Orientation Inventory?

xi
B. Personal and Community Trust and Openness:

Will the teachers' and students' perceptions of personal and community trust and openness increase positively from pre-test to post-test as manifested on the TORI Personal and Community Growth Inventory?

C. Subject Matter Meaning:

Will the students' perceptions of subject matter meaning increase positively from pre-test to post-test as manifested on a semantic differential?

D. The Helping Relationship:

Will teachers' and students' perceptions of the helping relationship increase positively from pre-test to post-test as manifested on a semantic differential?

Results

A correlated *t* test was the statistical analysis used to determine the level of difference between the subjects' pre-post test scores on all three instruments. Significant changes occurred in the following areas:

1) Graduate and undergraduate students' self-actualized inner-directedness,

2) Undergraduates' personal openness and trust, and

3) Graduate and undergraduate perceptions of the subject matter relevance.

Non-significant findings occurred in:

1) Teachers' self-actualized time competence and inner-directedness and graduate and undergraduate student time competence,

2) Teacher, graduate, and undergraduate community trust and openness, and teacher and graduate student personal trust and openness, and

3) Teacher, graduate, and undergraduate students' perceptions of the helping relationship.

xii
Conclusions

The study concluded that, although all findings were not statistically significant, all the groups showed positive growth in self-actualization and personal and community TORI except the teachers' self-actualized time competence which regressed slightly. Further, a positive relationship exists between the students' perceptions of the subject matter and the open education program but there is not a relationship between the subjects' perception of the helping relationship and the open education program studied.
CHAPTER I

THE PROBLEM AND PURPOSE OF THE STUDY

The Problem Defined

The purpose of this investigation is to study the effects of an open education teacher preparation program on subjects' perceptions of their self-actualization, personal and community trust, subject matter relevance, and views of the helping relationship. The following definitions will be used in this study:

1. Open education (Walberg and Thomas 1971) is defined as an educational environment in which students are actively involved in the decisions, plans for, and evaluation of their own learning.

2. Self-actualization (Shostrom 1966a) is defined as time competence, that is the extent to which the subject focuses on actively living in the present rather than the past or future and inner-directedness as seen in the subject's ability to guide his experiences primarily from within himself rather than depending on others extensively.

3. Personal and community trust (Random House 1969) refers to the subjects' confidence in and reliance on himself as well as those he interacts with, (his community), (Gibb 1968).

4. Subject matter relevance (Combs et al. 1971) is seen as the extent to which the students perceive the subject matter of the open education teacher preparation program as relating to their needs and purposes as persons preparing to become teachers.

5. The helping relationship (Combs et al. 1971) is defined as the relationship of helping which develops between the teacher and the student. The subjects' perceptions of three facets of the helping relationship are explored in this study: perceptions of themselves as helpers, perceptions they have of others they attempt to help, and perceptions of their purposes in helping others. In the case of the
teacher as the helping person, the teacher facilitates the students' releasing their own energies and behaviors, instead of "controlling" student behavior toward certain ends and manipulating, coercing, and blocking the student's behavior.

These above areas of the subjects' perception are defined more extensively throughout chapters I, II, and III of this study.

Since some of the literature on teacher effectiveness suggests that the teachers' perceptions of self affect student growth, this investigation studies a teacher preparation program which may help develop positive personal growth in students preparing to be teachers. The subjects' growth toward self-actualization is studied specifically in a teacher preparation program based on open assumptions of learning, for it is believed that open education provides the kind of educational experiences and climate which the literature suggests will nurture growth toward student self-actualization. Such experiences are: 1) the involvement of students in the processes of learning and specifically decision making, 2) development of personal and community trust and openness, and 3) provision of subject matter relevant to the students' purposes and goals.

The Focus of This Study

This study focuses on the development of positive beliefs about self in students preparing to become teachers. It examines the growth in self-actualization, personal and community trust, openness, and attitudes toward subject matter and the helping relationship of thirty-five undergraduates,
fourteen graduates, and eight faculty during the fall semester (1971) of an open education teacher preparation program at the University of Massachusetts, Amherst. The major focus of this study is on the students' inner-directedness. This study examines changes in participant perceptions as a function of the program experiences. In this context the literature suggests that a distinct relationship does indeed exist between what the teacher believes about himself and his effectiveness as a teacher. Trent (1957) found that teachers tend to see others as they see themselves. Persons who see themselves as acceptable, tend to accept others more openly (Omwake 1954). The reverse also tends to be true, that self-rejection leads to rejection of others (Omwake 1954).

Furthermore, Brookover et al. (1965, 1967) found that teachers' attitudes and opinions of students directly influenced both the students' feelings about themselves as well as their academic success. Brookover, Erickson, and Joiner conclude:

The hypothesis that students' perceptions of the evaluations of their academic ability by others (teachers, parents, and friends) are associated with self concepts of academic ability was confirmed (1967, p. 110).

On the other side of the coin, children who felt their teachers' perceptions of them were positive were rated higher in academic achievement and positive classroom behavior by their teachers than children who saw teachers as feeling negatively toward them (Davidson and Lang, 1960). Gooding (1964) and Vonk (1970) found that teachers best liked by
students and seen as most competent by supervisors were found to have positive views of themselves, whereas teachers rated low by students and supervisors tended to have negative views of themselves. Furthermore, a significant correlation was found between teacher self-perceptions and teacher purposes with students (Vonk 1970). That is, those teachers who felt positively about themselves tended to have broad purposes and sought student ends in teaching. Those teachers who felt negatively about themselves tended to have narrow purposes and sought their own ends in teaching.

Clearly the literature states that there is a strong relationship between what the teacher believes about himself and his effectiveness in helping students grow both personally and academically. Based on the assumption that this relationship between teacher self-perception and student growth does in fact exist, this investigator is interested in developing positive self-perceptions in students taking teacher preparation courses. However, before positive self-perceptions can become a realizeable goal in teacher education, an operational definition as well as an instrument to measure growth in self-concept are needed. For the purposes of this study self-concept is defined as the perceptions one holds of one's self. These perceptions are made up of one's beliefs, values, and attitudes concerning one's self.

In this same context of positive self-concepts Maslow (1954, 1962) describes the self-actualizing person as one who tends to feel positively about himself in terms of being
adequate, competent, and creative. Maslow refers to self-actualizing persons as people who deal effectively and creatively with day to day problems and who are guided in their dealings primarily from within themselves, that is these persons are inner-directed rather than outer-directed. Further, Shostrom (1966) in his test of self-actualization, the Personal Orientation Inventory, operationalizes self-actualization as pertaining to those persons who tend to be "inner-directed" and "time competent." The time competent person lives primarily in the present with full awareness, contact, and full feeling reactivity. He sees the past and future as meaningfully related to the present, but his focus is on the present as he attempts to work effectively with day to day concerns. The time incompetent person tends to live in the past with regrets or in the future with goals and anxieties. Shostrom defines time competence in the following paragraphs:

The self-actualized person is primarily Time Competent and thus appears to live more fully in the here-and-now. He is able to tie the past and the future to the present in meaningful continuity. He appears to be less burdened by guilt, regrets, and resentments from the past than is the non-self-actualized person and his aspirations are tied meaningfully to present working goals. He has faith in the future without rigid or over-idealistic goals. The self-actualized individual's past and future orientations are depicted as reflecting positive mental health to the extent that his past is used for reflective thought and the future is tied to present goals. His use of time in a competent way is expressed in a Time Ratio score of approximately 1:8, as compared to the non-self-actualized Time Ratio of about 1:3. . . .This marked time incompetence suggests that the non-self-actualized person does not discriminate well between past or future. He is excessively concerned with the past or the future relative
to the present. He may be disoriented in the present by splitting off his past or future. A person who is Past-oriented may be characterized by guilt, regret, remorse, blaming and resentments. He is a person who is still nibbling on the undigested memories and hurts of the past. A person who is Future-oriented is an individual who lives with idealized goals, plans, expectations, predictions and fears. He is the obsessive worrier who nibbles at the future. A person who is a Present-oriented person is the individual whose past does not contribute to the present in a meaningful way and who has no future goals tied to present activity. He is a person who engages in meaningless activity and unreflective concentration. He is the busy-body who is always actively avoiding facing himself (Shostrom 1966, pp. 15 and 16).

Inner-directed persons are primarily independent and self-supportive, whereas other-directed persons tend to be primarily dependent on others for support. Shostrom defines inner-directed and other-directed persons in this way:

The inner-directed person appears to have incorporated a psychic "gyroscope" which is started by parental influences and later on is further influenced by other authority figures. The inner-directed man goes through life apparently independent, but still obeying this internal piloting. The source of inner-direction seems to be implanted early in life and the direction is guided by a small number of principles. The source of direction for the individual is inner in the sense that he is guided by internal motivations rather than external influences. This source of direction becomes generalized as an inner core of principles and character traits.

The Other-Directed Person. The other-directed person appears to have been motivated to develop a radar system to receive signals from a far wider circle than just his parents. The boundary between the familial authority and other external authorities breaks down. The primary control feeling tends to be fear or anxiety of the fluctuating voices of school authorities or the peer group. There is a danger that the other-directed person may become over-sensitive to "others" opinions in matters of external conformity. Approval by others becomes for him the highest goal. Thus, all power is invested in the actual or imaginary, approving group. Manipulation in the form of pleasing others and insuring constant acceptance, becomes his primary method of relating. Thus, it can be seen that the original feeling of fear can be transformed
into an obsessive, insatiable need for affection or reassurance of being loved.

The support orientation of the self-actualizing persons tend to lie between that of the extreme other and the extreme inner-directed person. He tends to be less dependency- or deficiency-oriented than either the extreme inner- or the extreme other-directed person. He can be characterized as having more of an autonomous self-supportive, or being-orientation. Whereas he is other-directed in that he must to a degree be sensitive to people's approval, affection, and good will, the source of his actions is essentially inner-directed. He is free; but his freedom is not gained by being a rebel or pushing against others and fighting them. He transcends complete inner-directedness by critical assimilation and creative expansion of his earlier principles of living. He discovers a mode of living which gives him confidence. For the validating group the ratio between this other-directedness and his inner-directedness is approximately 1:3. This ratio contrasts to the non-self-actualized group ratio of approximately 1:1 (Shostrom 1966, p. 16).

In this study, Maslow's self-actualizing person will be used as the ideal model for persons with positive self concepts. Shostrom's test of self-actualization will provide both the operational definition and the measurement of self-actualization.

According to the findings in the literature, environments in which students are expected to grow in self-actualization (as measured by their increased inner-directedness and time competence) are those environments in which trust and openness prevail and in which students are involved in decisions concerning their own learning. Thus a teacher preparation program based on open assumptions of learning was selected for this study. The open education concept involves students directly in the decisions, design, and evaluation of their own learning experiences; the open education program
goals include developing students who are competent, inner-directed, and creative. Support of open education which nurtures student self-actualization is suggested in the literature (Walberg and Thomas 1971).

The open classroom concept assumes that student self-confidence is highly related to his capacity for learning (Barth 1970). Making important choices affecting one's learning is a central concern in open education. De Charm (1971) found that through involving students directly in the decisions and evaluation of their learning they increased in inner-directedness and became "origins" in their education rather than "pawns." "Origin" behavior and attitudes are seen in students originating many of their educational goals, structures, and processes of evaluation. Pawn behaviors and attitudes are evident in students who follow the teacher's goals for and evaluation of their learning which eventually leads to student dependence on teachers for control, guidance, and evaluation of most classroom learning experiences. While de Charm explains that the terms "pawn" and "origin" represent two extreme poles on a continuum of student behaviors and attitudes, he finds the terms are useful in describing two different phenomena which in reality are intertwined. He finds that origin behavior is stronger than pawn behavior in learning environments where students are growing in social and personal responsibility and competence.

In addition to self-actualization, trust will also be examined in this study. Trust is defined as reliance on and
confidence in oneself, others and objects in the environment (Random House Dictionary 1969, p. 1520). Gibb (1968) finds that personal and interpersonal growth can only take place to the extent that trust is on the increase. "Growth occurs as a movement from fear towards increasing trust (Gibb 1972, p. 157)." He further defines trust and fear as the primary dynamics of the growth process.

Trust and fear are the primary dynamics of this process. The fear-trust level becomes an organismic habit which is central to the personality of the individual, group, or organization. Fear and trust are co-existent and polar states which are the ambivalent themes of human life. They are master processes which predetermine and control the other psychological events in the social organism (Gibb 1968, p. 1).

In Gibb's (1972) theory of growth, he suggests that:

".. any social system--a group, person, community, nation, or organization--is best understood and improved most effectively by focusing upon system characteristics of a living, growing organism (p. 157)."

He suggests that the ".. .primary variables in organic growth are the antithetical processes of fear and trust and their correlates (Gibb 1972, p. 157)." The primary correlates of this central process of growth, that is, movement from fear to increasing trust, are:

.. .movement from depersonalization and role towards greater personalization, from a closed system towards a more open system, from impositional motivation towards greater self determination, and from dependency towards greater interdependence. TORI is a convenient acronym for these four factors in the organic growth of living systems: trust, openness, realization, and interdependence (Gibb 1972, p. 157).

Gibb (1968) finds in groups where leaders are personal and open that environmental trust tends to increase
and all participants experience growth at the personal and the social level. He emphasizes that in a group where people are trying to meet personal and social needs participants must perceive trust at both the individual and the communal or group level in order for growth toward goals to be achieved. Since this researcher also believes that trust is a necessary ingredient for growth to occur, the participants' views of both individual and community TORI during teacher preparation will be assessed. Even though the majority of Gibb's (1968) work in developing trust in individuals and communities has taken place over short intense periods of time and training such as a weekend encounter, it was felt that studying his growth theory over a period of a semester in teacher education may also show interesting results in terms of the subjects' view of the trust.

The Purpose of This Study

The major purposes of this study are threefold: the observation of student and teacher growth in self-actualization, student and teacher growth in personal and community trust and openness, and student attitudes toward subject matter of the teacher preparation program under study as compared to attitudes toward subject matter in previous learning experiences. Regarding the last stated purpose Combs (1965a) notes that subject matter which is meaningfully related to the needs and purposes of the students will help students grow in confidence and independence.
The minor purposes of this study are to investigate the teacher and student attitudes toward the three areas in the helping relationship which were found to be related to helper effectiveness and ineffectiveness in the *Florida Studies in the Helping Professions* (Combs et al. 1969). The three areas are: the helpers' attitudes concerning their perceptions of themselves, perceptions of others whom they attempt to help, and their perceptions of their purposes as helpers (the present case as teachers).

The independent variable in this study is the open education teacher preparation program. The major dependent variables are the participants' attitudes toward their own self-actualization, personal and community trust and openness, and student attitudes toward the subject matter. The minor dependent variables are the participants' attitudes toward three areas of the helping relations. Although this investigator values the content of learning in teacher education as well as demonstrated teacher competencies these areas will not be discussed in this study.

Specifically the study addressed itself to the following questions:

A. Self-Actualization:

Will the teachers' and students' perceptions of their self-actualization (inner-directedness and time competence) increase positively from pre-test to post-test as manifested on the Personal Orientation Inventory?
B. Personal and Community Trust (TORI):

Will the teachers' and students' perceptions of personal and community trust (TORI) increase positively from pre-test to post-test as manifested on the TORI Personal and Community Growth Inventory?

C. Subject Matter Meaning:

Will the students' perceptions of subject matter meaning increase positively from pre-test to post-test as manifested on the semantic differential?

D. The Helping Relationship:

Will teachers' and students' perceptions of the helping relationship increase positively from pre-test to post-test as manifested on the semantic differential?

Chapter Summary

This chapter has presented an overview of the study purposes and rationale. Included is a personal statement of the interests of this investigator and an elaboration of major and minor study purposes and theoretical support. Lastly the questions to be researched in this study were presented. In the next chapter will be a survey of the literature related to these questions.
CHAPTER II

REVIEW OF RELATED LITERATURE

Categories of Related Literature

This study is an investigation into teacher and student growth in self-actualization, personal and community trust, the helping relationship, and the subjects' attitudes toward the subject matter. The investigation spans a semester of teacher preparation in the methodology of the open education concept.

In an effort to explore the basic issues and assumptions raised in the first chapter of this study, the following areas of related research will be examined:

1. Influence of teacher attitudes and beliefs;
2. Persons who are self-actualized;
3. Leadership styles of teachers and student growth;
4. Making subject matter meaningful;
5. Education for personal and community growth;
6. Teacher effectiveness in open education.

Although much of the related research is taken from studies of variable age groups the findings are germane to the objectives of this study.

Influence of Teacher Attitudes and Beliefs

Numerous studies have strongly suggested that the teacher's attitudes towards himself and others are perhaps more important than his techniques, practices or
materials. What the teacher believes about himself deeply influences; how he treats his students (Berger 1953, Fey 1954, Luft 1966). A distinct relationship has been reported between the way an individual sees himself and the way he sees others. People who accept themselves tend to be more accepting (Omwake 1954). Omwake also found that those who reject themselves have low regard for others and perceive others as being self-rejecting. Jersild (1952, 1960, and 1965) also emphasizes the importance of teachers' attitudes about themselves. He finds that personal problems often interfere with teaching effectiveness and suggests that in-service group counseling should be available to teachers.

The teacher's understanding and acceptance of himself is the most important requirement in any effort he makes to help students to know themselves and to gain healthy attitudes of self-acceptance (Jersild 1955, p. 3).

A number of studies in the helping professions have identified three areas of perception as being most important for counselors, ministers, nurses, and teachers; these are perceptions of self, others, and how they perceive their purposes as helpers (Gooding 1964, Combs and Soper 1963, Benton 1964, Dickman 1967, Usher 1966, and Vonk 1970). The effectiveness or ineffectiveness of helpers, as rated by their clients or supervisors, correlated positively with judges' inferences of helper perceptual organizations from observed helper behaviors. Effective helpers were found to see themselves as identified-with, adequate, trustworthy, wanted, and worthy whereas ineffective helpers tended to view
themselves as apart from others, inadequate, unwanted and unworthy. Effective helpers tended to see others as able, friendly, worthy, internally motivated, dependable, and helpful and they perceived their helping tasks as freeing, concerned with larger issues, self-revealing, involved, process-oriented, and altruistic.

Gooding’s (1964) study of effective and ineffective elementary school teachers strongly suggests that teacher education needs to place greater emphasis on developing sensitivity in student teachers.

He suggests that this can be accomplished by placing greater emphasis on perceptual factors during the teacher’s training and including a perceptual emphasis in the psychology taught to teacher trainees. While teaching a methodological progression of steps for success in the classroom may be easier than facilitating the development of new and more positive ways of seeing the self and students, in order to develop effective teachers we must include both perceptions and behaviors in teacher education.

As mentioned earlier, teacher effectiveness is determined by judges who infer the perceptual organizations of the teacher through observing their behaviors. These inferences coupled with the opinions of the teacher’s effectiveness by supervisors and/or students constitute the data on which the teacher is judged to be effective or ineffective. Those teachers who are judged effective, that is most helpful to student growth and learning, by supervisors or students, tend
to hold perceptions of themselves and others which are positive and helping purposes which are freeing. Those teachers who are judged ineffective by supervisors and students are inferred to having primarily negative views of themselves and others and their teaching purposes tend to be those of controlling student behavior to meet prescribed instructional ends.

In the helping profession studies the teachers' beliefs and perceptions concerning themselves and their teaching purposes were inferred by judges from two types of teacher behaviors: written behaviors such as critical incident essays written by the teacher (Vonk 1970) or actual teaching behaviors as observed by judges (Gooding 1964).

In regard to measuring an individual's perceptions, Combs (et al., 1971) found that inferential techniques of assessing one's self perceptions or self concept are superior to self report technique. Combs states that:

"...since perceptions (ie., beliefs of self) lie inside people, that they are not available for direct manipulation or measurement. It is necessary therefore, to approach the matter through some form of inference made from a sample of observable behavior (Combs et al., 1969, p. 17)."

While the findings in the Florida Studies in the Helping Professions (Combs et al., 1969) may be questioned methodologically on their use of supervisor or client opinions in the evaluation of helper success, these studies do show design rigor in establishing interjudge reliability and care in maintaining the anonymity of all participants involved. Combs (1961) found that study participants reported more openly and
honestly on themselves when participant identity remained anonymous than when participants' identity was revealed by names written on answer sheets.

A positive relationship was found between students' perceptions of teachers' feelings toward them and their self-perceptions (Davidson and Lang 1960). The more positive the children's perceptions of their teachers' feelings, the better their academic achievement and the more desirable their classroom behavior as rated by the teacher. As a result of many years of study, Brookover, Erickson and Joiner (1967) concluded that the students' self concept of their academic ability is related to the students' perceptions of the evaluations of their academic ability by others such as teachers, parents and friends. Whatever the teacher believes or expects of her students tends to become a self-fulfilling prophesy (Rosenthal and Jacobson 1968).

Clearly, these findings suggest that teachers' attitudes and perceptions of themselves are related to how they view students, and in turn how they behave with students. As was seen, a number of authors are suggesting that what one believes about oneself influences what one believes about others and indeed how he perceives his entire environment. In turn, his behaviors are directly influenced by what he perceives about his environment at any one time. This phenomenon of inter-action between the perceptions of oneself, the environment, and one's behavior is known in perceptual psychology as the perceptual basis of behavior.
The basic concept of perceptual psychology is that all behavior of a person is the direct result of his field of perceptions at the moment of his behaving. More specifically, his behavior at any instant is the result of 1) how he sees himself 2) how he sees the situations in which he is involved, and 3) the interrelations of these two. When I see myself as a lecturer, standing in front of an audience, I behave like a lecturer. My audience, on the other hand, seeing themselves as an audience, behaves like an audience. Each of us behaves in terms of what seems to him to be in the situation he is in at the moment. The immediate causes of behavior are to be found in the perceptions existing for the behaver at the moment of acting (Combs 1965a, pp. 12-13).

Following this line of reasoning, two teachers with two different sets of perceptions about themselves would probably perceive and react to students quite differently. For example, if a teacher did not trust in himself enough to develop instructional guidelines for his students based on their changing needs, but preferred, even after many years of teaching, to follow district manuals then, chances are, he would not trust his students to structure their learning either. On the other hand, a second teacher might find challenge in restructuring and re-organizing content, trusting himself to make good decisions. Chances are he would also trust his students to organize a good deal of their learning. Trusting the self would not necessarily always lead to trust in others, but the research does suggest a strong correlation between what one believes about himself and what he believes about others and, finally, how he behaves. If schools are interested in developing feelings of adequacy in students, schools must hire or train teachers who feel adequate about themselves. In the present study, the purpose is to examine
the development of feelings of adequacy in students preparing
to be teachers.

Persons Who Are Self-Actualized

Maslow (1954, 1962) has suggested that persons who feel adequate about themselves, who have positive self-perceptions and are constantly growing, are self-actualized. In his studies on self-actualization, Maslow found that self-actualized people tend to develop and utilize more of their unique potentialities and are relatively free of the inhibitions and emotional turmoil which less self-actualized people experience. Self-actualization is seen as the on-going process of growth toward experiencing one's potential in the here and now.

Those persons who have a positive view of themselves or are self-actualized tend to see themselves as "able to." Combs offers a summary description of self-actualized persons as viewed by Maslow, Rogers, Kelley, and Combs:

. . . adequate persons, feeling able, can more effectively assess their needs for self-improvement; handle their feelings constructively; initiate change as well as accept change; assess situations and design approaches to them; revise their values and establish new value-goals; cope with problems inventively as well as realistically; stock-pile successes as guides to future self-direction; accept and set reasonable, realistic situational limits; keep growing steadily in their desired or chosen ways, and reach out and up for peak experiences (Combs 1962, p. 100).

