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Linda J. Miller
Western Michigan University

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THE EFFECT OF SELF-EFFICACY TRAINING ON THE WILLINGNESS OF
PRESERVICE TEACHERS TO IMPLEMENT SOCIAL SKILL TRAINING
IN THE CLASSROOM

by
Linda J. Miller

A Dissertation
Submitted to the
Faculty of The Graduate College
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THE EFFECT OF SELF-EFFICACY TRAINING ON THE WILLINGNESS OF PRESERVICE TEACHERS TO IMPLEMENT SOCIAL SKILL TRAINING IN THE CLASSROOM

Linda J. Miller, Ed.D.
Western Michigan University, 1988

Self-efficacy is the belief that one can successfully perform a behavior, and is a cognitive process theorized to play an important role in the acquisition and retention of new behavior patterns. The purpose of this investigation was to determine the effectiveness of utilizing self-efficacy training procedures to influence the performance of preservice teachers, specific to social skill instruction, in their directed teaching assignments.

A modified posttest only control group design was utilized to compare the performance of three groups: (1) a treatment group exposed to self-efficacy training procedures, (2) a treatment group exposed to social skill training content information, and (3) a comparison group representing the standard classroom management university training sequence. The sample consisted of 34 preservice teachers in special education preparation programs at Western Michigan University, Kalamazoo, Michigan, and Grand Valley State University, Allendale, Michigan.

Analysis of the data collected resulted in the following conclusions:
1. Exposure to either self-efficacy training or social skill training content information results in a willingness to conduct social skill training activities in the classroom.

2. Preservice teachers exposed to self-efficacy training demonstrate more willingness to initiate, expend effort, and persist at social skill training than subjects exposed to the standard university training sequence.

3. Preservice teachers are favorably predisposed to conduct social skill training.

4. Subjects exposed to self-efficacy training are more willing to persist at social skill training in the classroom when faced with obstacles.

The hypothesis that self-efficacy training would produce more willingness to engage in social skill training than either a content training approach or the standard university training sequence was not supported. However, self-efficacy training was more effective at motivating classroom performance than standard university preparation.

The following implications were drawn from the findings:

1. Through training, preservice teachers can be influenced to pursue social skill training in the classroom.

2. Self-efficacy training is effective as a training approach and has the advantage of simulating field
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experience even when such hands-on opportunities are not accessible.
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Finally, I wish to dedicate this project to the late Lena S. Botello and Harold K. Miller, mother and father-in-law respectively. They both valued education highly and were key people in furthering my education. Their pride in this achievement would be immense.

Linda J. Miller
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CHAPTER I

INTRODUCTION

Self-efficacy is the belief that one can successfully perform a behavior, and is a strategic construct theorized to underlie motivation (Bandura, 1977, 1982). It is a cognitive process which plays an important role in the acquisition and retention of new behavior patterns (Bandura, 