Teachers should be helped to become increasingly self-actualized if they are to be effective in helping their students become more adequate (Combs et al., 1971). Purkey (1970,
p. 9) points out that one's self-concept is made up of a variety of beliefs one holds about oneself and that these beliefs may vary in positiveness and negativeness. For example, one may have a positive self-concept as a teacher and a low self-concept as an athlete. Perhaps this idea also applies to the concept of self-actualization. In this study open education is investigated as a learning environment where both teachers and students can grow in self-actualization.

Murray (1966) found in studying 26 home economics teachers that teachers who were perceived as effective by 2,333 high school students' ratings of "teacher concern for students" were also found to be more self-actualized as defined by Shostrom (1966) than teachers rated low by students. When these correlations were analyzed according to grade level they were found to be significant for grades 7, 8, 9, and 10; differences for grades 11 and 12 did not reach statistical significance. Self-actualization was measured in Murray's study by Shostrom's Personal Orientation Inventory (POI). The growth of teachers in self-actualization is a focus in this investigation and is measured by Shostrom's instrument.

It follows that helping teachers to develop positive self perceptions would contribute to their effectiveness as helping persons in the classroom. Furthermore, it has been suggested that, since the concepts of self-actualization adequately describe a person who has a positive perception of himself, growth toward self-actualization becomes a goal in
teacher education. Student growth toward self-actualization during teacher preparation is the main focus of this study.

Leadership Styles of Teachers and Student Growth

There is evidence that educational leadership which involves students' thinking and ideas in planning, performing, and evaluation tends to influence student attitudes and achievement more positively than education based primarily on the thinking of teachers and administrators. A student-centered climate is characterized by teachers' accepting feelings and inviting student response as well as praising and accepting student ideas. A teacher-centered climate is characterized by lecturing, giving directions, and criticizing or justifying authority (Withall 1949).

Flanders (1960b, 1960c) found that teachers of high achievement classes 1) accepted, clarified, and used pupil ideas significantly more, 2) criticized significantly less, and 3) encouraged significantly more pupil-initiated talk than did teachers of students who scored low on achievement tests. Hoover (1963), failed to reveal attitudinal differences in students from teacher-centered, pupil-centered, and group-centered classroom climates. Miller (1964), however, found in a controlled experiment that junior high school pupils in classes of responsive teachers had significantly more positive attitudes and used significantly higher levels of thinking than pupils in classes of directive teachers. In classrooms
in which achievement and attitudes were superior, teachers did not blindly pursue a single behavioral-instructional path to the exclusion of other possibilities. More successful teachers were found to range along a continuum of interaction styles which varied from fairly active, dominative support on the one hand to a more reflectively, discriminating support on the other (Flanders 1960a). Less successful teachers tended to use the same interaction styles in a more or less rigid fashion. There is a variety of evidence here that "student-centered" as opposed to "teacher-centered" instruction produces more positive attitudes and greater learning in students. It would also seem that a very important aspect of the student-climate for learning is "making use of pupil's ideas."

However, characterizing teaching in terms of opposite poles, may defeat our purposes. In measuring classroom climate, research has made it clear that teachers are not one type or the other, dominative or integrative, direct or indirect, but that all teachers use both types of behaviors at some time (Amidon and Flanders 1963). Variations between teachers lie in degrees of difference, and findings suggest effective teachers are teachers whose classrooms are most often characterized by "integrative" or "indirect" or "student-centered" or "democratic climates." Amidon and Flanders suggest that perhaps we need to introduce the idea of flexibility of teacher behavior wherein teachers vary their behavior according to the circumstances to achieve desired
consequences. This investigator feels that perhaps we should be researching the ability of the teacher to shift from one type of influence to another as the occasion demands or warrants rather than the maintenance of particular classroom climates. Walberg and Thomas (1971) describe the teacher in open education as an active decision maker in the processes that affect the child's learning.

The role of the teacher in a situation which is structured both by active, decision-making children and by an active, decision-making adult calls for a more precise definition of the two roles. In practice, each teacher strives for her own definition based on her beliefs about children and the process of learning and upon her experience with the children in her class, and assisted by resource people, advisors, and colleagues (p. 10).

Bussis and Chittenden (1970) describe a double classification scheme for depicting the role of the child and teacher in education: This double scheme is based on the extent to which 1) the individual teacher and 2) the individual child is an active contribution to decisions regarding the content and process of learning. The figure below shows this scheme (Walberg and Thomas 1971, p. 10, from Bussis and Chittenden 1970).

```
    high
      laissez-faire
    /        \\ contribution of teacher
  low     high

programmed instruction  traditional British

low
```
In open education both the teacher and the child are active participants in learning as seen in their high contributions to the educational process. This approach to education requires a good deal of flexibility on the part of the teacher in his leadership style (Walberg and Thomas 1971).

While research on teacher effectiveness does not find any specific teaching behaviors, that is methods or skills, which are common to all good teaching (Gage 1963, Biddle 1964, Smith 1971), a number of studies do suggest that a variety of behaviors on the part of a teacher who is professionally competent and personally sensitive often leads to high achievement and positive attitudes in students. Furthermore, studies of management in organizational psychology strongly suggest that managers who have flexible leadership styles tend to be more effective than managers who do not. The life cycle theory of management suggests that effective leaders adjust their leadership style to the maturity level of their followers (Hersey and Blanchard 1969). As the level of maturity of one's followers continues to increase, appropriate leader behavior not only requires less and less structure (task) but also less and less socio-emotional support (relationships).

It would seem that successful leaders, whether in industry or in classrooms, tend to be flexible and attempt to adjust their style to the needs of the followers. These findings are similar to de Charm's (1971) in that students who are origins (see Chapter I) in learning, that is more independent, are less dependent on teacher decisions.
If a teacher's effectiveness is determined by the interaction of his style and the environment (students and other situational variables), then it follows that there is no single ideal teacher behavior style which is appropriate to all situations. It would also follow that an effective teacher must be able to diagnose the demands of the environment and then either adapt his teaching style to fit these demands or develop the means to change some or all of the other variables. A system of overall classroom management within which teachers and students can grow is a framework in which teachers could use flexibility and individualization with students. This study focuses on the open classroom as an environment in which teachers use flexible leadership styles as they promote both student growth and their own.

A system of management for personal fulfillment as well as social responsibility has been developed by Gibb (1968) through his work with groups. He contends that in order for individuals within a group setting to develop independence and interdependence trust leading to acceptance must be established. From acceptance, individuals move on to openness, to self-realization and goal setting and, finally, to interdependence and the establishment of constructive community control.

Of three leadership styles, (democratic, authoritarian, and laissez-faire), democratic tended to produce students who were inner-directed and independent (Lewin et al., 1939, pp. 271-299). Lewin, Lippitt, and White found that authoritarian
leadership styles tended to result in students doing a greater quantity of work, but that they were less original, more hostile, competitive and aggressive, felt higher tension, expressed more discontent and dependence and greater feelings of self-concern. The democratically-led group became increasingly productive, praised each other more, were more cooperative, friendly, stable, and highly constructive, had greater teamwork, expressed more objective attitudes, and had greater feelings of we-ness and of concern for group goals. The laissez-faire led groups did less work and poorer work, were more aggressive than the authoritarian-led group, and spent more time in horseplay. According to this study it seems that both personal and group growth occurred more readily under the democratic leadership. Combs (1962) corroborates the importance of the democratic climate in the learning of values:

In general, this means that we must find ways of creating school and classroom atmospheres which facilitate the process of exploration and discovery of personal meaning—where there can be a freeing, expanding and changing of perception. Students need to have many choices; when they discover something of interest, they need to have plenty of time to work at it. Self-selection in an environment rich in materials, where students sense that how they feel and what they think are important, can be extremely effective in helping students to become more fully functioning. Through acceptance and trust, particularly teachers play a strategic role in this learning process (p. 202).

Gibb (1970a) points out that personal and community growth occurs in direct relation to the trust in the environment. A lack of trust amongst group members leads to role facades, depersonalization, and alienation from the group or
community. The resultant effect is counter growth activities based on deficit needs, which leads to non-self-actualization (Maslow 1954).

The literature on self-concept theory (Purkey 1970) and creativity (Parnes 1967) supports the notion that a learning environment which is free from threat and is built on trust and openness tends to develop both congruency and spontaneity in the learner's growth. Learners who feel it is "safe to be themselves" allow themselves to flow into their learning experiences, thus becoming at one with their on-going experiencing rather than becoming alienated from themselves.

Self-actualized persons are very much involved in their on-going experiencing and are growth motivated. They actually learn to grow on themselves:

Growth is, in itself, a rewarding and exciting process, eg. the fulfilling of yearnings and ambitions, like that of being a good carpenter; the steady increase of understanding about people or about the universe, or about oneself; the development of creativeness in whatever field or, the most important, simply the ambition to be a good human being. People who are predominantly growth motivated are people who grow upon themselves and instead of wanting less and less, such a person wants more and more of, for instance, education. The person rather than coming to rest becomes more active. The appetite for growth is whetted rather than allayed by gratification as is the case with deficit motivated people. Partly this intrinsic validity of living comes from the pleasure-ableness inherent in growing and in being grown. But it also comes from the ability of healthy people to transform means--activity into end-experience, so that even instrumental activity is enjoyed as if it were end activity (Maslow 1969, p. 226).

Clearly, the research suggests that democratic leadership tends to encourage more inner-directedness in students than does authoritarian leadership. Further, Gibb
(1972) suggests that leaders who are personal and open tend to nurture environmental trust. Without such trust, the participants do not experience self-trust leading to personal and communal development. In this study both the teachers' and the students' perceptions of personal and community trust and openness are observed to determine if the trust and openness will increase as a function of the subjects' experiences in this open education teacher preparation program. While these studies describe some of the ways in which students need to be involved in learning in order to grow toward self-actualization, paying particular attention to leadership styles and climates supportive of such growth, other studies point to the importance of the meaning of the subject matter to the student.

Making Subject Matter Meaningful—Affect in Education

Research findings on learner-centered or teacher-centered interaction styles suggest that the amount of cognitive gain is largely unaffected by the autocratic or democratic tendencies of the instructor. When affective gains are considered, however, the results are somewhat different. In a review of 34 studies comparing non-directive with directive instruction, Stern (1969) concluded:

Regardless of whether the investigator was concerned with attitudes toward the cultural outgroup, toward other participants in the class, or toward the self, the results generally have indicated that non-directive instruction facilitates a shift in a more favorable, acceptant direction (p. 345).
Throughout the years, schools have educated for cognitive or intellectual development at the expense of affective or emotional development. Polanyi (1966) points out that it is the passion of the scholar that makes for true scholarship. Overstress on the cognitive can have deleterious effects on the affective.

Under some conditions the development of cognitive behaviors may actually destroy certain desired affective behaviors and that, instead of a positive relation between growth in cognitive and affective behavior, it is conceivable that there may be an inverse relationship between growth in the two domains (Krathwohl, Bloom, and Masia 1956, p. 20).

Education which ignores the affective development of students, and encourages only cognitive development, leaves out student compassion for, and commitment to, learning. In perceptual psychology, the self is learned through interaction with the environment. One of the main forces which shape the self in the environment are "significant others." As one is loved and respected, one finds himself worthy of love and respect. The self as a vantage point for all human experiencing is the central core around which the remainder of the perceptual field is organized. "In this sense, the phenomenal self is both product of the individual's experience and producer of whatever new experience he is capable of" (Snygg and Combs 1959, p. 146).

We evaluate the world and its meaning in terms of how we see ourselves. Things are significant or insignificant, important or unimportant, attractive or unattractive, valuable or worthless, in terms of their relationship to oneself. Many students do poorly in school simply because what the school is doing seems irrelevant to himself and his world (Purkey 1970, p. 10).
The above suggests that students need to find meaning in order to do well in school.

A number of studies have suggested that the inclusion of positive teacher affect in the learning environment, has had positive effects on student attitudes and learning (Reed 1961 and Christensen 1960). The suggestion is that both student and teacher affect should be included in learning.

Perceptual psychologist Combs states that "...learning is individual and personal, that things are learned only in the degree to which the learner discovers the unique meanings of things to his particular self (1962, p. 183)."

Pearson (1966) finds that content which relates to student needs and concerns helps them to grow in inner-directedness and time competence. In investigating the effects of a series of four different group guidance processes and their relationship to successful college adjustment, Pearson found that the students from the group in which informal discussions had centered on feelings and needs of students showed a greater increase in time competence and inner-direction on the Personal Orientation Inventory than students participating in more highly structured groups. Students in groups where discussion topics were decided by the leaders, scored lower in self-actualization, time competence and inner-directedness.

The teacher preparation program used in this study attempted to focus its emphasis on personal and professional needs of the students. The Personal Orientation Inventory was used as the research instrument which could measure the students' growth in self-actualization. It was hypothesized that such growth
would take place as a function of the program efforts to involve the needs of students.

Further, subject matter must have personal meaning for the student's own purposes and goals if course content is to promote student growth toward increased inner-directedness. In regard to the meaning of subject matter Combs relates the following:

Meaning is a people problem. It happens in persons. Development of meaning is a creative occurrence as a consequence of people interacting with the world they live in. It is literally true that people do not get information from the printed page. Meanings are really discovered by the learner. Meanings are also highly personal (Combs 1971, p. 84).

Combs goes on to suggest that unless meanings are personal to students, the student's person cannot grow through education.

In summary, the above literature suggests that democratically led learning environments which nurture trust and openness and involve students as origins in decision making processes are likely to be effective in helping students become increasingly inner-directed and time competent, both traits of the self-actualized person. Learning environments which are fear producing and promote pawn behavior in students, those that are authoritarianly directed, tend to produce students who are other-directed, dependent, and involved in countergrowth activities. It is also important that the subject matter be personally meaningful to the student.

The literature also suggests that in order for students to grow toward self-actualization they need to partake of learning activities that contribute to self-growth
such as decision making. Traditionally schools have not involved students in decision making processes. In the program under study many opportunities were offered for both students and teachers to become involved in decision making. Historically, students have been forced to learn whatever adults wanted them to learn in school. The characteristics of the learning environment have demanded that students' behavior be confined to that of de Charm's pawns. Pawn attitudes and behavior have led to student dependence on the environment. The powerlessness students feel as pawns in learning is described by Weinstein and Fantini (1970). Stevens (1970) quotes Silberman as saying:

Schools discourage students from developing the capacity to learn by and for themselves, because the schools are structured in such a way as to make students totally dependent upon the teachers. The result is said to be an authoritarian system that educates for docility (p. 2).

In The Greening of America, Charles Reich (1970) describes schools as places where people in our society are conditioned to lose themselves and are trained to adopt a substitute-self which will conform to the needs of the corporate state.

The process by which man is deprived of his self begins with his institutionalized training in public school for a place in the machinery of the State. The object of the training is not merely to teach him how to perform some specific function, it is to make him become that function; to see and judge himself and others in terms of functions, and to abandon any aspect of self, thinking, questioning, feeling, loving, that has no utility for either production or consumption in the Corporate State. The training for the role of consumer is just as important as training for a job, and at least equally significant for loss of self (pp. 141-142).
Education for Personal and Community Growth

While it is the interest of this investigator to help students, both young and old, grow toward self-actualization, it appears that not only our current schools but our societal goals as suggested by Reich's (1970) work are in direct conflict with this interest. However, there are other models of education currently available which do, in fact, nurture personal growth in students. In planning education for full psychological development Alschuler (1972) suggests that a total environmental change is advantageous to nurture complete psychological development in students. Furthermore, this investigator proposes that the open classroom approach to education represents a concept of learning which incorporates components which tend to help students grow toward self-actualization.

In his paper on psychological development, Alschuler describes three procedures for organizing psychological education experiences: 1) the "confluent approach," developed by Brown (1971), wherein affective experiences are woven into the existing curriculum, 2) the "congruent approach," developed by Weinstein and Fantini (1971) and Alschuler (et al. 1970), wherein students have specific learning experiences, classes in human growth and development, and 3) the "contextual approach," such as the origin climates de Charms (1971) describes, wherein the demand characteristics of the environment are changed. In this study the open education approach to learning is studied as the "contextually"
different learning environment within which the demand characteristics of learning are changed. In changing the demand characteristics of the learning environment, the expectations, roles, rules, and cues of the situation are changed. For example, in many traditional classrooms the students are not expected to make decisions concerning their learning; as learners they are often thought of as passive recipients of knowledge and the classroom rules and cues support such behaviors in students. By contrast many of the demand characteristics of the open classroom state that students are expected to become involved in the decisions concerning their learning, thus, the students' role may be defined as one of being actively involved in a variety of learning and evaluation activities, and the rules and cues of the environment support these student expectations and roles. While the "contextual approach" to helping students grow psychologically may be the most difficult to plan, organize, and execute, it is also the most comprehensive, for it is an environment planned and organized around specific learning goals emanating from corresponding assumptions of learning.

The open-classroom as an approach to education represents a departure from traditional assumptions and goals of education. Its different assumptions and goals lead to "contextually different" learning environments; hence the demand characteristics of the learning environment are different (Walberg and Thomas 1971).
Open Education

The open education approach to education was started by Dewey (1939) as early as the 1920s and most recently developed in the United States and Britain. Open education, unlike most traditional schools, is based on a number of assumptions which support the students' becoming inner-directed, responsible, and self-fulfilled in learning. "With understanding for help, the child soon begins to develop responsibility for his own behavior rather than relying on outside authority and control (Brown and Precious 1969, p. 58). In regard to the importance of choice in learning, Moustakas (1966) makes the following comment:

Self values are in jeopardy in any climate where freedom and choices are denied, in a situation where the individual rejects his own senses and substitutes for his own perceptions the standards and expectations of others (p. 4P).

A student develops faith in his thinking and in his ability to make judgments when he is encouraged to participate in his own development by making personal decisions. Open education assumes that students can be trusted to pursue, plan, and organize their own learning (Barth 1970). Students are expected to be origins and make decisions in learning as they co-plan their learning experiences with teachers and peers.

The open-education approach encourages "family groupings" in which children from ages five to eight are grouped together in an infant school learning environment. The interdependence and community described by Gibb (1968) becomes a natural outgrowth of this plan since children are encouraged
from each other. As learners are trusted and accepted for themselves, Gibb (1970b) points out, they will allow themselves to enter the environment totally and will experience their own personal growth as well as that of the group or community. In this study the subjects' growth in personal and community trust is observed.

As Taylor et al. (1958) points out, groups of persons can work together creatively and productively if certain conditions are maintained.

Groups can be more creative than individuals because of the mutual stimulation members can provide for one another. However, this proves to be true only under certain circumstances. Such conditions as having a non-evaluative climate in the group, a decision-making structure appropriate to the task, and enough time to explore unusual ideas. Also certain tasks that require a wide range of information or require complex evaluation of various alternatives, require more time (pp. 23-47).

Brown and Precious (1969) indicate that the priorities of the open classroom are

***closely related to the principles involved in sociology in that they are deeply concerned with the needs of the individual and his obligations to the group of which he is a member (p. 14).

The importance of "community" to man's natural growth and development cannot be underestimated according to Gibb's (1972) theory of growth. Charles Reich (1970), however, warns us that we've lost community in our society at the same time that one of man's greatest needs is for "community."

Perhaps the greatest and least visible form of impoverishment caused by the Corporate State is the destruction of community. Man's greatest need after food and water, is for a circle of affection; man is a communal animal and he craves his kind. But even though we are starved for community in our world, we may not realize it. We
can see a physical effect when a bulldozer rips up a hillside, but today our experience of genuine human community is so limited that we are hardly aware of our loss, and the substitutes provided keep us so busy that emptiness is drowned in busyness (p. 196).

Reich goes on to explain that we have substituted for real town and neighborhood communities the false ones of apartments and offices which actually isolate people from one another.

Perhaps the open classroom model of education where "the school is part of the community in which the children live" (Brown and Precious 1969, p. 17) can be instrumental in helping the individuals in our society regain a much needed sense of community. In the present study the subjects' growth in community is observed.

Teacher Effectiveness in Open Education

Since the open classroom is "contextually" different, it demands different behaviors from teachers as well as students. Teachers are expected to originate learning experiences for children which are in harmony with the child's total growth needs. This system requires a good deal of inner-directedness and time competence on the part of the teacher as he seeks to diagnose children's needs as accurately as is possible. Brown and Precious (1969) describe teachers in open classes as spending most of their time with children providing intensive diagnostic and resource help rather than giving whole group instruction. The teachers' ability to accurately diagnose student needs and to make appropriate interventions is extremely important to the success of the open classroom.
The teacher might be unable to diagnose with confidence precisely where the child is with respect to the conceptual relations embodied in the attribute blocks with which he is working; she might decide she has already intervened enough that day; her reason for refraining might be a hope that the child will move on himself, without external assistance. On the other hand, there will be numerous circumstances which favor intervention; the point is that it is the teacher's professional judgment which determines whether and when (Cazden 1969, p. 103).

Open education teachers are noted for their special awareness and alertness to the diverse qualities of their children's activities and learning styles. A British headmistress once said, "The teacher has got to be ready. That I think, is the main difference. She's got to be aware--all the time (Cazden 1969, p. 3)." The teachers seem to move, act, and converse from a stance which arises from responding to the constantly posed question: How can I be of use to this particular child at this particular time?

Since the teachers' perceptions can only be as effective as his or her perceptive and diagnostic ability, her effectiveness as a teacher is largely based on her ability to use herself personally and professionally in behalf of the students' growing needs. Combs (1971) describes this effective use of self:

Professional helpers must be thinking, problem-solving people; the primary tool with which they work is themselves. Effective helping relationships may be a function of the effective use of the helper's self in bringing about fulfillment of his own and society's purposes (p. 5).

A number of studies in the helping professions (Combs and Soper 1963, Gooding 1964, and Vonk 1970) have suggested that there is a significant correlation between the
"perceptions one holds of oneself" and one's helper purposes. This finding combined with a basic principle in perceptual psychology, which states that of all the perceptions a person has, those he holds about himself influence him the most, suggests that it may behoove us as teacher educators to help our teacher trainees grow in positive views of themselves thus developing positive helping purposes. The teacher preparation program used in this study attempts to help students to develop positive views of themselves by involving them actively in learning. Their personal growth toward self-actualization is observed.

In the conclusion of his study on teacher effectiveness, Gooding (1964) suggests that teacher education institutions will need to consider the question of the attitudes and perceptions of teachers as significant aspects for the development of effective teachers. This investigator is further suggesting that an effective model for the fully functioning person is the self-actualizing person who feels positively about himself. Learning experiences which develop origin behavior in students and environments which promote trust and openness are suggested as optimal conditions for nurturing self-actualization in students.

The open education approach to education is proposed as the model learning environment where students may be helped to grow toward self-actualization in the college classroom and at the elementary school level. In particular, it is suggested that the open classroom environment for learning be adopted in
teacher training college classes so that these students may grow toward self-actualization.

Significance of the Study

This study is significant because it focuses on the development of positive personal growth in students during an open education teacher preparation program. According to the literature the open education approach to learning helps students grow personally by providing learning opportunities through which they become directly involved in their learning experiences. Furthermore this study has taken a comprehensive approach to the study of the personal development of the students preparing to become teachers. Based on the findings in the literature concerning the personal growth of students, this study observes the overlapping variables which are involved in personal growth. These variables include environmental trust and openness, attitudes toward subject matter and the helping relationship, student growth in self-actualization and simultaneous teacher growth in these areas.
CHAPTER III
DESIGN OF THE STUDY

The Population Studied

The samples examined in this study constitute the total population of the open education teacher education program at the University of Massachusetts' School of Education called METEP. METEP is an acronym for Model Elementary Teacher Education Program. The study took place during the Fall Semester of the academic year 1971-1972.

The population sample consisted of three groups of people all of whom were involved in the teacher preparation program as students or teachers:

1) Eight Teachers of the METEP teacher preparation program
2) Fourteen Graduate Students, (masters degree level),
3) Thirty-five Undergraduate Students, (bachelor degree level).

METEP Teachers

Of the eight teachers, two are doctoral level graduate students and six are professors. One of these doctoral candidates (the investigator of this study) served as the teaching assistant for the curriculum section of METEP. The other doctoral candidate served as an assistant to the entire METEP program and was primarily responsible for individual student advising and some teaching. Each of the six professors were responsible for one of the six main content areas of the METEP
program: language arts, mathematics, science, human relations, aesthetics, and curriculum. The teachers had from zero to seven years experience in programs of teacher preparation, with a mean of 4.1 years experience. The eight METEP teachers ranged in age from 26 to 40 years with a mean age of 35.40 years. There were four female teachers and four male teachers.

METEP Graduate Students

The graduate students (N=14) worked simultaneously toward a masters degree in education and certification as elementary school teachers. They ranged in age from 23 years to 40 with a modal age of 24 years. There was one male in the graduate student population and 13 females.

A majority of the graduate students had had some experience in education before entering the program. These experiences included tutoring in urban areas, summer educational programs, and experience in alternative and nursery schools. The graduate students had had a variety of additional work experiences, travel, and living experiences in foreign areas for extended periods of time.

METEP Undergraduate Students

The undergraduate students (N=35) simultaneously worked toward a bachelors degree in education and certification as elementary school teachers. The undergraduates consisted of 6 males and 29 females ranging in age from 19 to 47 years with a modal age of 20 years.
A majority of the undergraduate students had transferred from two year junior colleges in Massachusetts to the University of Massachusetts to complete their education in teacher preparation. Many of them were junior-level students and were experiencing their first year away from their hometown areas. A number of the other undergraduates were in their junior or senior year at the University of Massachusetts and had been involved in the School of Education for one to two years preceding entry into METEP or they had transferred into the School of Education from other university departments. The undergraduates had experienced a variety of parttime jobs, travel, mostly in the New England area, and a few had tutored in schools.

The teachers, graduate students, and the undergraduate students came from a range of middle class backgrounds and all were Caucasian. The participants' ages, sex, and socio-economic backgrounds are not a focus in this study since this investigator finds the range in these three areas of minor importance, however the data were included as additional information. This study examines the changes in the participants' perceptions of their own growth as a function of their experiences in an open education teacher preparation program.

There was no random selection for the study sample since all of the teachers and students elected to be in METEP were included in the sample. The graduate students had all been interviewed before entering the program and claimed that their selection for application to this program was based
primarily on the particular assumptions, practices, and goals of open education. A few of the undergraduate students were interviewed before entering METEP. They had a variety of reasons for selecting this program ranging from a belief in the assumptions of open education to a need for teacher certification.

The decision to separate the student population of this study into two study samples, graduate and undergraduate, for data analysis was made on the basis of Aspy's findings (1969). He found that 70% of undergraduate teacher-trainees at a California teacher preparation site reported considerable psychological discomfort at the beginning of student teaching and 20% said it continued throughout the experience. Aspy found that many of these students were operating at Maslow's (1954) need level of safety and were being asked in teacher preparation to operate at higher levels of self-esteem and self-actualization in terms of giving to and helping others. This investigator thought that since many of the graduate students had had a variety of travel and teaching experiences that they might be more confident in themselves than the undergraduates and therefore were operating at a higher level of need. If this were the case, the graduate students as a group could score considerably higher on Shostrom's test of self-actualization than the undergraduates at pre-test. Therefore, since it is assumed by this investigator that the graduates and the undergraduates of METEP represent two different populations, they will be handled as two groups in this study.
Hypotheses of the Study

In this study several perceptions of the teachers and students in the open education teacher preparation program are being investigated. The major areas are self-actualization, personal and community growth, and subject matter meaning. The minor area is the helping relationship. In order to examine these four areas of perception, a series of hypotheses is proposed. The hypotheses are stated in the conventional null form and are listed below.

Self-Actualization

Teachers Group

Ia: The teachers will not increase in their perceptions of the time competence from pre-testing to post-testing as manifested on the (POI) Personal Orientation Inventory.

Ib: The teachers will not increase in their perceptions of their inner-directedness from pre-testing to post-testing as manifested on the (POI) Personal Orientation Inventory.

Graduate Student Group

IIa: The graduate students will not increase in their perceptions of their time competence from pre-testing to post-testing as manifested on the (POI) Personal Orientation Inventory.

IIb: The graduate students will not increase in their perceptions of their inner-directedness from pre-testing to post-testing as manifested on the (POI) Personal Orientation Inventory.

Undergraduate Student Group

IIIA: The undergraduate students will not increase in their perceptions of their time competence from pre-testing to post-testing as manifested on the (POI) Personal Orientation Inventory.
IIIb: The undergraduate students will not increase in their perceptions of their inner-directedness from pre-testing to post-testing as manifested on the (POI) Personal Orientation Inventory.

Personal and Community TORI (Trust, Openness, Self Realization and Interdependence)

Teachers Group

IVA: The teachers will not increase in their perceptions of the personal TORI from pre-testing to post-testing as manifested on the TORI Personal and Community Growth Inventory.

IVB: The teachers will not increase in their perceptions of the community TORI from pre-testing to post-testing as manifested on the TORI Personal and Community Growth Inventory.

Graduate Student Group

VA: The graduate students will not increase in their perceptions of the personal TORI from pre-testing to post-testing as manifested on the TORI Personal and Community Growth Inventory.

Vb: The graduate students will not increase in their perceptions of the Community TORI from pre-testing to post-testing as manifested on the TORI Personal and Community Growth Inventory.

Undergraduate Student Group

VIa: The undergraduate students will not increase in their perceptions of their personal TORI from pre-testing to post-testing as manifested on the TORI Personal and Community Growth Inventory.

VIb: The undergraduate students will not increase in their perceptions of the community TORI from pre-testing to post-testing as manifested on the TORI Personal and Community Growth Inventory.

Subject Matter Meaning

Graduate Student Group

VII: The graduate students will not increase in their perceptions of the majority of the bipolar adjective scales under the attitude concept called subject matter from pre-testing to post-testing as manifested on the semantic differential.
Undergraduate Student Group

VIII The undergraduate students will not increase in their perceptions of the majority of the bipolar adjective scales under the attitude concept called subject matter from pre-testing to post-testing as manifested on the (SD) semantic differential.

The Helping Relationship

Since Vonk (1970) found a significant relationship between the teacher's general frame of reference and teaching purposes, it was decided to group the three aspects of the helping relationship, me, others, and purposes, under a single hypothesis assuming that all three will change in a similar direction and degree or not at all.

Teachers Group

IX The teachers will not increase in their perceptions of the majority of the bipolar adjective scales under the concepts of the helping relationship called myself, others, and teaching purposes from pre-testing to post-testing as manifested on the (SD) semantic differential.

Graduate Student Group

X The graduate students will not increase in their perceptions of the majority of the bipolar adjective scales under the attitude concepts of the helping relationship called myself, others, and teaching purposes from pre-testing to post-testing as manifested on the (SD) semantic differential.

Undergraduate Student Group

XI The undergraduates will not increase in their perceptions of the majority of the bipolar adjective scales under the attitude concepts of the helping relationship called myself, others, and teaching purposes from pre-testing to post-testing as manifested on the (SD) semantic differential.
Instruments

The Personal Orientation Inventory

In this study of subjects' self-actualization it was necessary to find an instrument which would measure that growth. The Personal Orientation Inventory (Shostrom, 1966a) (POI) was selected because it is an instrument specifically developed to measure self-actualization traits, in particular time competence and inner-directedness. A moderate correlation of .49 was found between inner-directedness and time competence in a college sample (Shostrom 1966a), however Shostrom finds that research on self-actualizing persons suggests that the two are interrelated.

In order to live in the present effectively, one inevitably leans on his own inner-direction more. The reason for this is that living in the moment does not require concern for support or sustenance. Further, that Being in the moment, being an active process, may be said to be an end in itself. That Being has its own reward—a feeling of self-support (Shostrom 1966a, p. 19).

As a measure of self-actualization, the Personal Orientation Inventory (POI), has been found to discriminate effectively between individuals who have been observed in their life behavior to have attained a relatively high level of self-actualization from those who are not seen to have evidenced such development (Shostrom 1964, Shostrom and Knapp 1966b).

The items of the POI were designed to reflect value orientations which are commonly held, and which are considered to be significant to a person's approach to living. Buhler (1962, pp. 30-31) has suggested that value orientations are definite existential judgments. She states that value
orientations symbolize the fact that affective, or value, and cognitive, orientation elements are blended. She suggests that a value orientation may be defined as a generalized and organized concept which influences behavior.

The POI has been shown to demonstrate a high degree of validity by a number of researchers (Murray 1966; Fox 1965; Shostrom and Knapp 1966). Test-retest reliability coefficients have been obtained for the POI scales based on a sample of 48 undergraduate college students. The results of the Inventory being given twice, a week apart, showed reliability coefficients of .71 for time competence and .84 for inner-directedness (Klavetter and Mogar 1967).

The POI is basically two scales of personal orientation: inner-directed support (127 items) and time competence (23 items). There are also ten sub-scales of the POI; however, for the purposes of this investigation only the two major scales concerning inner-directedness and time competence will be reported for each group. An example of a POI item which purports to measure inner-directedness is: "I am not afraid to be myself (Shostrom 1966a, p. 36)." An other-support item would be "Impressing others is most important (Shostrom 1966a, p. 36)." Examples of time competence and time incompetence follow respectively: "I do not feel it necessary to defend my past actions," and "I often feel it necessary to defend my past actions (Shostrom 1966a, p. 35)."
The TORI Personal and Community Growth Inventory

One purpose of this investigation to determine if the learning environment of the open classroom will by its very assumptions of trust, tend to increase the TORI (Trust, Openness, Self Realization, and Interdependence) of the participants both personally and communally.

It was of interest to this investigator to find an instrument which purported to measure personal and community trust, openness, self-realization, and interdependence in the learning environment. Jack Gibb’s TORI Personal and Community Growth Inventory was chosen because it is designed specifically to measure these environmental variables (La Boon 1971).

The TORI Personal and Community Inventory has been found to assess the growth of trust, openness, self-realization, and interdependence in groups of persons where specific exercises geared to the development of TORI have been deliberately encouraged by the group facilitator (Gibb 1968). The TORI instrument has not been formally standardized, but in all cases of its use Gibb reports (in a letter to this investigator 1972) positive increases in personal and community growth as reported on the TORI scales by the group participants.

The improvement (changes in scores on the instrument) has been consistently positive in the various groups that I have used it; groups where I have been the leader or convener, and where I have used our TORI philosophy and basic theory of training. Because this is consistent with other research that we have conducted systematically I am quite sure that the changes associated with the tests are "real." Some items change more than others. Some items don't change (Gibb's letter to this investigator 1972).
La Boon (1971) found in comparing two experimental TORI groups to two control groups, that the Vancouver experimental group and the organizational control group experienced slightly lower mean scores on personal and community items than did the Denver experimental group and the leadership training control group. Gibb has speculated that higher scores for the leadership training control group may be due to the notion that leaderless groups (as this group was) are likely to be more powerful than leader-led groups (La Boon 1971). The experimental groups experienced more growth in community whereas the control groups experienced more personal growth. La Boon explains this finding to be the result of emphasis on "community building" in the experimental groups and emphasis on "personal growth" in the control groups. The TORI instrument was developed specifically for the La Boon study under the direction of Dr. Gibb. Face validity was assumed because of the straightforward manner in which the dimensions to be measured were presented.

According to Gibb's TORI (1968) theory of growth, trust leads to acceptance of individuals, which nurtures openness and data flow throughout the group. Self-realization follows as individuals become increasingly aware of themselves and their experiences in the group and begin to establish goals for their own growth. As personal needs and goals emerge, groups of persons begin helping one another meet these goals and the formation of interdependence between members develops and the emergence of a community becomes evident.
Community refers to the interaction between the individuals of a group which results in both individual and community need satisfaction, hence growth. As mentioned earlier, TORI is an acronym for the four correlates which make up trust: trust, openness, realization, and interdependence. Both the subjects' personal and community growth in trust are of interest in this investigation; therefore, both personal TORI and community TORI will be assessed.

The TORI is composed of a total of eight bipolar concepts, separated by an eight-point scale. The first four concepts measure TORI in personal growth and the second four concepts measure TORI in the community growth. Each concept is expressed as a description of a persons' behavior and feelings at opposing ends of a continuum. The positive end is weighted at eight points and the negative at one point; the area between those points is scored in sequence from one to eight.

On the first four concepts concerning TORI personal growth subjects are asked to indicate on the 1-8 point scale where they see themselves "at this moment" in comparison to the bipolar persons described. On the second four concepts concerning TORI community growth subjects are asked how they feel about the group "at this moment" as compared to the bipolar groups described. (Refer to Appendix A for the complete TORI Personal and Community Growth Inventory.)
The Semantic Differential

In this study the participants' attitudes toward the adjectives, used to define the helping relationship concepts: me, others, and helper purposes, researched by Combs et al. (1971 pp. 11-16), and the subject matter meaning of METEP (Combs 1971, pp. 82-101), and the concepts were of interest to this investigator. Pre-post-test measures on the participants' attitudes toward these concepts had to be assessed by an instrument purported to measure meanings reliably and validly. The Semantic Differential (SD) developed by Osgood, Suci, and Tannenbaum (1957) measures the meanings people hold for particular concepts. The selection of the semantic differential to assess the meanings subjects give to the concepts of the helping relationship and subject matter was made because the semantic differential is a measurement technique which can be adapted to this particular research problem.

Osgood et al. describes the semantic differential as

''a highly "generalizable technique of measurement" which must be adapted to the requirement of each research problem to which it is applied. There are no standard concepts and no standard scales; rather, the concepts and scales used in a particular study depend upon the purposes of the research (Osgood et al. 1957, p. 76).''

The semantic differential is composed of concepts and scales. "Concepts" refer to . . ."the stimulus to which the subjects' checking operation is a terminal 'response'. It is the nature of the problem that chiefly defines the class and form of concept to be selected (Osgood et al. 1957, p. 77).''

In the present study, interest is on measurement of the
subject's attitudes toward the three parts of the helping relationship and subject matter. The concepts selected to reflect these two areas are called "perceptions of myself," "perceptions of others," "perceptions of my purposes," and "subject matter meaning."

"Scales" are bipolar adjective words which are used to describe each of the four concepts. In developing the semantic differential for this study, the selection of scales was based on the criteria for scale selection outlined in Osgood (1957, p. 78-80). "The first criterion for selecting scales is their 'factorial composition'--we usually select about three scales to represent each factor, these being maximally loaded on that factor and minimally on others (Osgood 1957, p. 78)." Osgood describes primarily three factors which make up scale composition: the evaluative factor, the potency factor, and the oriented activity factor (p. 62, 63). While the evaluative dimension of semantic space is a very general one it tends primarily to measure the subject's "attitudes" toward a concept. Attitudes are referred to as 'tendencies of approach or avoidance,' or as 'favorable or unfavorable,' and so on (Osgood 1957, p. 189).

... to index attitude we would use sets of scales which have high loadings on the evaluative factor and negligible loadings on other factors, as determined from our various factor analytic studies (Kerlinger et al. 1957, p. 191).

Since it is the interest of this investigator to determine if a relationship exists between the subject's "attitudes" toward the concepts of the helping relationship
and METEP subject matter and particular bipolar adjectives or scales, those scales researched in the Thesaurus (Osgood 1957, pp. 53-61) study and mostly having higher loadings on the evaluation factor than on potency and oriented activity factors were selected. However there were few scales higher on potency and activity factors than evaluative; these were selected because none of the evaluative scales expressed particular ideas in Combs (et al. 1971, pp. 13-16) and the aspects under scrutiny were potency or activity oriented activities. For example, Combs found that the helpers' purposes with those they helped could be either freeing or controlling. Since it was important to reflect the meaning of freeing-controlling under the concept "helper purposes" of the semantic differential, this investigator looked for scales in the Thesaurus study which would reflect the freeing-controlling idea. The only scale which came close to reflecting this idea was free-constrained. This scale did not load high on the evaluative factor but did on the potency factor. Even though free-constrained was low on the evaluative factor, it was used because it reflected the meaning of freeing-controlling.

The second "criterion in scale selection is relevance to the concepts being judged (Osgood p. 78)." It is the purpose of the investigator that dictates the choice, and the purpose here is to reflect the meanings of the definitions of effective and ineffective helpers found in the helper studies (Combs 1969 and 1971). Tables 1, 2, 3, and 4 in Appendix A
show the scales which were selected to reflect the meaning of each of the operational definitions in the helper studies. The factor loadings are also included to show that most of the scales were weighted heaviest on evaluation. To read these tables for each concept work them left to right. First is the operational definition of a particular finding from the helper studies, next those scales selected by this investigator to reflect the meanings found in the definitions, and last the factor loadings for each of the scales selected.

The scales under the concept subject matter were selected on the basis of how nearly they reflected the combined meanings of the helper purposes (Combs et al. 1971, pp. 14-16) and the importance of the meaning of the subject matter (Combs et al. 1971, Chapter 5) to the student. Since this researcher found that much of what is described in the helper purposes is also reflected in the writings on the personalness of meaning to subjects, the subject matter scales were primarily used to reflect the meanings found under helper purposes. To illustrate how purposes and subject meanings appear to be similar the following example of selection of one of the scales under subject matter is offered: The scale meaningful-meaningless was used to reflect both the process orientation meaning under helper purposes and the Combs' concern with the meaning of subject matter to student teachers.

"We must find ways of producing teachers who find meaning in facts and who help their students to do so (Combs 1965, p. 44)."

The last "criterion for scale selection is their 'semantic stability' for the concepts and subjects in a par-
ticular study (Osgood 1957, p. 79)." Scales were selected
which hopefully reflect social concepts in education. While
a formal pilot study was not run on this semantic differential,
a group of fifteen in-service teachers were asked to offer
their opinions of the scales in light of the meanings of these
particular concepts. As a result of this evaluative session,
certain scales which caused a good deal of semantic confusion
were deleted and others more relevant were added.

Bunker (1970) summarized evidence that the semantic
differential is a reliable and valid instrument of measurement.

The semantic differential has been found to be a valid
and reliable technique for assessing attitudes (Mazer 1969,
Among those researchers who have used the technique with
success are Butts and Raun (1969) with elementary school
personnel, Kane (1969) with elementary education seniors,
and Frank (1967) with secondary student teachers (p. 60).

Bunker (1970) has described the semantic differential from
Remmer's writing in Gage, 1963, p. 360:

It consists of a number of seven-"unit" rating scales
with opposing, or "bipolar" adjectives at each end. . .
The basic operation of "differentiating" the meaning of
a concept. . .follows. The subject is asked to judge a
concept. . .against a series of scales. Assigning num-
bers from 1 to 7 to each scale units, we then have for
each scale a quantitative value of the concept for each of
the scales in relation to the concept under study (p. 60).

Since the positive adjective pole was given the high-
est rating, seven points, the higher the subject scores on the
SD, the more positive their perceptions.
The Research Design

In this study, the subjects' changes in their perceptions of the helping relationship, their self-actualization, personal and community TORI, and subject matter relevance over a semester of involvement in the open education teacher preparation program in METEP are of interest. All of the subjects were assessed in these four areas of perception twice during the semester, except for subject matter relevance: once at a pre-testing and once at a post-testing. These pre-post scores by population groups are then compared statistically to determine if changes in test scores are in the positive or negative direction and also to determine if the changes in test scores which do occur are significant. This study did not use a control group design, as it was not the interest of this investigator to compare treatments and populations at this time.

The design of this study seems to most closely resemble the field experiment approach to research described by Kerlinger (1964, pp. 382-386). While the strengths of field experiment research include appropriateness in studying complex social influences, processes, and changes in lifelike settings, the drawbacks include difficulty in controlling variables. The control of variables is more easily accomplished in laboratory experiments, but the variables of the field experiment usually have a stronger effect than those of the laboratory because the field experiment takes place in a more natural setting. The principle is: "The more realistic the research situation, the stronger the variables. This is
one advantage of doing research in educational settings (Kerlinger 1964, p. 383).

Each subject's scores are summed with other members of his group. While these group scores may serve as contrasts for one another of the groups, the groups will not be compared statistically. It was felt by this investigator that the three subgroups of this study were possibly quite different upon entry into the METEP program and that entry differences would interfere statistically with any attempts to compare groups on the basis of their reaction to their growth during METEP as manifested on the POI, the TORI, and the SD.

A post-test administration of the SD, the TORI, and the POI following the METEP experience provided data which were compared to pre-test data for each sample. Differences between pre-test and post-test scores were treated as change scores and examined for each group to determine differences in perceptions (attitudes and value orientations) as a function of the METEP experience. Computation of change scores from pre-testing to post-testing provided data for all of the study hypotheses.

**Administration of the Study Instruments**

The procedural scheme consisted of the pre-test, before the teacher education (METEP) experiences, and the post-test. Pre-post testing administration of the three study instruments (POI, TORI, SD) will be discussed in this section while the METEP experiences are described in the next section.
All subjects in all samples (N=61) participated in the pre-testing. All but four subjects (four undergraduates) participated in the post-testing. Those four undergraduates who did not take the post-test were dropped from the study sample altogether, leaving a total study sample of N=57. These four did not take the post-test because of absence from the area and extended sickness.

The pre-test was administered to all of the subjects two days after the METEP program had begun (September 14, 1971). The post-test was given two days before the METEP fall 1971 semester program terminated (December 15, 1971).

For each testing, subjects were gathered into the large double room used for the METEP program throughout the semester. The subjects were asked to pick up their testing packets upon entry into the room and sit quietly or talk softly until everyone had arrived. Within ten to fifteen minutes, the majority of subjects had assembled and the testing began with an explanation of the directions and answering of any questions by this investigator. Subjects were told clearly at each testing that they were only to put their testing identification numbers at the top of each test and that the results of each test were entirely confidential. Subjects completed the tests within an hour, turned in their test booklets, and left the testing area.

The tests were collected, scored, and the results written onto 5" X 8" cards. These cards were later taken to be keypunched for computer analysis at the University of Massachusetts Graduate Research Center.
**METEP Teacher Preparation Experiences**

In the METEP program, each student was required to take all of the eighteen semester hours offered during the fall semester with the exception of the fourteen graduate students who could negotiate for other courses. These eighteen semester credits included the areas listed below. In addition, two credits of social studies were offered in conjunction with the other six courses and by special lectures on open laboratory days. An additional three credits called special problems could be earned by tutoring/teaching in local classrooms and independent study as arranged by students.

**METEP Requirements Fall 1971**

<table>
<thead>
<tr>
<th>Course No.</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Educ. 205</td>
<td>Aesthetic Elements in the Teaching/Learning Process</td>
<td>1</td>
</tr>
<tr>
<td>Educ. 220</td>
<td>Human Relations Laboratory</td>
<td>3</td>
</tr>
<tr>
<td>Educ. 259</td>
<td>Principles and Methods of Teaching Social Studies in Elementary Schools</td>
<td>2</td>
</tr>
<tr>
<td>Educ. 260</td>
<td>The Elementary School Curriculum</td>
<td>3</td>
</tr>
<tr>
<td>Educ. 261</td>
<td>Principles and Methods of Teaching Language Arts and Reading in Elementary Schools</td>
<td>2</td>
</tr>
<tr>
<td>Educ. 262</td>
<td>Principles and Methods of Teaching Science in Elementary Schools</td>
<td>2</td>
</tr>
<tr>
<td>Educ. 263</td>
<td>Principles and Methods of Teaching Mathematics in Elementary Schools</td>
<td>2</td>
</tr>
<tr>
<td>Educ. E68</td>
<td>Special Problems in Education: The Model Elementary Teacher Education Program</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td>18</td>
</tr>
</tbody>
</table>
While flexibility was allowed within the stated course areas, students were encouraged to maintain a high level of participation and performance in all areas. Students were encouraged to negotiate individual study contracts whenever they felt their needs would be better met through other, similar, or adjusted educational experiences.

For example, a few of the students who had had a good deal of work in human relations negotiated with the professor in human relations or their support group leader to use this class time in other subject or interest areas as they needed it. In one instance, a student negotiated for more time in language arts in place of human relations training where she already felt competent. She spent this time writing a children’s book.

Individuality in program planning was emphasized and alternative ways of meeting many course requirements were outlined and encouraged. For example, both language arts and mathematics required a minimum amount of field experience in the application of concepts with school children, but the concepts used, age levels of children, and selection of schools, were completely left up to the decisions of the METEP students.

All in all, most of the course requirements were quite general and open-ended which allowed students to make choices about what learning alternatives to pursue and decisions about the extent of their needs in the content areas. The whole METEP program was based on active learning wherein students
learned various educational concepts through being directly involved with them. For example, in curriculum the students learned about the various "sources of curriculum" through becoming involved in searching through newspapers, textbooks, and other places to discover possible curriculum sources. All students had on-going tutoring experiences which they planned and organized. Wednesday, which was open lab day, was a time both students and teachers offered educational experiences (Sec Appendix B). While students were expected to demonstrate certain course competencies, there were extensive opportunities for students not only to demonstrate their expertise in creative ways, but also to initiate their own ideas on what they felt were important teacher competencies. Each teacher was the support group leader for seven or eight students and became an immediate advisor and friend to his or her support group students, both personally and communally. Evaluation was informal and was facilitated by use of an on-going personal and professional journal, diary, or log, which the students were encouraged to keep up day by day. They were asked to enter their on-going professional experiences and as well their personal reactions and growth. Co-evaluation was conducted throughout the semester between the student and his or her support group leader as was needed by the student. Grading was based on the pass-fail-no-record system rather than letter grading. This was to remove extensive fears of failure and thus tended to open the door for real, personal learning, and involvement on the part of both staff and students.
As with many new programs in their first semester, many problems occurred resulting from certain inconsistencies between basic philosophy and practices. However, the staff of eight was continually open and receptive to student feedback and was able to make numerous program changes throughout the semester which more nearly reflected the open education philosophy of education and the needs of participants. The majority of students were understanding and actively supportive of the efforts to marry practices and beliefs and by the second half of the semester a relatively strong sense of community between staff and students seemed evident.

Since this particular program had as one of its major goals the development of autonomous learners and creative and imaginative teachers with a strong sense of self-worth and a positive belief in others, this investigator felt that this particular program would probably influence changes in the participants' perceptions of themselves and others. (Refer to the Appendix B of this study for more specific information on the METEP open-education, teacher preparation program. In many of the appendix materials the METEP program is referred to as the Integrated Day Program. For the purposes of this study it is referred as the open education program).

**Statistical Treatment and Data Analysis**

Each subject in each sample yielded scores from each of the three instruments given: the POI, the TORI, and the SD.
The Analysis of the POI

Each of the subjects yielded two scores on the POI at pre-testing and at post-testing: one score for time competence and one score for inner-directedness. The subjects' pre-test scores in each of these two categories were summed within their subgroups. The same was done with the post-test scores. The difference between the pre-test and post-test scores was computed to determine any changes in test scores from pre-testing to post-testing within the three subgroups: teachers, graduate students, and undergraduate students. Statistical analyses revealed the level of these changes in the subjects' group scores from pre-testing to post-testing on the POI.

The Analysis of the TORI

Each subject's scores for the four items under personal growth were summed by groups for the pre-test and for the post-test. These sums were then compared to determine each group's summed personal TORI growth score changes from pre-testing to post-testing. The same summing procedure and comparison of scores from pre-testing to post-testing was used for determining group score changes in community growth. Scores are reported for the three subgroups of subjects.

The Analysis of the SD

Each of the subjects yielded nineteen scores on three different concepts measured by the semantic differential, both at pre-testing and at post-testing. These concepts included:
my perceptions of myself, my perceptions of others, my perceptions of teaching purposes. The students yielded an additional nineteen scores on the concept called subject matter.

Since it was the interest of this investigator to determine if a relationship exists between the particular bipolar adjectives (scales) selected and the attitude concepts subject matter, myself, others, and purposes, the difference between the pre-test and post-test scores on each scale was computed to determine the level of change for each group on each scale. It was decided by this investigator that Osgood's (1957, p. 191) suggested method of evaluating the semantic differential through summing factor scores would not be as appropriate to the specific interests of this investigation. This investigator is more interested in observing individual scale changes from pre-test to post-test rather than noting two or three scores resulting from summing. It was felt that a good deal of information would be lost by summing.

Statistical Analysis of All Three Instruments

In each test the decision to reject or not to reject the null hypotheses rested on the probability that the observed event would occur by chance less than five times out of one hundred ($\alpha = .05$). However, when hypotheses were rejected more exact levels of significance were stated.

A correlated $t$ test was used to test the hypotheses of all instruments: the POI, the TORI, and the SD. A $t$ test is the statistical technique used to determine the level of
significance between subjects' group mean pre-test scores and mean post-test scores (Popham 1967, Chapter 9) and was used on the three instruments utilized in this study. A correlated \( t \) test tests the relationship between the pre-test mean scores and the post-test mean scores.

A special \( t \) model which is designed for correlated data should be used whenever a relationship between data in the two groups of scores exists. Such correlation between data in the groups is usually present in situations involving matched pairs or when two measures have been taken for the same person, as in pre-and post-test mean comparisons (Popham 1967, p. 137).

Results from the correlated \( t \) tests are reported within the three subject samples of this study: the teachers, the graduate students, and the undergraduate students. Pearson-Product Correlation Coefficients will be obtained from the subjects' scores of the POI and TORI to determine whether a positive or negative relationship exists between the POI inner-directedness and time competence and the TORI personal and community scales.
CHAPTER IV

FINDINGS

This study has explored several hypotheses related to perceptual changes in the teachers and students of an open-education teacher preparation program called METEP. Each of these hypotheses has been tested statistically to determine the probability of events observed occurring by chance. The findings of these tests are stated in the following paragraphs and provide the data for the conclusions and implications presented in the final chapter. The findings are grouped under the four areas of perception explored: the subjects' self-actualization, the subjects' views of personal and community TORI, the students' attitudes of the subject matter of METEP, and the participants' attitudes toward the helping relationship. The correlated t test was the statistical technique used to determine the level of change in the groups' scores on all three instruments from pre-testing to post-testing. Correlation coefficients were determined in comparing the POI and the TORI items.

Self-Actualization Hypotheses

In order to examine the changes for each subject group in time competence and inner-directedness scores between pre-testing and post-testing, the following hypotheses were examined:
Teachers

Ia: The teachers will not increase in their perceptions of their time competence from pre-testing to post-testing as manifested on the POI.

Ib: The teachers will not increase in their perceptions of their inner-directedness from pre-testing to post-testing as manifested on the POI.

Graduate Students

IIa: The graduate students will not increase in their perceptions of their time competence from pre-testing to post-testing as manifested on the POI.

IIb: The graduate students will not increase in their perceptions of their inner-directedness from pre-testing to post-testing as manifested on the POI.

Undergraduate Students

IIIa: The undergraduate students will not increase in their perceptions of their time competence from pre-testing to post-testing as manifested on the POI.

IIIb: The undergraduate students will not increase in their perceptions of their inner-directedness from pre-testing to post-testing as manifested on the POI.

The findings for all three groups on the POI are shown on table 5.

Teachers

Analysis of the teachers' pre-post test change scores on time competence and inner-directedness showed no significant change. From pre-testing to post-testing, the teachers' mean scores showed a decrease of .125 in time competence and a mean increase of 2.625 in inner-directedness. While the teachers' scores moved slightly in the direction of time incompetence, they experienced an increase in inner-directed-
Table 5. Correlated T-Test Results for Three Sample Groups on Time-Competence and Inner-Directedness (Self-Actualization)

<table>
<thead>
<tr>
<th>Group</th>
<th>Test</th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>Standard Error Mean</th>
<th>Degrees of Freedom</th>
<th>T-Ratio</th>
<th>Probability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teachers</td>
<td>Time Competence</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>N = 8</td>
<td>Pretest</td>
<td>17.7500</td>
<td>2.1213</td>
<td>0.7500</td>
<td>7</td>
<td>0.11614</td>
<td>0.9068</td>
</tr>
<tr>
<td></td>
<td>Posttest</td>
<td>17.6250</td>
<td>3.1139</td>
<td>1.1009</td>
<td>7</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Inner-Directedness</td>
<td>91.1250</td>
<td>9.6723</td>
<td>3.4197</td>
<td>7</td>
<td>-0.53035</td>
<td>0.6162</td>
</tr>
<tr>
<td></td>
<td>Pretest</td>
<td>93.7500</td>
<td>13.9974</td>
<td>4.9488</td>
<td>7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Graduate Students</td>
<td>Time Competence</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>N = 14</td>
<td>Pretest</td>
<td>17.3571</td>
<td>3.7336</td>
<td>0.9978</td>
<td>13</td>
<td>-0.99525</td>
<td>0.6608</td>
</tr>
<tr>
<td></td>
<td>Posttest</td>
<td>18.4286</td>
<td>2.3110</td>
<td>0.6176</td>
<td>13</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Inner-Directedness</td>
<td>92.1429</td>
<td>10.1592</td>
<td>2.7152</td>
<td>13</td>
<td>-2.21145</td>
<td>0.0435*</td>
</tr>
<tr>
<td></td>
<td>Pretest</td>
<td>99.2143</td>
<td>7.5567</td>
<td>2.0196</td>
<td>13</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Undergraduate</td>
<td>Time Competence</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Students</td>
<td>Pretest</td>
<td>16.3143</td>
<td>3.0848</td>
<td>0.5214</td>
<td>34</td>
<td>-0.91259</td>
<td>0.6290</td>
</tr>
<tr>
<td>N = 35</td>
<td>Posttest</td>
<td>16.9143</td>
<td>4.0828</td>
<td>0.6901</td>
<td>34</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Inner-Directedness</td>
<td>85.0000</td>
<td>11.0666</td>
<td>1.8706</td>
<td>34</td>
<td>-2.35126</td>
<td>0.0233*</td>
</tr>
<tr>
<td></td>
<td>Pretest</td>
<td>90.0286</td>
<td>12.3300</td>
<td>2.0841</td>
<td>34</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Significant at the .05 level
ness. This increase in inner-directedness however only reached the probability level of 0.6162. Since this does not reach the acceptable probability level of .05, the null hypothesis Ib for teacher inner-directedness was not rejected. Also the null hypothesis Ia on teacher time competence was not rejected since no significant positive change occurred.

Graduate Students

Analysis of the graduate students' pre-post test change scores in time competence showed a mean increase of 1.0715 from pre-test to post-testing with a probability level of 0.6608. Since this does not reach the .05 level of significance, hypothesis IIa was not rejected. The graduate students' post-test mean score on inner-directedness showed an increase of 7.0614, significant at the 0.0435 level of probability. Since this surpasses the .05 level of significance, the IIb null hypothesis was rejected. The graduate students did indeed increase in their perceptions of their inner-directedness from pre-testing to post-testing.

Undergraduate Students

The undergraduate students' post-test mean score on time competence showed an increase of 0.60 reaching a probability level of 0.6290 which was not significant at the .05 level of significance. Thus the null hypothesis IIIa was not rejected. Since these students' post-test mean scores on inner-directedness showed an increase of 5.0286 with a
probability of 0.0233, well below the .05 level of significance, the null hypothesis IIIb was rejected.

In summary, null hypotheses Ia, Ib, IIa, and IIIa were not rejected as the subjects' change scores on these hypotheses did not reach the .05 level of significance. Null hypotheses IIb and IIIb concerning no increase in student inner-directedness were both rejected at the .05 level of significance. While none of the subjects' scores increased significantly in time competence, the students' scores did increase significantly on the inner-directedness dimension of self-actualization as measured on Shostrom's POI. It is interesting to note that, while only the two student groups changed significantly in inner-directedness, all of the groups' scores increased positively from pre-testing to post-testing except the teachers' time competence score which decreased slightly. This increase in the groups' scores, while in most cases not significant does show subjects' growth toward self-actualization as seen in the groups' increased inner-directedness and time competence as measured by the POI.

Table 6 shows graphically a comparison between the three sample groups, POI scale mean scores on both pre-testing and post-testing and the POI scale means for "criterion" groups of self-actualizing and non-self-actualizing adults (Shostrom 1964). The purpose of this table is to show where the groups of this study scored on the POI in relation to self-actualized and non-self-actualized adults identified by Shostrom.
Table 6. POI Scale Means for Three Sample Groups Compared with POI Scale Means for "Criterion" Groups of Self-Actualizing (S.A.) and Non-Self-Actualizing (non S.A.) Adults.

<table>
<thead>
<tr>
<th>Pretest</th>
<th>Posttest</th>
</tr>
</thead>
<tbody>
<tr>
<td>Time Competent Lives in the present</td>
<td>Time Competent Lives in the present</td>
</tr>
<tr>
<td>TC</td>
<td>TC</td>
</tr>
<tr>
<td>Inner-Directed Independent Self-Supportive</td>
<td>Inner-Directed Independent Self-Supportive</td>
</tr>
<tr>
<td>I</td>
<td>I</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Pretest</th>
<th></th>
<th>Posttest</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>-100</td>
<td>60</td>
<td>100</td>
</tr>
<tr>
<td>-20</td>
<td>-95</td>
<td>50</td>
<td>-95</td>
</tr>
<tr>
<td>Teachers</td>
<td>-90</td>
<td>-85</td>
<td>-80</td>
</tr>
<tr>
<td>Graduates</td>
<td>-85</td>
<td>-80</td>
<td>-80</td>
</tr>
<tr>
<td>Undergraduates</td>
<td>-75</td>
<td>-75</td>
<td>-75</td>
</tr>
<tr>
<td>NSA Mean</td>
<td>-75</td>
<td>-75</td>
<td>-75</td>
</tr>
<tr>
<td>NSA Mean</td>
<td>-75</td>
<td>-75</td>
<td>-75</td>
</tr>
<tr>
<td>NSA Mean</td>
<td>-75</td>
<td>-75</td>
<td>-75</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Time Incompetent Lives in the past or future</th>
<th>Other Directed Dependent, seeks support of other's views</th>
</tr>
</thead>
<tbody>
<tr>
<td>Time Incompetent Lives in the past or future</td>
<td>Other Directed Dependent, seeks support of other's views</td>
</tr>
</tbody>
</table>
The teachers' pre-post scores on time competence remained within the norm mean scores of the criterion group, which is considerably below the self-actualized mean. The teachers' inner-directedness scores moved from just below the self-actualized mean on pre-test to slightly above the self-actualized mean on post-test. The graduate students on pre-test moved from just below the norm mean on time competence to just below the self-actualized mean at post-test. In inner-directedness, they moved from below the self-actualized mean at pre-test to far above the self-actualized mean at post-test. While the undergraduate mean scores did not reach the self-actualized mean, their mean scores in time competence moved up from just above the non-self-actualized mean to somewhat below the norm mean. Their inner-directedness moved upward from just below the norm mean on pre-test to somewhat below the self-actualized mean on post-test. Table 6 clearly shows that all of the groups except the teachers who experienced a slight decrease in time competence, experienced growth toward increased self-actualization (inner-directedness and time competence) from pre-testing to post-testing. While most of these increases did not reach the .05 level of significance, the fact remains that the study groups did experience growth toward greater self-actualization during a semester's involvement in the open education teacher preparation program.
Personal and Community TORI

Hypotheses

In order to examine the changes between pre-test and post-test scores of personal and community TORI for each subject group, the following hypotheses were tested:

Teachers Group

IVA: The teachers will not increase in their perceptions of the personal TORI from pre-testing to post-testing as manifested on the TORI.

IVB: The teachers will not increase in their perceptions of the community TORI from pre-testing to post-testing as manifested on the TORI.

Graduate Student Group

VA: The graduate students will not increase in their perceptions of the personal TORI from pre-testing to post-testing as manifested on the TORI.

VB: The graduate students will not increase in their perceptions of the community TORI from pre-testing to post-testing as manifested on the TORI.

Undergraduate Student Group

VIA: The undergraduate students will not increase in their perceptions of the personal TORI from pre-testing to post-testing as manifested on the TORI.

VIB: The undergraduate students will not increase in their perceptions of the community TORI from pre-testing to post-testing as manifested on the TORI.

The findings for all three groups on the TORI are shown on Table 7.

Teachers

The teachers' mean scores on the personal TORI increased .6250 and 4.250 on the community TORI from pre-testing to post-testing. These changes were not significant at the
.05 level of probability therefore both null hypotheses IVa and IVb were not rejected.

Graduate Students

The graduate student mean scores for personal TORD increased 1.7857 from pre-test to post-test and for the community TORD their mean scores increased .9286. These changes were not significant at the .05 level of probability therefore both null hypotheses Va and Vb were not rejected.

Undergraduate Students

The undergraduate students experienced an increase in mean scores in personal TORD of 2.7133 from pre-testing to post-testing significant at the 0.0007 level of probability far below the standard .001 level. Since this increase is statistically significant it was decided to reject the null hypothesis VIA which states that the undergraduates will not increase in their perceptions of their personal TORD from pre-testing to post-testing as manifested on the TORD. The undergraduates mean scores on community TORD increased 1.9428 points from pre-test to post-test showing a probability level of 0.0703. Since this level of probability does not reach the .05 level of significance, the null hypothesis VIb was not rejected.

In summarizing the TORD findings for all three groups, one null hypothesis VIA concerning no increase in undergraduate personal TORD was rejected. This hypothesis was rejected at the .001 level of significance. The other five
Table 7. Correlated T-Tests and Means for Three Sample Groups on Pre-test and Post-test of the TORI Personal and Community Growth Inventory

<table>
<thead>
<tr>
<th>Group</th>
<th>Test</th>
<th>Test Mean</th>
<th>Standard Deviation</th>
<th>Standard Error Mean</th>
<th>Degrees of Freedom</th>
<th>Correlated T-Ratio</th>
<th>Probability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teachers N = 8</td>
<td>Personal TORI</td>
<td>20.5000</td>
<td>4.3753</td>
<td>1.5469</td>
<td>7</td>
<td>-0.44619</td>
<td>0.6707</td>
</tr>
<tr>
<td></td>
<td>Pretest</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Posttest</td>
<td>21.1250</td>
<td>6.0341</td>
<td>2.1334</td>
<td>7</td>
<td>-2.04656</td>
<td>0.0780</td>
</tr>
<tr>
<td></td>
<td>Community TORI</td>
<td>21.3750</td>
<td>4.3732</td>
<td>1.5462</td>
<td>7</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Pretest</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Posttest</td>
<td>25.6250</td>
<td>3.0208</td>
<td>1.0680</td>
<td>7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Graduate Students</td>
<td>Personal TORI</td>
<td>24.2143</td>
<td>5.6593</td>
<td>1.5125</td>
<td>13</td>
<td>-1.14283</td>
<td>0.2734</td>
</tr>
<tr>
<td>N = 14</td>
<td>Pretest</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Posttest</td>
<td>26.0000</td>
<td>3.6162</td>
<td>0.9665</td>
<td>13</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Community TORI</td>
<td>23.7143</td>
<td>4.8742</td>
<td>1.3027</td>
<td>13</td>
<td>-0.57973</td>
<td>0.5778</td>
</tr>
<tr>
<td></td>
<td>Pretest</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Posttest</td>
<td>24.6429</td>
<td>3.4330</td>
<td>0.9175</td>
<td>13</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Undergraduate</td>
<td>Personal TORI</td>
<td>20.4571</td>
<td>4.6040</td>
<td>0.7782</td>
<td>34</td>
<td>-3.92481</td>
<td>0.0007***</td>
</tr>
<tr>
<td>Students N = 35</td>
<td>Pretest</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Posttest</td>
<td>23.1714</td>
<td>4.3756</td>
<td>0.7396</td>
<td>34</td>
<td>-1.84619</td>
<td>-0.0703</td>
</tr>
<tr>
<td></td>
<td>Community TORI</td>
<td>24.7143</td>
<td>4.9263</td>
<td>0.8327</td>
<td>34</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Pretest</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Posttest</td>
<td>26.6571</td>
<td>3.9403</td>
<td>0.6660</td>
<td>34</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

***Significant at the .001 level.
null hypotheses under TORI, IVa, IVb, Va, Vb, and VIb, were not rejected because pre-post test mean differences were not at the .05 level of significance. It is interesting to note that while only one out of the six TORI null hypotheses was rejected, all three study groups experienced some increase in both personal and community TORI throughout the semester in METEP.

Table 8 shows graphically a comparison between the pre-and post-test results of the three sample groups' TORI scale mean scores and the TORI scales in terms of the positive and negative poles and the middle point. While "criterion" group means for the TORI are not available, this investigator thought it would be interesting to show how the study groups mean scores looked in relation to the total TORI scale.

All three study group scores on the personal and community TORI for both pre-testing and post-testing fall between the middle point and the positive pole of the TORI scale. It is interesting to note that the teachers and undergraduates were somewhat higher than the graduate students in community TORI at post-testing. The teachers experienced greater growth in community TORI than in personal TORI from pre-test to post-test. The undergraduates experienced more growth in personal TORI than community TORI from pre-test to post-test. The undergraduates started out the highest on community TORI at pre-testing and remained highest at post-testing. The graduates started out the highest of the three groups in
Table 8. TORI Scale Means for Three Sample Groups as Shown with the Poles and Middle Points of the TORI Scale.

<table>
<thead>
<tr>
<th>Pretest</th>
<th>Posttest</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Personal Growth</strong></td>
<td><strong>Personal Growth</strong></td>
</tr>
<tr>
<td><strong>Community Growth</strong></td>
<td><strong>Community Growth</strong></td>
</tr>
<tr>
<td><strong>Personal</strong></td>
<td><strong>Personal</strong></td>
</tr>
<tr>
<td>Open Communication</td>
<td>Open Communication</td>
</tr>
<tr>
<td>Expresses</td>
<td>Expresses</td>
</tr>
<tr>
<td>Real Self</td>
<td>Real Self</td>
</tr>
<tr>
<td>Works With Others Toward Group Goals</td>
<td>Works With Others Toward Group Goals</td>
</tr>
<tr>
<td><strong>Mutual Caring</strong></td>
<td><strong>Mutual Caring</strong></td>
</tr>
<tr>
<td>Share With Others Openly</td>
<td>Share With Others Openly</td>
</tr>
<tr>
<td>Risk Being Selves</td>
<td>Risk Being Selves</td>
</tr>
<tr>
<td>Strong Sense Of Belonging</td>
<td>Strong Sense Of Belonging</td>
</tr>
<tr>
<td><strong>Impersonal</strong></td>
<td><strong>Impersonal</strong></td>
</tr>
<tr>
<td>Cautious Communication</td>
<td>Cautious Communication</td>
</tr>
<tr>
<td>Does What &quot;Should&quot; Do</td>
<td>Does What &quot;Should&quot; Do</td>
</tr>
<tr>
<td>Leads Or Follows Rules</td>
<td>Leads Or Follows Rules</td>
</tr>
<tr>
<td><strong>Mutual Not Caring</strong></td>
<td><strong>Mutual Not Caring</strong></td>
</tr>
<tr>
<td>Share Cautiously Don't Risk Little Sense Of Belonging</td>
<td>Share Cautiously Don't Risk Little Sense Of Belonging</td>
</tr>
</tbody>
</table>

Negative Pole | Negative Pole
---|---
-4 | -4

Positive Pole | Positive Pole
---|---
-32 | -32

Graduates | Teachers
---|---
-28 | -20

Undergraduates

Middle | Middle
---|---
-16 | -12

-8 | -8

-4 | -4
personal TORI at pre-testing and remained the highest on personal TORI at post-testing. All three groups experienced positive growth in personal and community TORI in varying degrees throughout the semester of METEP.

Correlation Between POI and TORI Items

While there was no hypothesis stated concerning the relationship between the POI and the TORI scales, it was of interest to this investigator to see if any such relationship did exist. Since the TORI is not standardized and POI is, it is of interest to learn for purposes of TORI validation and reliability if a relationship between these two instruments is statistically evident. Further, this investigator is interested in this relationship in terms of testing time. The POI takes some 30 to 45 minutes for participants to mark while the TORI administration requires only 5 to 10 minutes. If a significant relationship is found between the POI and TORI items, perhaps other investigators would be interested in determining if other populations score similarly on the POI and TORI.

Table 9 shows the findings for the correlated t test on the relationship between the POI and the TORI. Pre-test correlations between the POI and the TORI show a relationship at the .05 level of significance between POI inner-directedness and the personal TORI items O, R, and I. There is no
Table 9. Correlation Coefficients for POI Scales and TORI Scales for all Sample Subjects for Pre-testing and Post-testing

<table>
<thead>
<tr>
<th>POI Scales</th>
<th>T</th>
<th>O</th>
<th>R</th>
<th>I</th>
<th>T</th>
<th>O</th>
<th>R</th>
<th>I</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Time Competence</td>
<td>.0272</td>
<td>.1459</td>
<td>.2578</td>
<td>-.0874</td>
<td>-.0294</td>
<td>-.2019</td>
<td>-.0198</td>
<td>.0436</td>
</tr>
<tr>
<td>2. Inner Directedness</td>
<td>.2230</td>
<td>.4446*</td>
<td>.4596*</td>
<td>.3082*</td>
<td>.0341</td>
<td>-.1609</td>
<td>-.1629</td>
<td>.0495</td>
</tr>
</tbody>
</table>

*Significant at .05 level  
**Significant at .01 level  
56 degrees of freedom

Posttest Correlations

<table>
<thead>
<tr>
<th>POI Scales</th>
<th>T</th>
<th>O</th>
<th>R</th>
<th>I</th>
<th>T</th>
<th>O</th>
<th>R</th>
<th>I</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Time Competence</td>
<td>.1245</td>
<td>.3056*</td>
<td>.3416**</td>
<td>.3773**</td>
<td>-.0044</td>
<td>.0456</td>
<td>.1141</td>
<td>.0048</td>
</tr>
<tr>
<td>2. Inner Directedness</td>
<td>.2524</td>
<td>.4547**</td>
<td>.4472**</td>
<td>.4756**</td>
<td>.0159</td>
<td>.0833</td>
<td>.1960</td>
<td>.1756</td>
</tr>
</tbody>
</table>

*Significant at .05 level  
**Significant at .01 level  
56 degrees of freedom
significant relationship shown between any of the other POI and TORI scales at the pre-testing of all of the subjects' (N=57) scores on the POI and the TORI. The post-test correlations between the POI and TORI show significant correlations between the POI time competence and inner-directedness and the personal TORI items 0, R, and I. (TORI is an acronym for trust, openness, realization, and interdependence thus items 0, R, and I stand for openness, realization and interdependence). There was no significant correlation on pre-test or post-test for the POI inner-directedness and time competence and the TORI personal T, or trust, and any of the TORI community items. It is no surprise to this investigator that neither pre-test or post-test correlation measures between POI inner-directedness and time competence and TORI community reach a level of significance. The POI is purported to measure personal self-actualization and the TORI community scale is purported to measure TORI in terms of community growth. Since personal growth and community growth tend to represent two different entities, then two instruments such as the POI and TORI community which purport to measure one of these types of growth would not tend to correlate significantly.

Subject Matter

Hypotheses

In order to examine the difference between the pre-test and the post-test mean scores for each of the two student groups on the bipolar adjective scales under the attitude
concept called subject matter, the following hypotheses were tested:

VII: The graduate students will not increase in their perceptions of the majority of the bipolar adjective scales under the attitude concept called subject matter from pre-testing to post-testing as manifested on the SD.

VIII: The undergraduate students will not increase in their perceptions of the majority of the bipolar adjective scales under the attitude concept called subject matter from pre-testing to post-testing as manifested on the SD.

Table 10 shows the results of the correlated t test which was the statistical procedure used to measure the level of change for each of the nineteen scales under the attitudes toward the concept subject matter from pre-testing to post-testing for both the graduates and the undergraduates.

The results show that there was a significant (P < .05, .001, .0001) change in the mean scores for both student groups on sixteen out of nineteen bipolar adjective scales relating to subject matter from pre-testing to post-testing. Since the majority of the bipolar adjective scales under the concept subject matter did change significantly from pre-testing to post-testing for both the graduates and the undergraduates it was decided to reject the null hypotheses VII and VIII which states there will be no such change.

These findings indicate that there is a statistically significant relationship between the bipolar adjective scales of subject matter and the attitude concept called subject matter. As mentioned earlier, it was decided not to sum
### Table 10. Correlated T-Values and Mean Scores for Two Student Groups on the Semantic Differential Concept of "My Perceptions of the Subject Matter"

<table>
<thead>
<tr>
<th>Scale Origin</th>
<th>Scale</th>
<th>Graduate Students</th>
<th>Undergraduate Students</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Favorable Pole</td>
<td>Unfavorable Pole</td>
<td>Pretest Mean</td>
</tr>
<tr>
<td>Involved/Friendly</td>
<td>attracting</td>
<td>repelling</td>
<td>4.428</td>
</tr>
<tr>
<td>Alienated/Interesting</td>
<td>friendly</td>
<td>unfriendly</td>
<td>4.428</td>
</tr>
<tr>
<td>Self-revealing/Colorful</td>
<td>colorful</td>
<td>colorless</td>
<td>3.785</td>
</tr>
<tr>
<td>Self-concealing/Subjective</td>
<td>revealed</td>
<td>concealed</td>
<td>4.214</td>
</tr>
<tr>
<td>Process-oriented/Controlling</td>
<td>intrinsic</td>
<td>extrinsic</td>
<td>3.500</td>
</tr>
<tr>
<td>Goal-wise/Important</td>
<td>meaningful</td>
<td>meaningless</td>
<td>3.428</td>
</tr>
<tr>
<td>Altruistic/Narcissistic</td>
<td>voluntary</td>
<td>compulsory</td>
<td>2.928</td>
</tr>
</tbody>
</table>

*Significant at the .05 level  
**Significant at the .01 level  
***Significant at the .001 level  

13 degrees of freedom  
34 degrees of freedom
these scale scores arriving at an attitude score as Osgood (1957) recommends.

It is interesting to note that both student groups showed no significant change on the same three bipolar adjective scales. These scales are subjective--objective, intrinsic--extrinsic, and complex--simple.

In summary the two null hypotheses raised concerning students' perceptions of the relationship between the bipolar adjective scales and the concept subject matter did change from pre-testing to post-testing. This change was significant at the .001 level of probability for the undergraduates and at approximately the .01 level for the graduate students. The students' scores on sixteen scales out of nineteen changed significantly for both groups from pre-testing to post-testing. From a possible high score of seven points on each scale the two groups averaged a median score of 4.00 at pre-test for most of the scales and approximately 6.2 at post-test. These findings indicate that both groups' scores increased significantly on the majority of scales under subject matter from pre-testing to post-testing.

The Helping Relationship

Hypotheses

In order to examine the difference between the pre-test and post-test mean scores for each of the three study groups on the bipolar adjective scales under the attitude
concepts of the helping relationship called "me," "others," and "teaching purposes," the following hypotheses were tested:

IX: The teachers will not increase in their perceptions of the majority of the bipolar adjective scales under the concepts of the helping relationship called myself, others, and teaching purposes from pre-testing to post-testing as manifested on the semantic differential.

X: The graduate students will not increase in their perceptions of the majority of the bipolar adjective scales under the attitude concepts of the helping relationship called myself, others, and teaching purposes from pre-testing to post-testing as manifested on the semantic differential.

XI: The undergraduates will not increase in their perceptions of the majority of the bipolar adjective scales under the attitude concepts of the helping relationship called myself, others, and teaching purposes from pre-testing to post-testing as manifested on the semantic differential.

Tables 11, 12, and 13 show the findings for the three groups on all three parts of the helping relationship. Each table shows one part of the helping relationship for all groups. The findings were presented for all three groups on a single concept, rather than presenting all three concept findings for each group. It was thought it would be interesting to show all three groups on each of the concepts in order to observe how they scored similarly or differently. However the three groups will not be compared statistically as mentioned earlier.

Teachers

The teachers' perceptions of the majority of the bipolar adjective scales under all of the attitude concepts of the helping relationship, myself, others, teaching purposes,
<table>
<thead>
<tr>
<th>Scale Origin</th>
<th>Favorable Pole</th>
<th>Unfavorable Pole</th>
<th>Teachers</th>
<th>Graduate Students</th>
<th>Undergraduate Students</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Pretest Mean</td>
<td>Posttest Mean</td>
<td>Correlated Mean</td>
<td>Pretest Mean</td>
<td>Posttest Mean</td>
</tr>
<tr>
<td>Adequate/Inadequate</td>
<td>skillful 5.875</td>
<td>bungling 5.750</td>
<td>0.42</td>
<td>5.071</td>
<td>5.642</td>
</tr>
<tr>
<td></td>
<td>wise 5.250</td>
<td>foolish 5.750</td>
<td>-2.65*</td>
<td>5.142</td>
<td>5.785</td>
</tr>
<tr>
<td></td>
<td>elastic 5.875</td>
<td>inelastic 4.800</td>
<td>-1.00</td>
<td>5.857</td>
<td>6.214</td>
</tr>
<tr>
<td></td>
<td>successful 5.875</td>
<td>unsuccessful 6.125</td>
<td>-1.00</td>
<td>5.428</td>
<td>5.428</td>
</tr>
<tr>
<td>Identified-with/Apart from</td>
<td>contemporary 6.375</td>
<td>non-contemporary 5.625</td>
<td>1.82</td>
<td>5.928</td>
<td>5.785</td>
</tr>
<tr>
<td></td>
<td>attracting 5.500</td>
<td>repelling 5.625</td>
<td>-0.55</td>
<td>5.714</td>
<td>5.857</td>
</tr>
<tr>
<td></td>
<td>revealed 5.125</td>
<td>concealed 5.375</td>
<td>-0.68</td>
<td>5.571</td>
<td>5.642</td>
</tr>
<tr>
<td></td>
<td>open 6.125</td>
<td>closed 6.125</td>
<td>0.00</td>
<td>5.642</td>
<td>6.142</td>
</tr>
<tr>
<td></td>
<td>identified 6.375</td>
<td>anonymous 6.125</td>
<td>1.53</td>
<td>4.928</td>
<td>6.000</td>
</tr>
<tr>
<td>Wanted/Unwanted</td>
<td>intrinsic 5.000</td>
<td>extrinsic 5.125</td>
<td>-0.28</td>
<td>4.928</td>
<td>4.785</td>
</tr>
<tr>
<td></td>
<td>friendly 6.000</td>
<td>unfriendly 6.125</td>
<td>-0.55</td>
<td>6.214</td>
<td>6.142</td>
</tr>
<tr>
<td></td>
<td>beneficial 6.000</td>
<td>harmful 6.125</td>
<td>-0.55</td>
<td>6.000</td>
<td>6.214</td>
</tr>
<tr>
<td></td>
<td>sociable 5.750</td>
<td>unsociable 5.750</td>
<td>0.00</td>
<td>5.714</td>
<td>5.928</td>
</tr>
<tr>
<td>Trustworthy/Untrustworthy</td>
<td>honest 6.250</td>
<td>dishonest 6.250</td>
<td>0.00</td>
<td>6.357</td>
<td>6.000</td>
</tr>
<tr>
<td></td>
<td>intelligent 6.250</td>
<td>unintelligent 6.125</td>
<td>0.55</td>
<td>6.285</td>
<td>6.500</td>
</tr>
<tr>
<td></td>
<td>consistent 5.875</td>
<td>inconsistent 5.875</td>
<td>0.00</td>
<td>4.724</td>
<td>5.428</td>
</tr>
<tr>
<td>Worthy/Unworthy</td>
<td>meaningful 6.000</td>
<td>meaningless 6.375</td>
<td>-1.00</td>
<td>6.214</td>
<td>6.357</td>
</tr>
<tr>
<td></td>
<td>important 6.125</td>
<td>unimportant 6.000</td>
<td>0.55</td>
<td>6.072</td>
<td>6.500</td>
</tr>
<tr>
<td></td>
<td>interesting 5.500</td>
<td>boring 5.750</td>
<td>-0.80</td>
<td>5.857</td>
<td>6.214</td>
</tr>
</tbody>
</table>

*Significant at the .05 level
Table 12. Correlated T-Values and Mean Scores for Three Sample Groups on the Semantic Differential Concept of "My Perceptions of Others"

<table>
<thead>
<tr>
<th>Scale Origin</th>
<th>Scale</th>
<th>Favorable Pole</th>
<th>Unfavorable Pole</th>
<th>Pretest Mean</th>
<th>Posttest Mean</th>
<th>Correlated T-Value</th>
<th>Pretest Mean</th>
<th>Posttest Mean</th>
<th>Correlated T-Value</th>
<th>Pretest Mean</th>
<th>Posttest Mean</th>
<th>Correlated T-Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Able/</td>
<td>hopeful</td>
<td>6.125</td>
<td>6.000</td>
<td>0.23</td>
<td>6.071</td>
<td>0.14</td>
<td>5.714</td>
<td>6.000</td>
<td>-0.89</td>
<td>5.657</td>
<td>6.142</td>
<td>0.28</td>
</tr>
<tr>
<td>Unable</td>
<td>hopeless</td>
<td>5.625</td>
<td>5.500</td>
<td>0.24</td>
<td>5.071</td>
<td>1.60</td>
<td>5.714</td>
<td>5.714</td>
<td>-0.89</td>
<td>5.685</td>
<td>5.742</td>
<td>-0.21</td>
</tr>
<tr>
<td>Friendy/</td>
<td>friendly</td>
<td>6.250</td>
<td>6.125</td>
<td>0.55</td>
<td>6.214</td>
<td>0.34</td>
<td>6.071</td>
<td>6.071</td>
<td>0.14</td>
<td>6.342</td>
<td>6.171</td>
<td>0.69</td>
</tr>
<tr>
<td>Unfriendly</td>
<td>unfriendly</td>
<td>6.125</td>
<td>5.750</td>
<td>1.00</td>
<td>6.142</td>
<td>1.24</td>
<td>5.750</td>
<td>6.012</td>
<td>0.66</td>
<td>6.371</td>
<td>6.257</td>
<td>0.60</td>
</tr>
<tr>
<td>Internally</td>
<td>intrinsic</td>
<td>4.875</td>
<td>4.875</td>
<td>0.00</td>
<td>4.214</td>
<td>0.21</td>
<td>4.357</td>
<td>4.357</td>
<td>0.00</td>
<td>6.257</td>
<td>6.114</td>
<td>0.68</td>
</tr>
<tr>
<td>Motivated/</td>
<td>extrinsic</td>
<td>5.500</td>
<td>5.875</td>
<td>-1.00</td>
<td>5.785</td>
<td>-1.13</td>
<td>5.785</td>
<td>5.785</td>
<td>0.00</td>
<td>5.675</td>
<td>4.942</td>
<td>1.19</td>
</tr>
<tr>
<td>Externally</td>
<td>motivated</td>
<td>4.625</td>
<td>5.000</td>
<td>-1.63</td>
<td>4.428</td>
<td>1.23</td>
<td>4.928</td>
<td>4.928</td>
<td>1.05</td>
<td>4.800</td>
<td>4.342</td>
<td>-1.33</td>
</tr>
<tr>
<td>Helpful/</td>
<td>beneficial</td>
<td>5.875</td>
<td>6.125</td>
<td>-1.53</td>
<td>5.928</td>
<td>0.34</td>
<td>6.071</td>
<td>6.071</td>
<td>-0.34</td>
<td>6.171</td>
<td>6.257</td>
<td>-0.44</td>
</tr>
<tr>
<td>Hindering</td>
<td>harmful</td>
<td>5.750</td>
<td>5.500</td>
<td>0.42</td>
<td>5.214</td>
<td>-1.75</td>
<td>5.785</td>
<td>5.785</td>
<td>-1.75</td>
<td>5.885</td>
<td>6.114</td>
<td>-1.11</td>
</tr>
<tr>
<td>Worthy/</td>
<td>congenial</td>
<td>4.675</td>
<td>5.250</td>
<td>-0.55</td>
<td>5.285</td>
<td>1.05</td>
<td>4.928</td>
<td>4.928</td>
<td>1.05</td>
<td>5.571</td>
<td>5.485</td>
<td>0.34</td>
</tr>
<tr>
<td>Unworthy</td>
<td>unimportant</td>
<td>6.500</td>
<td>6.500</td>
<td>0.00</td>
<td>6.357</td>
<td>0.62</td>
<td>6.214</td>
<td>6.214</td>
<td>0.62</td>
<td>6.257</td>
<td>6.342</td>
<td>-0.49</td>
</tr>
<tr>
<td>Meaningful</td>
<td>unimportant</td>
<td>6.125</td>
<td>6.125</td>
<td>0.00</td>
<td>6.285</td>
<td>0.35</td>
<td>6.142</td>
<td>6.142</td>
<td>0.35</td>
<td>6.257</td>
<td>6.257</td>
<td>0.00</td>
</tr>
<tr>
<td>Interesting</td>
<td>meaningful</td>
<td>6.000</td>
<td>6.375</td>
<td>-0.63</td>
<td>6.357</td>
<td>0.25</td>
<td>6.285</td>
<td>6.285</td>
<td>0.25</td>
<td>6.400</td>
<td>6.171</td>
<td>1.02</td>
</tr>
<tr>
<td>Dependable/</td>
<td>honest</td>
<td>5.875</td>
<td>6.125</td>
<td>-1.53</td>
<td>6.071</td>
<td>1.39</td>
<td>5.571</td>
<td>5.571</td>
<td>1.39</td>
<td>6.285</td>
<td>6.114</td>
<td>0.85</td>
</tr>
<tr>
<td>Undependable</td>
<td>dishonest</td>
<td>5.125</td>
<td>5.500</td>
<td>-1.43</td>
<td>5.000</td>
<td>-0.69</td>
<td>5.285</td>
<td>5.285</td>
<td>-0.69</td>
<td>5.571</td>
<td>5.521</td>
<td>0.20</td>
</tr>
<tr>
<td>Dependable/</td>
<td>wise</td>
<td>5.000</td>
<td>5.125</td>
<td>-0.55</td>
<td>5.214</td>
<td>0.25</td>
<td>5.142</td>
<td>5.142</td>
<td>0.25</td>
<td>5.200</td>
<td>5.457</td>
<td>-1.06</td>
</tr>
</tbody>
</table>

*Significant at the .05 level

7 degrees of freedom | 13 degrees of freedom | 34 degrees of freedom
Table 13. Correlated T-Values and Mean Scores for Three Sample Groups on the Semantic Differential Concept of "My Perceptions of My Purposes as a Teacher"

<table>
<thead>
<tr>
<th>Scale Origin</th>
<th>Scale</th>
<th>Teachers</th>
<th>Graduate Students</th>
<th>Undergraduate Students</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Favorable</td>
<td>Unfavorable</td>
<td>Pretest</td>
<td>Posttest</td>
</tr>
<tr>
<td>Involved/</td>
<td>attracting</td>
<td>repelling</td>
<td>6.125</td>
<td>7.000</td>
</tr>
<tr>
<td>Alienated</td>
<td>friendly</td>
<td>unfriendly</td>
<td>6.500</td>
<td>6.625</td>
</tr>
<tr>
<td>Self-</td>
<td>approaching</td>
<td>receding</td>
<td>6.000</td>
<td>6.375</td>
</tr>
<tr>
<td>Revealing/</td>
<td>revealed</td>
<td>concealed</td>
<td>6.500</td>
<td>6.875</td>
</tr>
<tr>
<td>Concealing</td>
<td>subjective</td>
<td>objective</td>
<td>4.000</td>
<td>5.000</td>
</tr>
<tr>
<td>Process-</td>
<td>meaningful</td>
<td>meaningless</td>
<td>7.000</td>
<td>6.875</td>
</tr>
<tr>
<td>oriented/</td>
<td>contemporary</td>
<td>non-contemporary</td>
<td>6.750</td>
<td>6.250</td>
</tr>
<tr>
<td>Goal-</td>
<td>timely</td>
<td>untimely</td>
<td>6.750</td>
<td>6.750</td>
</tr>
<tr>
<td>oriented</td>
<td>intrinsic</td>
<td>extrinsic</td>
<td>5.500</td>
<td>6.500</td>
</tr>
<tr>
<td></td>
<td>intentional</td>
<td>unintentional</td>
<td>6.625</td>
<td>6.500</td>
</tr>
<tr>
<td></td>
<td>free</td>
<td>constrained</td>
<td>5.625</td>
<td>5.875</td>
</tr>
<tr>
<td>Control/</td>
<td>voluntary</td>
<td>compulsory</td>
<td>5.625</td>
<td>6.000</td>
</tr>
<tr>
<td></td>
<td>consistent</td>
<td>inconsistent</td>
<td>6.125</td>
<td>5.625</td>
</tr>
<tr>
<td></td>
<td>elastic</td>
<td>inelastic</td>
<td>6.250</td>
<td>6.125</td>
</tr>
<tr>
<td>Altruistic/</td>
<td>altruistic</td>
<td>egotistic</td>
<td>4.750</td>
<td>4.750</td>
</tr>
<tr>
<td>Larger/</td>
<td>wide</td>
<td>narrow</td>
<td>6.370</td>
<td>6.500</td>
</tr>
<tr>
<td>issues/</td>
<td>Smaller</td>
<td>issues</td>
<td>4.250</td>
<td>5.000</td>
</tr>
</tbody>
</table>

*Significant at the .05 level
did not change significantly from pre-testing to post-testing as seen in the low-correlated t values. Therefore the null hypothesis concerning no change in the teachers' perceptions of the helper relationship scales IX was not rejected. While there was a significant increase at the .05 level of probability for the mean score changes on the scale wise-foolish under the attitude concept myself and for the scales attracting-repelling and intrinsic-extrinsic under the attitude concept of my purposes or teaching purposes, these scales represent only three out of a total of 57 scales. Since the majority, 54, of the bipolar scales for the teachers' under the helping relationship did not change significantly, it was not possible to consider rejecting the null hypothesis.

Graduate Students

The results of the correlated t tests on the change scores of the 57 bipolar adjective scales of the helping relationship attitude concepts of myself, others, and purposes for the graduates, show that the majority of the scales did not change significantly from pre-testing to post-testing. Only three scales out of 57 changed significantly at the .05 level of probability. Therefore the null hypothesis X which stated there would be no change was not rejected.

Undergraduate Students

The results of the correlated t tests on the change scores of the 57 bipolar adjective scales of the helping relationship attitude concepts of myself, others, and purposes
for the undergraduates, show that the majority of the scales did not change significantly from pre-testing to post-testing. Only two scales out of 57 changed significantly at the .05 level of probability. Therefore the null hypothesis XI which stated there would be no change was not rejected.

In summary, there was no significant change found in any of the study groups for the majority of the 57 bipolar adjective scales under the attitude concepts of the helping relationship, myself, others, and purposes, from pre-testing to post-testing. Therefore none of the null hypotheses IX, X, or XI were rejected. These findings point out that there is no significant relationship between the 57 bipolar adjective scales and the attitude concepts of the helping relationship.

Table 14 shows the direction in which all three group-mean scores moved from pre-testing to post-testing on all three attitude concepts. In the lower right hand corner of the table the directional totals for all of the scales for all groups show that there were total mean scale increases of 91, decreases of 62, and 18 incidences where scales remained the same from pre-testing to post-testing. It appears that while approximately one-half of the total mean score changes from pre-test to post-test were positive increases, the other half either changed negatively or remained the same. Looking across the groups at single concepts, the most positive changes occurred for myself and purposes. The attitude concept, others, experienced the most negative changes for all three groups totalling a minus 27 points. The student groups
Table 14. The Direction of the Mean Score Changes from Pretesting to Posttesting for All Three Groups on All Fifty-Seven Scales under the Attitude Concepts Myself, Others, and Purposes of the Helping Relationship.

<table>
<thead>
<tr>
<th>Study Groups</th>
<th>Myself Increased</th>
<th>Myself Decreased</th>
<th>Myself Remained the same</th>
<th>Others Increased</th>
<th>Others Decreased</th>
<th>Others Remained the same</th>
<th>Purposes Increased</th>
<th>Purposes Decreased</th>
<th>Purposes Remained the same</th>
<th>TOTALS Increased</th>
<th>TOTALS Decreased</th>
<th>TOTALS Remained the same</th>
</tr>
</thead>
<tbody>
<tr>
<td>TEACHERS</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Range in scores:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Myself, 4.8 to 6.375</td>
<td>10</td>
<td>5</td>
<td>4</td>
<td>9</td>
<td>6</td>
<td>4</td>
<td>12</td>
<td>5</td>
<td>2</td>
<td>31</td>
<td>16</td>
<td>10</td>
</tr>
<tr>
<td>Others, 4.625 to 6.7500</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Purposes, 4.000 to 7.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>GRADUATE STUDENTS</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Range in scores:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Myself, 4.714 to 6.500</td>
<td>13</td>
<td>5</td>
<td>1</td>
<td>9</td>
<td>9</td>
<td>1</td>
<td>10</td>
<td>8</td>
<td>1</td>
<td>32</td>
<td>22</td>
<td>3</td>
</tr>
<tr>
<td>Others, 4.214 to 6.357</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Purposes, 4.000 to 6.857</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>UNDERGRADUATE STUDENTS</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Range in scores:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Myself, 4.485 to 6.457</td>
<td>11</td>
<td>4</td>
<td>4</td>
<td>6</td>
<td>12</td>
<td>1</td>
<td>11</td>
<td>8</td>
<td>0</td>
<td>28</td>
<td>24</td>
<td>5</td>
</tr>
<tr>
<td>Others, 3.800 to 6.400</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Purposes, 3.828 to 6.880</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TOTAL SCORES</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Increases</td>
<td>34</td>
<td>19</td>
<td>9</td>
<td>24</td>
<td>27</td>
<td>6</td>
<td>33</td>
<td>21</td>
<td>3</td>
<td>91</td>
<td>62</td>
<td>18</td>
</tr>
<tr>
<td>Decreases</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Same</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: The table represents the number of scale changes for each group and purpose based on the direction of the mean score changes from pretesting to posttesting.
tended to show more decreases on all three concepts than the teachers. While the changes shown on this table are interesting, they must be taken with caution, since the mean change scores often varied only slightly from pre-testing to post-testing. Looking over all of the scales and groups, this investigator finds a good deal of similarity in mean scores and mean score changes.

**Summary**

Significant changes were found in the following instances:

1) The graduate and undergraduate students' self-actualized inner-directedness;

2) The undergraduate students' growth in personal openness and trust;

3) the graduate and undergraduate students' perceptions of the relationship between the scales of and concept called subject matter.

All of the other pre-post changes in the subjects' perceptions did not show statistical significance at the .05 level of probability.
CHAPTER V

DISCUSSION AND IMPLICATION OF
THE FINDINGS

The present research effort attempted to determine if there would be any change in the perceptions of the teachers and students of an open education teacher preparation program in the area of self-actualization, personal and community TORI (trust and openness), subject matter, and the helping relationship. The conclusions and implications of the research findings are found in this chapter under the appropriate categorical headings.

Conclusions and Discussion of Findings

Self-Actualization

The graduate students and undergraduate students increased positively in their self-actualized inner-directedness from pre-test to post-test. This increase was significant ($P < .05$). The graduate and undergraduate students' change scores in self-actualized time competence were not significant. The teachers' changes in self-actualized inner-directedness and time competence were not statistically significant. Increases of the subjects' scores in time competence indicate that they were becoming increasingly time competent and living in the "here and now" more than the past or future. Decreases indicate subjects' were living more in the past and future and becoming more time-incompetent, according to Shostrom (1966).
The findings for all three groups on the POI show that both student groups experienced greater growth increases than the teachers, in time competence and inner-directedness. These student increases may be due to the fact that the students were involved in a good deal of decision making throughout the semester. The significant increases in the student inner-directedness could be due to their having to use more origin behaviors than pawn behaviors in METEP. The teachers were often required to use origin behavior too, as in situations in which they made program changes in response to their needs as well as those of the students. The teachers started out the semester just below the self-actualized mean for inner-directedness and scored above the self-actualized mean at post-test. This increase may have been due to their use of origin behavior. Also, throughout the semester as students provided professors with positive feedback concerning METEP, the professors’ self-concepts may have raised.

As was suggested in Chapter III the graduate students did score a good deal higher than the undergraduates on the pre-testing of the POI. Perhaps Aspy’s (1969) findings that undergraduates tend to be operating at Maslow’s security level during teacher education suggests a reason for the undergraduates’ scoring nearer the non-self-actualized mean and the norm mean than the self-actualized mean at pre-testing. On the other hand, the graduates scored considerably higher on inner-directedness and time competence at post-testing. Perhaps they experienced such growth because they were
operating on a higher need level than the undergraduates and teachers throughout the program. As mentioned earlier, the graduate students had had a number of personal and professional experiences which may have contributed to their operating at a higher need level than the undergraduates.

Since no control group was used in this study, it is difficult to know how much the METEP experience affected these scores and how much they were influenced by concurrent experiences such as dating and private lives. A number of the METEP students told this investigator during the semester that they felt the METEP experiences were a part of their total living. For example, one student claimed that she could not discern where her private life began and her METEP experiences left off since she felt they were so intermeshed. Other comments such as this led this investigator to suspect that perhaps the METEP experience did affect the students' overall perceptions.

An explanation for no significant increase in time competence may be that the methods preparation phase of teacher education tends to be futuristically oriented in that students learn methods and approaches which they are to apply at a later date. Even though METEP did focus on the involvement of students in the on-going experiencing of the ideas presented, the METEP program is consciously futuristically oriented. Perhaps a teacher education program which is experientially based in the here and now would tend to increase the time competence of both staff and students. The
Bank Street Model of teacher preparation involves professors and teacher trainees directly in elementary classrooms throughout teacher preparation, as do other programs. This investigator feels that the concept of time competence would have to be investigated further to determine whether or not time competence is a relevant concept for teacher education in regard to the development of positive personal growth of students preparing to be teachers.

Personal and Community TORI

The undergraduate students' change scores were significant (P<.001) in personal TORI from pre-test to post-test. Pre-post test changes in the following areas of personal and community TORI were not significant: undergraduate community TORI, graduate personal and community TORI, and the teachers' personal and community TORI. The findings of the TORI for all three groups suggest that the METEP educational environment contributed to the positive growth in personal and community TORI of the METEP participants.

Although only the undergraduates showed a significant increase in personal TORI, all groups showed an increment in score. The undergraduate scores in personal TORI increased significantly as did their inner-directedness on the POI. The undergraduates scored lowest of the three groups in personal TORI and self-actualization, inner-directedness on the pre-test and experienced significant growth in both areas. Evidently the METEP experience provided an environment in
which the undergraduates could grow in areas of need such as self-actualization. The literature suggested that the teacher's person does affect student growth; therefore it became the focus of this investigation to help students grow toward self-actualization during teacher education. According to the findings, increases in personal growth did occur in both student groups on the POI and the TORI as a result of the METEP experience. The teachers' low increase in personal TORI did not seem to hold the students back from increasing in personal TORI. Both student groups scored higher than the teachers on personal TORI at post-test. These findings suggest that the teachers do not necessarily set the standard for the amount of growth experienced in personal trust and openness in the open classroom, but, rather, that the student groups may excel them and develop levels of trust and openness based on their own experiencing. It would be interesting to study the effects of maturity on these scores. Perhaps the open classroom tends to be a learning environment in which both teachers and students are free to grow at their paces without unnecessarily hindering another's growth. This is only speculation at best, but it may be that student growth in the open classroom is not nearly as dependent on particular teacher characteristics as it is on teacher attitude. For example, open education teachers may simply need to be basically positive persons with facilitative and diagnostic skills which can enhance student growth with the result that both teachers and students continue to grow in their own ways at
their own pace. This of course means that the students may excel the teachers in growth or vice versa, depending on the interests and needs of either of the groups or individuals. Whether or not the students would tend to regress in self-actualization with maturity would be an interesting study focus. Maslow (1954) does suggest however that he finds increasingly greater self-actualization in older more mature persons than he does in younger persons.

The teachers and the undergraduates experienced greater growth in the community TORI (trust, openness, realization, and interdependence) than the graduate students did. This may have been due to the fact that the fourteen graduate students developed a group feeling among themselves the first week of the program. The graduates held their first all group meeting the day before the pre-test was administered. A feeling of community began to develop as a result of this meeting. This feeling of graduate cohesiveness continued throughout the program, hence it may have been that the graduates felt little need to mix into the larger group thus developing community throughout METEP.

While the teacher sample size was small, making it difficult to achieve significance in change, that group did show positive growth in community TORI. This growth may have resulted from the staff working together through a number of problems, such as program limitations and lack of understanding among staff members and between staff and students. Toward the latter part of the semester, these problems were
aired at total METEP community sessions. During these sessions both staff and student concerns were shared along with group planning of certain METEP guidelines. These concerns included such items as the selection of next spring semester's student teaching classrooms. These sessions were an indication of increased personal and community TORI in the participants. The undergraduate scores remained the highest in community TORI at both testings. This high rating in community trust and openness may have been due to the fact that the undergraduates had the largest membership of the three groups. Also a number of the undergraduates reported to this investigator and other staff members that they felt left out of the graduate group. This may have caused them to form a more cohesive group among themselves and with the teachers throughout the semester. Perhaps if TORI were taught directly as Gibb (1968) suggests, subjects' scores would have been higher on TORI at post-test. The experiences of METEP in which students and teachers were grouped together in a select program may have increased undergraduate community. METEP used the same two adjoining classrooms throughout the semester in which on-going METEP projects and ideas became the working part of the environment. For many undergraduates, this was a place to go, to discuss problems, and to gain support for ideas.
The POI-TORI Correlations

The correlation study between the POI and TORI results show that on the post-test results the POI inner-directedness and time competence and the personal TORI items 0, R, I, relate significantly. There was no relationship between the POI and the community TORI items. This lack of relationship gives support to the fact that there is a relationship between POI and TORI measures. There should be no relationship between the POI and the community TORI as the first test measures personal growth and the latter measures community growth. Since it is assumed that personal and community growth are different, a personal growth instrument such as the POI could not be expected to correlate significantly with a community growth instrument such as the community TORI. While it is felt that the sample size of this study was not large enough to offer more substantial findings on the POI-TORI correlation, the findings strongly suggest that such a relationship exists. It may be of interest to future investigators to explore this relationship further, particularly since the TORI can be administered quickly and easily compared to the POI which is quite involved and takes some 30 to 40 minutes to mark and several minutes of computer time to score. The TORI takes approximately 5-10 minutes to mark and about 2 minutes to hand score.
Subject Matter

The graduates and undergraduates increased in their perceptions of the subject matter scales of the open education teacher preparation program. These increases were significant ($P < .05$ and $P < .0001$).

Both the undergraduate and the graduate student groups indicated that the METEP subject matter related more closely to those adjectives which reflected effective helper purposes and meaningful subject matter. The subject matter they experienced before METEP was more closely related to the purposes of ineffective helpers and meaningless subject matter (Combs et al., 1971). Specifically the METEP subject matter was perceived by the students to be more attracting, friendly, open, meaningful, important, beneficial, pleasurable, and voluntary than their views of subject matter previous to the METEP experience. Combs (et al., 1971) states that subject matter must be relevant to the purposes and needs of the learner before personal growth can occur. The study findings suggest that the students did see the METEP subject matter as related to their needs and purposes and that corresponding personal growth did occur as manifested in the increased student inner-directedness on the POI and increased personal trust and openness on the TORI. The suggestion here is, that for personal growth to occur in the students, they would have to perceive the METEP subject matter as meaningfully related to their needs and purposes. While a relationship between the students' view of the subject matter and their personal growth
was not hypothesized, it was suggested in the literature on the relationship between subject matter meaning and personal growth (Combs et al. 1971). So, while the findings of this investigation cannot state a relationship between student views of subject matter and student personal growth, the relationship is suggested here in the hope that other investigators may later be interested in testing such a relationship.

Helping Relationship

The majority of the teachers', the graduate students', and the undergraduate students' did not increase significantly in their perceptions of the scales of the helping relationship from pre-testing to post-testing.

The particular adjective scales selected by this investigator to reflect the meaning of the helping relationship discussed in Combs (et al., 1971) did not change significantly in relation to the attitude concepts myself, others, and purposes as manifested on the semantic differential. The reason the participants' scores did not increase significantly may have been due to the fact that the SD is a behavioral self-report instrument (an instrument on which someone reports on himself) which Combs (et al. 1965b) finds cannot measure self-beliefs. The literature on the measurement of one's self is contradictory as Rogers (1951) and Allport (1955) support self-report as a measure of self-concept or self-beliefs and Combs (et al. 1965b) disagrees. Purkey (1970) suggests that a combination of self-report plus inferential measurement
techniques may be the most comprehensive and accurate approach to assessing one's perceptions relating to self-concept. Another explanation for the lack of significant change in the participants' views of the adjectives used to describe myself, others, and helper purposes, may be due to the fact that the scales selected by this investigator to reflect the meanings of the helping relationship were inappropriate though discussions with the criterion group did not indicate this. Another possible explanation for lack of pre-post test change is that the participants' scores on the helping relationship pre-testing were sufficiently high as to warrant little change at post-test. An explanation for the students' lack of change may be due to the fact that the concept "others" and "purposes" related to ideas in the future more than in the present. For example, it may have been difficult for the students to relate to their purposes as a teacher when they were still in the methods training phase of teacher preparation. However, all of the students had on-going tutoring experiences in local elementary schools. On post-testing, both student groups showed slight decreases on a number of the helper scales which may support a number of the findings from other research regarding students' attitudes during student teaching. Day (1959) and Newsome (1965) found that student teaching attitudes tended to become less positive toward students and teaching after their initial teaching contact than they had been before student teaching. Thus the METEP tutoring experience may have served as the initial teaching contact and some of the
students' attitudes toward the helping relationship decreased accordingly. Studies in student-teaching attitude change attribute lower post-test attitude scores to the student-teachers' becoming less idealistic and more realistic about what they are able to do as teachers (Bunker 1970).

The METEP teachers also experienced a few decreases in the post-testing of the helper relations. This may have been due to the fact that this was a new program that they had high hopes for and that they discovered along the way that some of their views of the helping relationship decreased slightly as a result of their dealing with the day to day problems of METEP.

**Implications for Teacher Education**

The findings in the self-actualization of the teachers and students of METEP suggest that something happened during the semester that caused the participants to score higher on time competence and inner-directedness at the end of the semester than at the beginning. Gibb's (1970b) work suggests that such growth does not occur where trust and openness are not evident and de Charm's (1971) studies in origin climates suggest that students who are involved in the decisions, structures, and evaluation concerning their own learning do increase in self-actualization. The METEP experience offered students and teachers many opportunities to make decisions based on the on-going needs of all involved. Clearly, the findings in all of these areas: self-actualization, personal
and community TORI and subject matter, suggest that increases in each of these areas is important if growth in self-actualization is to occur. Even though many of the mean pre-post increases were not significant, some growth did occur in all of these areas except for the teachers' time competence which decreased .125.

The suggestion this investigator would like to make from this research is that it is important for teacher educators to observe more about students-in-training than their grade point averages, the courses covered, and the products of their training in terms of lesson plans, units, and projects. While these areas may all contribute to effectiveness as teachers, it is also important to focus on the personal growth or self-actualization of the student preparing to become a teacher. With student growth toward self-actualization as a goal in teacher education, it has become the focus of this investigation to show how comprehensive educational planning can achieve this goal. Successful educational planning is based on the identification of assumptions and goals, followed by a definition of the leadership style, the climate, the subject matter, and the demand characteristics which will support movement toward these goals. The following figure is an attempt to illustrate this idea.
The lines of the figure represent the processes of education including the goals and the basic assumptions. The overlapping circles identify the areas which need to be clarified in relationship to any particular set of goals and assumptions. For example, if one assumes students can make decisions in learning, and goals of increased student inner-directedness are established, then this investigator is suggesting that such growth will probably take place where: 1) the learning climate is a TORI environment and is based on trust and openness, 2) leaders feel able and competent as persons, 3) where the students are expected to make decisions in their learning, and 4) the subject matter is related to student purposes. It is suggested that all four of these components have to be defined in the light of particular goals and assumptions for goal achievement to become a reality in education.

This study strongly suggests that in order for teacher education to be successful in reaching particular goals, that the on-going educational experiences must be defined and clarified in light of the particular program goals and
assumptions. The purpose of this investigation has been to explore those educational experiences, leadership, and climates which tend to support student growth toward self-actualization. In this study the students' growth toward self-actualization was accomplished through a teacher preparation program based on open assumptions of learning in which students became increasingly responsible for the decisions concerning their learning.

Suggestions for Further Research

The use of a control group in a study such as this could help to further clarify and define those kinds of educational environments and experiences which promote student growth in self-actualization during teacher preparation. An experimental design using a control group would tend to reduce the effects of the intervening variables, such as the influence of the students' private lives on their self-actualization. Also it is suggested that student interviews, case studies, and observations by impartial observers, may provide additional information on student growth which seems impossible to gain by only self-report instruments. Variations on the open education experience during teacher preparation could also be of value to explore in terms of both staff and student personal growth. Involving children directly in the program may increase subjects' time competence. In addition, it might be helpful to observe student growth in teaching competencies along with their personal growth in the open classroom.
Another research focus would be to examine a situation in which the staff makes a deliberate effort to provide a model of the open classroom for the students. For example, since community is an important part of the open classroom, perhaps the staff could model such community through their interactions with one another. These interactions might take the form of staff members helping each other teach and problem solve with students. While the METEP staff did interact and help each other a good deal, perhaps such staff interdependency could be emphasized even more in a future study.

The literature suggests that a strong positive relationship exists between de Charm's (1971) origin behavior and the growth of inner-directedness. Therefore a study of student changes in inner-directedness as a result of their experiences in a "pawn" educational environment might prove fruitful. Research which focused on the need levels (Aspy 1969) of students in teaching at both the undergraduate and graduate levels of preparation may reveal more information on the readiness of these two groups for teaching. In regard to the time competence concept, it would be interesting to further explore this idea in relation to teaching effectiveness in the open classroom. Such questions as "are time competent teachers more effective in open classroom management than time incompetent teachers,?" may be of interest.

Definitions of persons having positive self-concepts may also be explored. While self-actualization was used in this study,
effective leaders as defined by Hersey and Blanchard (1969) may offer a definition for those with positive self-concepts.

This study observed both teacher and student growth in an effort to understand how teacher and student growth interacts or is different. According to the findings in this study, student post-test growth sometimes surpassed teacher growth, as in the graduate students' self-actualization. It may be fruitful to investigate the relationship of student and teacher personal growth in open education as contrasted with traditional education environments. Also it may be of value to observe different teaching styles and various teaching environments to determine which educational circumstances do tend to increase trust the most as measured by Gibb's (1968) TORI theory of growth. In regard to the students' attitudes toward the subject matter of teacher preparation, Combs (1971) suggests that subject matter which relates to student purposes and needs will aid in their personal growth. It could be helpful to explore whether or not the subject matter of other open education teacher preparation programs and traditional programs would be seen by students positively, as was the METEP subject matter. Another suggestion would be to do follow-up research on METEP in addition to follow-up studies of METEP students during student teaching and early teaching employment.

While the subjects' pre-post changes on the helping relationship section of the semantic differential were minimal in this study, perhaps if this instrument were administered
again, after the student teaching experience, the students would show greater changes. It may be that, as Combs (et al. 1965) suggests, inferential measurement techniques are needed to measure self-concept rather than self-report techniques. In this case one may refer to Purkey (1970) who suggests that both self-report and inferential measurement techniques are needed to measure self-concept.

In conclusion, this study has found that the open classroom does provide an educational environment in which both teachers and students experience some growth personally. In the event that there is interest in the replication of part or all of this study, and if more information is needed on METEP than is provided in chapter III and Appendix B of this study, interested persons should write to the METEP Teacher Education Staff in the School of Education at the University of Massachusetts in Amherst.
BIBLIOGRAPHY


Taylor, D. W., Berry, P. C., and Block, C. H. "Does group participation when using brainstorming facilitate or inhibit creative thinking?" *Administration Science Quarterly,* 3 (1958), 23-47.


Operational Definitions of Effective Helpers Concept of “Subject Matter Meaning” (Same list for purposes used) (Combs et al. 1971, pp. 15 and 16).

Involved-alienated. Helpers tend to be personally involved with rather than alienated from the people they work with. The helper feels his appropriate role as one of commitment to the helping process and willingness to enter into interaction, as opposed to being inert or maintaining aloof or remote from interaction (teachers and priests).

Self-revealing—self-concealing. Helpers are more likely to be self-revealing than self-concealing. They are willing to disclose the self. They can treat their feelings and shortcomings as important and significant rather than hide or cover them up. They seem willing to be themselves (teachers and counselors).

Process-oriented—goal-oriented. Helpers are concerned with furthering processes rather than achieving goals. They seem to see their appropriate role as one of encouraging and facilitating the process of search and discovery as opposed to promoting or working toward a personal goal or prescriptive solution (teachers).

Feeling-controlling. Helpers perceive their purpose as one of feeling rather than of controlling people—that is to say, the helper sees the purpose of the helping task as one of assisting, releasing, and facilitating rather than as a matter of controlling, manipulating, coercing, blocking, or inhibiting behavior (teachers, counselors, and priests).

Altruistic-narcissistic. Helpers have altruistic purposes rather than narcissistic ones. Their purposes are more oriented toward aiding and assisting other people rather than attending to their own personal or selfish goals (counselors).

Larger interactional ones. Helpers tend to be more concerned with larger rather than smaller issues. They tend to view events in a broad rather than a narrow perspective. They are concerned with the larger concatenations of events and with more extensive implications rather than with the immediate and specific. They are not exclusively concerned with details, but can perceive beyond the immediate to the future (teachers and counselors).

Table 1. Origin of Scales and Factor Loadings of Scales Selected from the Osgood et al. Thesaurus Study* and used in the Semantic Differential Attitude Scaling under the concept “Subject Matter,” Combs et al. 1971**

<table>
<thead>
<tr>
<th>Concept from the “Meaning of Subject Matter”</th>
<th>Selected Scales</th>
<th>Factor Loadings</th>
<th>Evaluation Potency Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Favorable Pole</td>
<td>Unfavorable Pole</td>
<td>Favorable Pole</td>
</tr>
<tr>
<td>Involved</td>
<td>Alienated</td>
<td>attracting</td>
<td>repelling</td>
</tr>
<tr>
<td></td>
<td></td>
<td>friendly</td>
<td>unfriendly</td>
</tr>
<tr>
<td></td>
<td></td>
<td>interesting</td>
<td>boring</td>
</tr>
<tr>
<td></td>
<td></td>
<td>colorful</td>
<td>colorless</td>
</tr>
<tr>
<td>Self-</td>
<td>Self-</td>
<td>revealed</td>
<td>concealed</td>
</tr>
<tr>
<td>Revealing</td>
<td>Concealing</td>
<td>open</td>
<td>closed</td>
</tr>
<tr>
<td>Process-</td>
<td>Goal-</td>
<td>intrinsic</td>
<td>extrinsic</td>
</tr>
<tr>
<td>Oriented</td>
<td>Oriented</td>
<td>meaningful</td>
<td>meaningless</td>
</tr>
<tr>
<td></td>
<td></td>
<td>contemporary</td>
<td>non-contemporary</td>
</tr>
<tr>
<td></td>
<td></td>
<td>wise</td>
<td>foolish</td>
</tr>
<tr>
<td></td>
<td></td>
<td>important</td>
<td>unimportant</td>
</tr>
<tr>
<td></td>
<td></td>
<td>beneficial</td>
<td>harmful</td>
</tr>
<tr>
<td>Freeing</td>
<td>Controlling</td>
<td>voluntary</td>
<td>compulsory</td>
</tr>
<tr>
<td></td>
<td></td>
<td>elastic</td>
<td>inelastic</td>
</tr>
<tr>
<td>Altruistic</td>
<td>Narcissistic</td>
<td>hopeful</td>
<td>hopeless</td>
</tr>
<tr>
<td></td>
<td></td>
<td>pleasurable</td>
<td>painful</td>
</tr>
<tr>
<td>Larger</td>
<td>Smaller Ones</td>
<td>wide</td>
<td>narrow</td>
</tr>
<tr>
<td>Issues</td>
<td></td>
<td>complex</td>
<td>simple</td>
</tr>
</tbody>
</table>


Table 2. Origin of Scales and Factor Loadings of Scales Selected from the Osgood et al. Thesaurus Study* and used in the Semantic Differential Attitude Scaling under the concept "Myself," Combs et al. 1971**

<table>
<thead>
<tr>
<th>Concept from the Helping Relationship about &quot;Myself&quot;</th>
<th>Selected Scales</th>
<th>Factor Loadings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adequate-Inadequate Pole</td>
<td>Favorable Pole</td>
<td>Unfavorable Pole</td>
</tr>
<tr>
<td>Adequate</td>
<td>Inadequate</td>
<td>skillful</td>
</tr>
<tr>
<td></td>
<td></td>
<td>wise</td>
</tr>
<tr>
<td></td>
<td></td>
<td>elastic</td>
</tr>
<tr>
<td></td>
<td></td>
<td>successful</td>
</tr>
<tr>
<td>Identified-Apart-from with</td>
<td>contemporary</td>
<td>non-contemporary</td>
</tr>
<tr>
<td></td>
<td>revealed</td>
<td>concealed</td>
</tr>
<tr>
<td></td>
<td>open</td>
<td>closed</td>
</tr>
<tr>
<td>Wanted-Unwanted Pole</td>
<td>Favorable Pole</td>
<td>Unfavorable Pole</td>
</tr>
<tr>
<td>Wanted</td>
<td>Unwanted</td>
<td>intrinsic</td>
</tr>
<tr>
<td></td>
<td></td>
<td>friendly</td>
</tr>
<tr>
<td></td>
<td></td>
<td>beneficial</td>
</tr>
<tr>
<td></td>
<td></td>
<td>sociable</td>
</tr>
<tr>
<td>Trustworthy-Untrustworthy</td>
<td>honest</td>
<td>dishonest</td>
</tr>
<tr>
<td></td>
<td>intelligent</td>
<td>unintelligent</td>
</tr>
<tr>
<td></td>
<td>consistent</td>
<td>inconsistent</td>
</tr>
<tr>
<td>Worthy-Unworthy</td>
<td>meaningful</td>
<td>meaningless</td>
</tr>
<tr>
<td></td>
<td>important</td>
<td>unimportant</td>
</tr>
<tr>
<td></td>
<td>interesting</td>
<td>boring</td>
</tr>
</tbody>
</table>

---

Table 3. Origin of Scales and Factor Loadings of Scales Selected from the Osgood et al. Thesaurus Study* and used in the Semantic Differential Attitude Scaling under the concept "Others," Combs et al.**

<table>
<thead>
<tr>
<th>Concept from the Helping</th>
<th>Relationship about &quot;others&quot;</th>
<th>Selected Scales</th>
<th>Factor Loadings</th>
<th>Evaluation Potency Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Favorable</td>
<td>Unfavorable</td>
<td>Favorable</td>
<td>Unfavorable</td>
</tr>
<tr>
<td>Able</td>
<td>Unfavorable</td>
<td>Contemporary</td>
<td>Non-contemporary</td>
<td>.37</td>
</tr>
<tr>
<td></td>
<td></td>
<td>hopeful</td>
<td>hopeless</td>
<td>.37</td>
</tr>
<tr>
<td></td>
<td></td>
<td>elastic</td>
<td>inelastic</td>
<td>-.06</td>
</tr>
<tr>
<td>Friendly-Unfriendly</td>
<td>Unfavorable</td>
<td>friendly</td>
<td>unfriendly</td>
<td>.42</td>
</tr>
<tr>
<td></td>
<td></td>
<td>sociable</td>
<td>uncordial</td>
<td>.42</td>
</tr>
<tr>
<td></td>
<td></td>
<td>attracting</td>
<td>repelling</td>
<td>.43</td>
</tr>
<tr>
<td></td>
<td></td>
<td>revealed</td>
<td>concealed</td>
<td>.11</td>
</tr>
<tr>
<td>Internally Externally</td>
<td>Unfavorable</td>
<td>intrinsic</td>
<td>extrinsic</td>
<td>.25</td>
</tr>
<tr>
<td>Motivated</td>
<td></td>
<td>motivated</td>
<td>aimless</td>
<td>.29</td>
</tr>
<tr>
<td></td>
<td></td>
<td>subjective</td>
<td>objective</td>
<td>.09</td>
</tr>
<tr>
<td>Helpful-Hindering</td>
<td>Unfavorable</td>
<td>beneficial</td>
<td>harmful</td>
<td>1.00</td>
</tr>
<tr>
<td></td>
<td></td>
<td>congenial</td>
<td>quarrelsome</td>
<td>.49</td>
</tr>
<tr>
<td></td>
<td></td>
<td>careful</td>
<td>careless</td>
<td>.33</td>
</tr>
<tr>
<td>Worthy-Unworthy</td>
<td>Unfavorable</td>
<td>important</td>
<td>unimportant</td>
<td>.38</td>
</tr>
<tr>
<td></td>
<td></td>
<td>meaningful</td>
<td>meaningless</td>
<td>.41</td>
</tr>
<tr>
<td></td>
<td></td>
<td>interesting</td>
<td>boring</td>
<td>.40</td>
</tr>
<tr>
<td>Dependable-Undependable</td>
<td>Unfavorable</td>
<td>honest</td>
<td>dishonest</td>
<td>.50</td>
</tr>
<tr>
<td></td>
<td></td>
<td>wise</td>
<td>foolish</td>
<td>.57</td>
</tr>
<tr>
<td></td>
<td></td>
<td>consistent</td>
<td>inconsistent</td>
<td>.26</td>
</tr>
</tbody>
</table>


Operational Definitions of Effective Helpers Concept of "Perceptions of Helping Purposes" (Combs et al., 1971, pp. 15 and 16).

Involved-Alienated. Helpers tend to be personally involved with rather than alienated from the people they work with. The helper sees his appropriate role as one of conflict to the helping process and willingness to enter into interaction, as opposed to being inward or maintaining aloof or remote from interaction (teachers and priests).

Self-revealing-Self-concealing. Helpers are more likely to be self-revealing than self-concealing. They are willing to disclose the self. They can treat their feelings and emotions as important and significant rather than hide or cover them up. They are willing to be themselves (teachers and counselors).

Process-oriented-Goal oriented. Helpers are concerned with furthering processes rather than achieving goals. They see their appropriate role as one of encouraging and facilitating the process of search and discovery as opposed to promoting or working toward a personal goal or preconceived solution (teachers).

Freeing-controlling. Helpers perceive their purpose as one of freeing rather than controlling people—that is, they see the purpose of the helping task as one of assisting, releasing, and facilitating rather than as that of controlling, manipulating, coercing, blocking, or inhibiting behavior (teachers, counselors, and priests).

Altruistic-narcissistic. Helpers have altruistic purposes rather than narcissistic ones. Their purposes are more oriented toward aiding and assisting other people rather than attending to their own personal or selfish goals (teachers).

Larger issues-smaller ones. Helpers tend to be more concerned with larger rather than smaller issues. They tend to view events in a broad rather than a narrow perspective. They are concerned with the larger configurations of events and with more extensive implications rather than with the immediate and specific. They are not exclusively concerned with details, but can perceive beyond the immediate to the future (teachers and counselors).

Table 4. Origin of Scales and Factor Loadings of Scales Selected from the Osgood et al. Thesaurus Study* and used in the Semantic Differential Attitude Scaling under the concept "Helper Purposes," Combs et al.**

<table>
<thead>
<tr>
<th>Relationship: &quot;Helper Purposes&quot;</th>
<th>Selected Scales</th>
<th>Factor Loadings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Favorable Pole</td>
<td>Unfavorable Pole</td>
<td>Favorable Pole</td>
</tr>
<tr>
<td>Involved</td>
<td>Alienate</td>
<td>attracting</td>
</tr>
<tr>
<td></td>
<td></td>
<td>friendly</td>
</tr>
<tr>
<td></td>
<td></td>
<td>approaching</td>
</tr>
<tr>
<td>Self-Revealing</td>
<td>Self-Concealing</td>
<td>revealed</td>
</tr>
<tr>
<td>Process-Oriented</td>
<td>Oriented</td>
<td>open</td>
</tr>
<tr>
<td></td>
<td></td>
<td>subjective</td>
</tr>
<tr>
<td>Freeing</td>
<td>Controlling</td>
<td>intentional</td>
</tr>
<tr>
<td></td>
<td></td>
<td>free</td>
</tr>
<tr>
<td></td>
<td></td>
<td>voluntary</td>
</tr>
<tr>
<td></td>
<td></td>
<td>consistent</td>
</tr>
<tr>
<td></td>
<td></td>
<td>elastic</td>
</tr>
<tr>
<td>Altruistic Narcissistic</td>
<td>altruistic</td>
<td>egotistic</td>
</tr>
<tr>
<td></td>
<td>pleasurable</td>
<td>painful</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Larger Issues</th>
<th>Smaller Ones</th>
<th>Factor Loadings</th>
</tr>
</thead>
<tbody>
<tr>
<td>wide</td>
<td>narrow</td>
<td>.20</td>
</tr>
<tr>
<td>complex</td>
<td>simple</td>
<td>.17</td>
</tr>
</tbody>
</table>


Instructions for the Semantic Differential

The purpose of this study is to measure the meanings of certain things to various people by having them judge them against a series of descriptive scales. In taking this test, please make your judgments on the basis of what these things mean to you. On each page of this booklet you will find a different concept to be judged and beneath it a set of scales. You are to rate the concept on each of these scales in order.

Here is how you are to use these scales:

If you feel that the concept at the top of the page is very closely related to one end of the scale, you should place your check-mark as follows:

   Fair ___________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:_________:-----
IMPORTANT:

(1) Place your check-marks in the middle of spaces, not on the boundaries:

THIS          NOT THIS

'_'_'_'_'_ X '_'_'_'_'_

(2) Be sure you check every scale for every concept -- do not omit any.

(3) Never put more than one check-mark on a single scale.

Sometimes you may feel as though you've had the same item before on the test. This will not be the case, so do not look back and forth through the items. Do not try to remember how you checked similar items earlier in the test. Make each item a separate and independent judgment. Work at fairly high speed through this test. Do not worry or puzzle over individual items. It is your first impressions, the immediate "feelings" about the items, that we want. On the other hand, please do not be careless, because we want your true impressions.
<table>
<thead>
<tr>
<th>Subject Matter</th>
<th>Evaluation Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attracting</td>
<td>Repelling</td>
</tr>
<tr>
<td>Revealed</td>
<td>Concealed</td>
</tr>
<tr>
<td>Extrinsic</td>
<td>Intrinsic</td>
</tr>
<tr>
<td>Friendly</td>
<td>Unfriendly</td>
</tr>
<tr>
<td>Meaningless</td>
<td>Meaningful</td>
</tr>
<tr>
<td>Non-contemporary</td>
<td>Contemporary</td>
</tr>
<tr>
<td>Wise</td>
<td>Foolish</td>
</tr>
<tr>
<td>Important</td>
<td>Unimportant</td>
</tr>
<tr>
<td>Compulsory</td>
<td>Voluntary</td>
</tr>
<tr>
<td>Closed</td>
<td>Open</td>
</tr>
<tr>
<td>Beneficial</td>
<td>Harmful</td>
</tr>
<tr>
<td>Hopeful</td>
<td>Hopeless</td>
</tr>
<tr>
<td>Painful</td>
<td>Pleasurable</td>
</tr>
<tr>
<td>Inelastic</td>
<td>Elastic</td>
</tr>
<tr>
<td>Colorful</td>
<td>Colorless</td>
</tr>
<tr>
<td>Interesting</td>
<td>Boring</td>
</tr>
<tr>
<td>Complex</td>
<td>Simple</td>
</tr>
<tr>
<td>Subjective</td>
<td>Objective</td>
</tr>
<tr>
<td>Narrow</td>
<td>Wide</td>
</tr>
</tbody>
</table>
# SUBJECT MATTER

**MY PERCEPTIONS OF SUBJECT MATTER AS A STUDENT IN THE INTEGRATED DAY TEACHER EDUCATION PROGRAM**

<table>
<thead>
<tr>
<th>Evaluation Number</th>
<th>Attracting</th>
<th>Revealed</th>
<th>Extrinsic</th>
<th>Friendly</th>
<th>Meaningless</th>
<th>Non-contemporary</th>
<th>Wise</th>
<th>Important</th>
<th>Compulsory</th>
<th>Closed</th>
<th>Beneficial</th>
<th>Hopeful</th>
<th>Painful</th>
<th>Inelastic</th>
<th>Colorful</th>
<th>Interesting</th>
<th>Complex</th>
<th>Subjective</th>
<th>Narrow</th>
</tr>
</thead>
</table>
MYSELF
MY PERCEPTIONS OF MYSELF

<table>
<thead>
<tr>
<th>Repelling</th>
<th>Concealed</th>
<th>Intrinsic</th>
<th>Friendly</th>
<th>Meaningless</th>
<th>Contemporary</th>
<th>Harmful</th>
<th>Bungling</th>
<th>Unsocial</th>
<th>Honest</th>
<th>Successful</th>
<th>Wise</th>
<th>Identified</th>
<th>Unimportant</th>
<th>Closed</th>
<th>Inconsistent</th>
<th>Unintelligent</th>
<th>Interesting</th>
<th>Inelastic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attracting</td>
<td>Revealed</td>
<td>Extrinsic</td>
<td>Unfriendly</td>
<td>Meaningful</td>
<td>Non-contemporary</td>
<td>Beneficial</td>
<td>Skillful</td>
<td>Sociable</td>
<td>Dishonest</td>
<td>Unsuccessful</td>
<td>Foolish</td>
<td>Anonymous</td>
<td>Important</td>
<td>Open</td>
<td>Consistent</td>
<td>Intelligent</td>
<td>Boring</td>
<td>Elastic</td>
</tr>
</tbody>
</table>
### OTHERS

**MY PERCEPTIONS OF THE OTHERS I WORK WITH, WHEN I AM THE HELPING PERSON**

<table>
<thead>
<tr>
<th>Repelling</th>
<th>Attracting</th>
</tr>
</thead>
<tbody>
<tr>
<td>Concealed</td>
<td>Revealed</td>
</tr>
<tr>
<td>Intrinsic</td>
<td>Extrinsic</td>
</tr>
<tr>
<td>Unfriendly</td>
<td>Friendly</td>
</tr>
<tr>
<td>Meaningful</td>
<td>Meaningless</td>
</tr>
<tr>
<td>Contemporary</td>
<td>Non-Contemporary</td>
</tr>
<tr>
<td>Dishonest</td>
<td>Honest</td>
</tr>
<tr>
<td>Beneficial</td>
<td>Harmful</td>
</tr>
<tr>
<td>Unsociable</td>
<td>Sociable</td>
</tr>
<tr>
<td>Foolish</td>
<td>Wise</td>
</tr>
<tr>
<td>Hopeful</td>
<td>Hopeless</td>
</tr>
<tr>
<td>Quarrelsome</td>
<td>Congenial</td>
</tr>
<tr>
<td>Inconsistent</td>
<td>Consistent</td>
</tr>
<tr>
<td>Aimless</td>
<td>Motivated</td>
</tr>
<tr>
<td>Careless</td>
<td>Careful</td>
</tr>
<tr>
<td>Important</td>
<td>Unimportant</td>
</tr>
<tr>
<td>Inelastic</td>
<td>Elastic</td>
</tr>
<tr>
<td>Objective</td>
<td>Subjective</td>
</tr>
<tr>
<td>Interesting</td>
<td>Boring</td>
</tr>
</tbody>
</table>
### PURPOSES

**MY PERCEPTIONS OF MY PURPOSES AS A TEACHER**

<table>
<thead>
<tr>
<th></th>
<th>Attracting</th>
<th>Revealed</th>
<th>Extrinsic</th>
<th>Unfriendly</th>
<th>Meaningful</th>
<th>Non-Contemporary</th>
<th>Closed</th>
<th>Intentional</th>
<th>Painful</th>
<th>Compulsory</th>
<th>Egotistic</th>
<th>Approaching</th>
<th>Untimely</th>
<th>Consistent</th>
<th>Subjective</th>
<th>Elastic</th>
<th>Simple</th>
<th>Free</th>
<th>Wide</th>
</tr>
</thead>
<tbody>
<tr>
<td>Repelling</td>
<td>:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Concealed</td>
<td></td>
<td>:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Intrinsic</td>
<td></td>
<td></td>
<td>:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Friendly</td>
<td></td>
<td></td>
<td></td>
<td>:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Meaningless</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Contemporary</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Open</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Unintentional</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pleasurable</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Voluntary</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Altruistic</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Receding</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Timely</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Inconsistent</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Objective</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Inelastic</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Complex</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Constrained</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Narrow</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
TORI Inventory by Jack Gibb

My Feelings of Me

Place a check (X) on the scale at a point which approximately indicates your feelings about yourself AT THIS MOMENT in comparison to the persons described.

1. Person A is personal. When with another person he acts and talks as he feels about them at that moment. Person B is often impersonal. When with another person his actions and speech usually depend upon who the person is, their relationship and the situation.

2. Person A expresses his feelings directly and frankly. He deeply values open communication. Person B is cautious about expressing his real feelings. He deeply values being tactful and making a good impression on others.

3. Person A often does what he deeply wants to do and tries to express his real inner self. Person B often does what he feels he should do and tries to fulfill his obligations as a responsible person.

4. Person A likes to do things with others. He is comfortable working with them to achieve common goals with a minimum of control. Person B likes to lead or to be led. He is comfortable with a form of organization in which the rules are clearly stated and followed.
My Feelings of the Group

Evaluation Number

Place a check (X) on the scale at a point which approximately indicates how you feel about this group at this moment as compared to the groups described.

1. People here care how others feel and value them as persons. Individuals feel that they are an important part of the group. People here don't seem to care how others feel or to value them as persons. Individuals don't feel that they are important in this group.

2. People here are sharing feelings with others rather easily and openly. People listen and try to understand what others say to them. People here are expressing their feelings about others infrequently and very cautiously. People are not very interested in what others say to them.

3. People here seem to want to change by taking risks and asserting who they are. People feel they would be accepted and understood if they did or said almost anything. People here seem reluctant to change by taking risks and asserting who they are. They don't seem to want to risk offending others or being misunderstood.

4. People here really feel comfortable with each other and easily join together in a common undertaking. People feel a strong sense of belonging. People here do not really feel comfortable with each other nor do they easily join together. They feel little sense of belonging.
Appendix B
THE MODEL ELEMENTARY TEACHER EDUCATION PROGRAM
(METEP)

Bill Masalski
and METEP staff

METEP is a program which provides participants with those competencies necessary to function effectively in integrated day programs or any educational setting where active learning is emphasized. The METEP philosophy encourages a student to assume much of the responsibility for his own learning. The teacher's responsibility is to expose the student to a rich environment of materials, to encourage him to become self-directing, to permit him to become more intensely involved with those activities which interest him, and by continual diagnosis and assessment of his intellectual growth and development to guide him to experiences which will allow him to maintain a maximum rate of growth and development in all areas of concern. In this way, the student learns how to learn and develops an ability for self-education. The evidence that a teacher teaches as he has been taught has led the METEP staff to believe that the METEP participant who is himself exposed to this approach will indeed pattern his teaching in similar fashion.

METEP is basically a two semester sequence with opportunities for extended involvement beyond the second semester for those who wish to continue this program. The program is open to freshmen, sophomores, juniors and seniors, although students are counseled not to wait until their senior year to begin the sequence.

During the first semester of the sequence, the fifty students in the program participate in an 18 credit hour offering centered on the areas of Curriculum, Aesthetics, Human Relations, Social Studies, Language Arts and Reading, Science, Mathematics and Special Problems in Education concerned with the integrated day and active learning approaches.

During the full second semester of the two semester sequence METEP participants serve internships in integrated day settings with carefully selected and specially trained supervising teachers affiliated with the program. They earn 15 credit hours for this experience.

Except for the regular University requirements, the METEP program has no "outside" requirements. However, courses which the METEP staff highly recommend to be taken by the students prior to or after the experience in the METEP program include: Zoology 200 (meets a University "E" requirement), Botany 200 or Physics 123 (courses specifically designed for elementary education majors), anyone of several educational psychology courses, and any one of the Philosophy of Education courses.
The required course work and internship of the METEP program more than adequately meet the state certification requirements. If the student also takes the recommended courses outlined above, he will not only be certified in the Commonwealth of Massachusetts but he will also meet the requirements of many other states as well.
"Ideas About Children and the Process of Learning"

1. Children's innate curiosity and self-perpetuating exploratory behavior should form the basis of their learning in school; they should have the opportunity to pursue interests as deeply and for as long as the pursuit is satisfying.

2. Providing for sustained involvement requires a flexible and individualized organization of time.

3. Children are capable, with varying degrees of support, of making intelligent decisions in significant areas of their own learning.

4. Individual children often learn in unpredicted ways, at their own rate, and according to their own style.

5. Work and play should not be differentiated in the learning process of children because play is a child's way of learning.

6. Knowledge is a personal synthesis of one's own experience the learning of "skills" and "subjects" proceeds along many intersecting paths simultaneously.

7. Traditional techniques of evaluation do not necessarily measure those qualities of learning which are most important, and may have a negative effect on learning.

8. Looking at a child's development over a long period of time is more useful for evaluation than comparing him with his peers or a standardized norm.

9. Children have the right to make important decisions regarding their own educational experience.

10. The child must be valued as a human being, treated with courtesy, kindness and respect.

11. The child's life in school should not be viewed primarily as a preparation for the future; each child's experiences are justifiable in themselves and are not dependent upon future performance for justification.

12. With a few consistent, reasonable, and explicit rules and limits, children are able to be more free and productive.


14. Learning is facilitated by relationships of openness, trust, and mutual respect.

15. Fear of making mistakes or of not doing well impedes a child's progress in learning.
16. Objectives of education should include, but go beyond, literacy, dissemination of knowledge, and concept acquisition.

17. The function of school is to help children learn to learn; to acquire both the ability and the willingness to extend their intellectual and emotional resources and bring them to bear in making decisions, organizing experience, and utilizing knowledge.

Adapted by Masha Rudman from Roland Barth and TDR Associates Report
There are three key differences between this kind of education and a traditional approach.

1. **Attitude**

   We proceed under the assumption that children are capable of learning to make choices and judgments about their own abilities and needs. We assume that the teacher serves as facilitator, guide, and co-learner.

2. **Materials**

   There may not be more materials in terms of numbers of things in this kind of classroom, but there will be a much greater diversity of materials. Seldom will there be more than five of any one book or game or material. The principle involved here is that children and materials interact differently depending on the time, the children, and the materials.

3. **Scheduling**

   A child in an integrated day classroom has more opportunity to stay with or leave an activity according to his current interests and/or needs.

   The above are comparative degrees. Our goal is that you begin to move toward the changes fully described above. The classes in which you will intern are only beginning to move in this direction. Please do not feel pressured. We would, however, like you to feel committed.

Masha Rudman
ASSUMPTIONS ABOUT LEARNING AND KNOWLEDGE

By Roland S. Barth

I. Assumptions About Children's Learning

Motivation

Assumption 1: Children are innately curious and will explore their environment without adult intervention.

Assumption 2: Exploratory behavior is self-perpetuating.

Conditions for Learning

Assumption 3: The child will display natural exploratory behavior if he is not threatened.

Assumption 4: Confidence in self is highly related to capacity for learning and for making important choices affecting one's learning.

Assumption 5: Active exploration in a rich environment, offering a wide array of manipulative materials, will facilitate children's learning.

Assumption 6: Play is not distinguished from work as the predominant mode of learning in early childhood.

Assumption 7: Children have both the competence and the right to make significant decisions concerning their own learning.

Assumption 8: Children will be likely to learn if they are given considerable choice in the selection of the materials they wish to work with and in the choice of questions they wish to pursue with respect to those materials.

Assumption 9: Given the opportunity, children will choose to engage in activities which will be of high interest to them.

Assumption 10: If a child is fully involved in and is having fun with an activity, learning is taking place.
Social Learning

Assumption 11: When two or more children are interested in exploring the same problem or the same materials, they will often choose to collaborate in some way.

Assumption 12: When a child learns something which is important to him, he will wish to share it with others.

Intellectual Development

Assumption 13: Concept formation proceeds very slowly.

Assumption 14: Children learn and develop intellectually not only at their own rate but in their own style.

Assumption 15: Children pass through similar stages of intellectual development, each in his own way and at his own rate and in his own time.

Assumption 16: Intellectual growth and development take place through a sequence of concrete experiences followed by abstractions.

Assumption 17: Verbal abstractions should follow direct experience with objects and ideas, not precede them or substitute for them.

Evaluation

Assumption 18: The preferred source of verification for a child's solution to a problem comes through the materials he is working with.

Assumption 19: Errors are necessarily a part of the learning process; they are to be expected and even desired, for they contain information essential for further learning.

Assumption 20: Those qualities of a person's learning which can be carefully measured are not necessarily the most important.

Assumption 21: Objective measures of performance may have a negative effect upon learning.

Assumption 22: Learning is best assessed intuitively by direct observation.
Assumption 23: The best way of evaluating the effect of the school experience on the child is to observe him over a long period of time.

Assumption 24: The best measure of a child's work is his work.

II. Assumptions About Knowledge

Assumption 25: The quality of being is more important than the quality of knowing; knowledge is a means of education, not its end. The final test of an education is what a man is, not what he knows.

Assumption 26: Knowledge is a function of one's personal integration of experience and therefore does not fall into neatly separate categories or "disciplines."

Assumption 27: The structure of knowledge is personal and idiosyncratic; it is a function of the synthesis of each individual's experience with the world.

Assumption 28: Little or no knowledge exists which it is essential for everyone to acquire.

Assumption 29: It is possible, even likely, that an individual may learn and possess knowledge of a phenomenon and yet be unable to display it publicly. Knowledge resides with the knower, not in its public expression.
Description of the Program

The M. Ed. in Elementary Education is a professional program which leads to the degree and to teacher certification at the elementary level (K-8). It is a coordinated program specifically aimed at graduates who hold a bachelors degree and wish to earn a masters degree and, teacher certification concurrently. The M. Ed. program is recommended to attract candidates who have diverse educational preparations, work experiences, and expertise to the field of elementary teachings.

The program combines academic and professional coursework with related field experiences for a minimum of thirty-three (33) credit hours. It is expected that a candidate would be enrolled in the program for two consecutive semesters and one summer session to complete the minimum program.

Rationale for the Program

As the crisis-need to prepare large numbers of teachers is diminishing, the preparation of quality teachers becomes a possibility. The development of quality teachers however, should not be limited to those who possess a degree in education and certification, for to do so is to exclude a group which can contribute fresh approaches, depth of content, alternative strategies, and differing experiences to the field of elementary teaching. The M. Ed. in Elementary Education capitalizes on these diversities to enable candidates to share their perspectives and experiences among themselves through seminar participation and with undergraduates as they interact in professional and field experiences offered by the Model Elementary Teacher Education Program.

Typically, candidates who want to enter elementary teaching and lack the professional credentials select courses and field experiences on a catch-as-catch-can basis. There often is little continuity in such programs and advising in such situations is minimal. While this approach has allowed promising candidates to enter the teaching establishment and make a contribution, the candidate has often suffered because there is little opportunity for him to plan a course of learning experiences commensurate with his educational background, work experience, and career goals. At the same time, there was little opportunity for the candidate to set individual goals, plan alternate instructional routes, evaluate his experiences, and reflect on his behavior. The M. Ed. in
Elementary Education program provides a coordinated and concentrated program for candidates based on the individual needs and goals of each participant within the framework of the Model Elementary Teacher Education Program.

Core Experiences

The candidate and his advisor plan a program which is consistent with his experiences and his career goals. The program includes those prerequisites to certification as established by Massachusetts law.

Candidates participate in a minimum of eighteen (18) credit hours in professional education including the following experiences:

- **METEP TEACHER PREPARATION PROGRAM (METHODS AND CURRICULUM WORKSHOPS)**: 9-18 credits
- **INTERNSHIP (FULL SEMESTER)**: 3-6 credits
- **SUPERVISORY SEMINAR**: 3 credits

**METEP-Teacher Preparation Program**

During his first semester on campus, the candidate will select from nine to eighteen credit hours of learning experiences from the Integrated Day workshops offered in the Model Elementary Teacher Education Program. The workshop experiences seek to provide participants with competencies in diagnostic and strategic skills in the management of the Integrated Day as well as in curriculum and content areas. These include language arts, reading, social studies, science, math, aesthetics, and human relations. Observation, evaluation and underlying philosophy will be included in the workshop semester.

M. Ed. candidates join the fifty selected undergraduates in the Integrated Day program for workshop experiences.

The METEP Integrated-Day approach, allows a learner to assume much of the responsibility for his own learning. The teacher's job is to expose the learner to a rich environment of materials to explore, to encourage the learner to be self-directing, to permit the learner to become intensely involved in those activities which interest him, and, by continual diagnosis and assessment of his intellectual growth and development, to guide the learner to experiences which will allow him to maintain a maximum rate of growth and development in all areas of concern. In this way he learns how to learn and develops the desire and ability for self-education. The METEP - Integrated Day Workshop has been established in the belief that this is the most useful kind of education in today's rapidly changing society.
<table>
<thead>
<tr>
<th>Time</th>
<th>MONDAY</th>
<th>TUESDAY</th>
<th>WEDNESDAY</th>
<th>THURSDAY</th>
<th>FRIDAY</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Room</td>
<td>Room</td>
<td>Room</td>
<td>Room</td>
<td>Room</td>
</tr>
<tr>
<td></td>
<td>226</td>
<td>226</td>
<td>226</td>
<td>226</td>
<td>226</td>
</tr>
<tr>
<td>8:30</td>
<td>OPEN LABS</td>
<td>OPEN LABS</td>
<td>OPEN LABS</td>
<td>OPEN LABS</td>
<td>OPEN LABS</td>
</tr>
<tr>
<td>10:00</td>
<td>OPEN LABS</td>
<td>OPEN LABS</td>
<td>OPEN LABS</td>
<td>OPEN LABS</td>
<td>OPEN LABS</td>
</tr>
<tr>
<td>11:00</td>
<td>ED 262/562 Science</td>
<td>ED 261/561 Language Arts</td>
<td>ED 205/505 Aesthetics</td>
<td>ED 263/563 Math</td>
<td>OPEN LABS</td>
</tr>
<tr>
<td>12:00</td>
<td>Support Groups</td>
<td>Support Groups</td>
<td>Support Groups</td>
<td>Support Groups</td>
<td>Support Groups</td>
</tr>
<tr>
<td>1:00</td>
<td>ED 205/505 AESTHETICS</td>
<td>ED 263/563 MATH</td>
<td>ED 262/562 OPEN LABS</td>
<td>ED 220/520 HUMAN RELATIONS</td>
<td>OPEN LABS</td>
</tr>
<tr>
<td>2:00</td>
<td>OPEN LABS</td>
<td>OPEN LABS</td>
<td>OPEN LABS</td>
<td>OPEN LABS</td>
<td>OPEN LABS</td>
</tr>
<tr>
<td>3:00</td>
<td>OPEN LABS</td>
<td>OPEN LABS</td>
<td>OPEN LABS</td>
<td>OPEN LABS</td>
<td>OPEN LABS</td>
</tr>
<tr>
<td>4:00</td>
<td>OPEN LABS</td>
<td>OPEN LABS</td>
<td>OPEN LABS</td>
<td>OPEN LABS</td>
<td>OPEN LABS</td>
</tr>
<tr>
<td>5:00</td>
<td>OPEN LABS</td>
<td>OPEN LABS</td>
<td>OPEN LABS</td>
<td>OPEN LABS</td>
<td>OPEN LABS</td>
</tr>
<tr>
<td>6:00</td>
<td>OPEN LABS</td>
<td>OPEN LABS</td>
<td>OPEN LABS</td>
<td>OPEN LABS</td>
<td>OPEN LABS</td>
</tr>
<tr>
<td>7:00</td>
<td>OPEN LABS</td>
<td>OPEN LABS</td>
<td>OPEN LABS</td>
<td>OPEN LABS</td>
<td>OPEN LABS</td>
</tr>
<tr>
<td>8:00</td>
<td>OPEN LABS</td>
<td>OPEN LABS</td>
<td>OPEN LABS</td>
<td>OPEN LABS</td>
<td>OPEN LABS</td>
</tr>
<tr>
<td>9:00</td>
<td>OPEN LABS</td>
<td>OPEN LABS</td>
<td>OPEN LABS</td>
<td>OPEN LABS</td>
<td>OPEN LABS</td>
</tr>
<tr>
<td>Date</td>
<td>Activity</td>
<td>Activity Description</td>
<td>Credit Earned</td>
<td></td>
<td></td>
</tr>
<tr>
<td>-----------------</td>
<td>---------------------------------------------------------------------------------------------</td>
<td>-------------------------------------------------------------------------------------------------------------</td>
<td>----------------</td>
<td></td>
<td></td>
</tr>
<tr>
<td>September 24</td>
<td>Workshop Module Number One: An Introduction to the Active Learning Approach in Elementary School Mathematics</td>
<td>(2)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>September 28</td>
<td>Test on Content Module Number One: Sets and Numbers</td>
<td>(4)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>October 1</td>
<td>Workshop Module Number Two: Strategies for Teaching and Learning Elementary School Mathematics</td>
<td>(2)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>October 8</td>
<td>Workshop Module Number Three: Exploring the Use of Color Cubes in Elementary School Mathematics</td>
<td>(2)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>October 12</td>
<td>Test on Content Module Number Two: Numeration Systems</td>
<td>(4)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>October 15</td>
<td>Workshop Module Number Four: Attitudes, Values, Racism, Diagnosis and Evaluation, and the Use of A-V Aids in Elementary School Mathematics</td>
<td>(2)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>October 22</td>
<td>Workshop Module Number Five: Exploring the Use of Metric Rods in Elementary School Mathematics</td>
<td>(2)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>October 26</td>
<td>Test on Content Module Number Three: The System of Whole Numbers</td>
<td>(4)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>October 29</td>
<td>Workshop Module Number Six: Exploring Basic Computation and Structure in Elementary School Mathematics</td>
<td>(2)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>November 5</td>
<td>Workshop Module Number Seven: Exploring Geometry in Elementary School Mathematics</td>
<td>(2)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>November 16</td>
<td>Test on Content Module Number Four: Geometry and Measurement</td>
<td>(4)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>November 19</td>
<td>Workshop Module Number Eight: Exploring Measurement in Elementary School Mathematics</td>
<td>(2)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>November 30</td>
<td>Test on Content Module Number Five: Relations, Graphs, Functions, Statistics, Probability and Logic</td>
<td>(4)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>December 3</td>
<td>Workshop Module Number Nine: Exploring Graphs, Relations, and Functions in Elementary School Mathematics</td>
<td>(2)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Date</td>
<td>Activity</td>
<td>Notes</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>------------</td>
<td>---------------------------------------------------------------------------</td>
<td>-------</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>December 10</td>
<td>Workshop Module Number Ten: Independent Exploration</td>
<td>(2)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>December 14</td>
<td>Test on Content Module Number Six: The Real Numbers</td>
<td>(4)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>December 17</td>
<td>Workshop Module Number Eleven: Independent Exploration</td>
<td>(2)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Readings</td>
<td>(24)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Working with Individual Children</td>
<td>(24)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>TOTAL</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Minimum requirements: completion of 72 units of credit.
This book is none of the above

Human relations is considered a vital part of effective elementary education. As such, a variety of workshop experiences have been established to help you become familiar with some alternative approaches to human relations in the classroom.

To facilitate the human relations workshops, a draft of a book, THIS BOOK IS NONE OF THE ABOVE, is given to each student in the METEP program. This book provides a summary of six approaches to human relations in the classroom and if all goes well additional chapters of the book will be distributed during the term. The six approaches are:

1. Relaxation and its relevance to the classroom
2. Nonverbal communication and body language
3. Attending behavior: the art of listening
4. Self-Expression
5. Decision making
6. Racial relations

Other chapters in preparation include existential psychology, behavior modification, myth making, and "the ecology of relationship."

Accompanying the six approaches are optional workshops which explore the issues in each topic in more detail. You will have the opportunity to sign up for small group workshops on the above topics, plus additional ones that may be of interest to you. The workshops will vary in length and style from a single lecture to two hour participant workshops to possible marathon weekends.

So, you are free to read this material, dig into it as much as you wish, set your own goals. All workshops are optional and you will determine the depth of experience in the human relations area that seems important to you.

You may want to check to make sure you have all the material that goes to this book:

1. Preface
2. Business details--how to earn credits, etc.
3. Credit form
4. Introductory chapter
5. Chapters on the six topics listed above

Welcome, we look forward to your reactions.
SCIENCE COMPONENT/METEP
Dick Konicek
Ed. 262/562—Principles and Methods in Teaching Science in Elementary Schools.
Instructor—
Course Description:

We shall operate on the assumption that science is an integral part of a child's life and therefore of the elementary school part of his life. We shall attempt to use this assumption in providing experiences which will fall into six basic areas:

a. classroom management
b. using curriculum
c. tailoring curriculum
d. teaching
e. one step beyond
f. philosophical foundations

Further, we shall attempt to look at these experiences in three ways: 1. expressive experiences, 2. philosophical and/or psychological rationale for the experience and 3. teaching the experience or some part of it.

Since this is an experience in experimentation with an integrated curriculum (integrating people, personalities and "traditional" areas of curriculum) we hesitate to add hard and fast methods and rules for evaluation and requirements for pass grades. We would much rather operate on a basis of trust and communication of honest feelings in evaluating both you and me.

The one requirement I would ask for is that each person keep a log of their experiences to turn in twice during the course. Once in November and once in January. In this log you should write:

a. what was the activity?
b. did you like or dislike it and why?
c. what were your feelings about it?
d. what improvements could be made? (there have to be some)
e. what did it do for you?

I hope that there will be a choice of several activities during each lab period. There are some individualized readings and curriculum analysis to be done as well. You may wish to spend an entire period on one activity and to explore it in depth. You may wish to shop around and see a little of each. That is up to you. Only you can decide how to spend your time purposefully.
I am open to any suggestions. Feel free to make them and I will try to accommodate you. This is your responsibility to me! My responsibility to you is to help you to receive the experiences you want. This two-way street means that you are as much responsible for the course as I am and that is a big responsibility. I hope that we're both up to it. In an experiment of this type there are few absolutes. This may trouble you and me at times. When it does, let's talk about it openly.

9/13/71
Curriculum Component/Integrated Day/METEP/
Modular Offerings

Mason Bunker

260/560: The Elementary School Curriculum (3 credit hours) - Fall, 1971

Two Instructors

Course Description: The elementary school curriculum from the standpoint of method and content with an emphasis on integrated planning and activity learning.

Experiences will be in the form of 10 modular offerings - completion of each workshop will earn the learner three modular credits. Each workshop will provide a general learning encounter which will be developed into specific activity tasks or performance criteria which enable the learner to use the process or content of the workshop.

During the final weeks of the semester, learners may develop individual learning projects which are an application of the ten workshop experiences for 15 modular credits.

Competencies: The learner may participate in learning encounters which develop competencies in:

Phase I: Intake: Skills
1. knowing oneself and others
2. determining sources of the curriculum
3. using principles of learning
4. diagnosing readiness to learn
5. visualizing the use of the open space school
6. perceiving the physical and emotional environment
7. communicating and decision making
8. creating resources
9. valuing, assuming, responsibility, and direction volition
10. abolishing prejudice

Phase II: Synthesis Integration of Process Skills
11. conceiving, developing, and executing an independent learning-teaching project
1. Workshop "Getting to Know You"

2. "What's It All About?"

3. "Principals of Learning"

4. "Diagnosing Readiness to Learn"

5. "Use of Open Space"

6. "Perceiving the Environment"

7. "Communicating and Decision Making"

8. "Creative Resourcery"

9. "Valuing, Assuming Responsibility, and Directing Volition"

10. "Abolishing Racism"

11. "Conceiving, Developing, and Executing an Independent Learning-teaching Project"

(Workshop topics may vary according to learner needs).

Mason Bunker
CURRICULUM COMPONENT/MEET/INTEGRATED DAY/
FALL 1971/CONTRACT

As a participant of the curriculum component of the METEP-Integrated Day, I agree to pursue actively the following goals:

1. To participate in the workshop encounters.

2. To develop and execute tasks which demonstrate competence in each workshop area at three modular credits for each competency.

3. To help evaluate myself, others, and the program throughout the workshop.

4. To maintain a weekly log of reflections on the activities of the workshops and to determine implications for my living and my teaching.

5. To develop and pursue learning encounters in and out of the workshop environment.

6. To read and explore as many resources as I possibly can.

7. To seek field experiences aggressively which allow me to test my theories about the learning encounters.

8. To conceive, develop, and execute an independent learning/teaching project for fifteen modular credits.

(Signature)

(Date)

(Coordinator)

Mason Bunker
Outline of Workshops and Discussions

Series I - The Processes of Aesthetic Education

A. Workshop:
1. Sense Awareness and Self-Awareness
   Feel, smell, taste apples - message face, ears; then listen to music - blind walk
2. Planning for future workshops

Discussion:
1. Introduction to course and introduction of participants and staff
2. Assessment of student goals
3. Experiences in sense awareness and discussion of functions of sense awareness for education

Readings (suggested)
1. Course Outline
2. Gestalt Therapy X Ch. 1 & 2
3. Sense Relaxation V Ch. 1, 2, 6, 7

B. Developing Creative Perception

Workshop:
1. Imagination and creativity techniques
2. Plan for next weeks

Discussion:
1. The concept of creative perception and its relationship to learning (using ideas from readings below and experiences in workshops)
2. Continuation of assessment of student goals
3. Assignment: Think of one aesthetic experience you would like to share next week

Reading: required for discussion
1. Creative Teaching and Learning VI Ch. 4
2. Developing Artistic and Perceptual Awareness V Ch. 1 & 2
3. One of the following (if possible)
   Gestalt Therapy Ch. 3 & 4
   Creative Behavior Guidebook VI Ch. 1 & 2
   (see pp. 118-207 for creativity techniques)
   Development Through Drama V Ch. 4 & 5
C. Aesthetic experience

Workshop: Take a trip to any environment desired. Use sense awareness and imagination techniques to increase awareness of aesthetic elements of environments. Share experiences.

Discussion:

1. Sharing aesthetic experiences
2. Discussing the concept of aesthetic experiences (see readings)
3. Assignment: Attend two cultural-arts events during the next two weeks; reading assignment

Readings: required for discussion

1. Dissertation Ch. I (on file)
2. Introductory Readings in Aesthetics I Ch. 1 & 3
3. Art as Experience I Ch. III
4. One of the following (if possible)
   Creative Teaching and Learning VI Ch. 3
   Fantasy and Feeling in Education X Ch. 4, 5, 6
   Development Through Drama V Ch. 1 & 2

D. Creative Expression


Discussion:

1. Multi-Arts Improvisation: an experience in the process and discussion of the process (from readings and experiences)
2. Student assessment of own skills in and facilitating skills for creative expression

Readings: two of the following

1. Developing Artistic and Perceptual Awareness V Ch. 4 & 5
2. Creative Learning and Teaching VI Ch. 3 & 8
3. Improvisation for the Theater V Ch. 1 & 2

E. Creative expression for sharing experience

Workshop: Continuing intensive improvisation, emphasizing the "sharing" aspect

Discussion:

1. Sharing the main ideas of readings. Cultural arts as a means for sharing ideas and experience
2. Discussion of principle uses of aesthetics for the classroom.

3. Introduction to Series B

Readings: Selections from the bibliography (III & IV) will be assigned
We recommend a total of 30 modules in reading and language arts divided as indicated below. You may take more if you like, and fewer if you are overburdened, or already knowledgeable. The idea is for you to do as much in each area as you need to, to feel comfortable about it in the classroom.

Use your support groups and your conference time to seek advice and get feedback. Please also see me or any of the language arts facilitators for help.

Suggestions for modules will be written on "invitation cards." These will be further clarified during language arts time. A schedule of lectures and a list of texts and instructional resources are forthcoming.

<table>
<thead>
<tr>
<th>Area</th>
<th>Area of Modules Recommended</th>
</tr>
</thead>
<tbody>
<tr>
<td>I.</td>
<td>The Process of Reading and some approaches to teaching beginning reading.</td>
</tr>
<tr>
<td>II.</td>
<td>Readiness and Development (including Piaget)</td>
</tr>
<tr>
<td>III.</td>
<td>Children's Literature</td>
</tr>
<tr>
<td>IV.</td>
<td>Individualized Reading</td>
</tr>
<tr>
<td>V.</td>
<td>Experience Approach to Reading</td>
</tr>
<tr>
<td>VI.</td>
<td>Creative Writing</td>
</tr>
<tr>
<td>VII.</td>
<td>Legible Writing (penmanship and spelling)</td>
</tr>
<tr>
<td>VIII.</td>
<td>Speech</td>
</tr>
<tr>
<td>IX.</td>
<td>Listening</td>
</tr>
<tr>
<td>X.</td>
<td>Integrating the Language Arts Into the Total Curriculum</td>
</tr>
</tbody>
</table>

Masha Rudman
LECTURE SCHEDULE

I. Process
1. Phonics - 9/21 11:30-12:30
2. Linguistics - 9/21 12:30-1:00
3. i/t/a - 9/24 11:30-12:00 (film strip & record)
4. Basal - 9/28 11:30-12:30
5. Word analysis - 9/28 12:30-1:00
6. Other published materials - 10/1 11:30-12:30

II. Readiness
8. Factors in reading readiness - 10/5 11:30-12:00
   Piaget (see Science Instructor)

III. Children's Literature
9. What's available - 10/5 12:00-1:00
10. Widening Interests - 10/8 11:30-1:30

IV. Individualized Reading
11. Principles - 10/12 11:30-1:00
12. Record Keeping - 10/15 11:30-12:30
13. Scheduling - 10/15 12:30-1:30
14. Management - 10/19 11:30-1:30

V. Experience
15. Experience books - 10/22 11:30-1:00
16. Group experiences - 10/29 11:30-1:30

VI. Writing
17. Creative writing - 11/2 11:30-1:00
18. Mechanical writing 1) penmanship 2) spelling - 11/5 11:30-12:30
19. Mechanical writing - 11/5 12:30-1:30

VII. Speech
20. The mechanics of speech - 11/9 11:30-1:00
21. Some psychological aspects - 11/12 11:30-1:00
22. Listening - turn on, turn off - 11/12 1:00-1:30
23. Drama - informal & formal - 11/16 11:30-1:00

VIII. Integrating
24. Some explorations into the world - 11/19 11:30-1:30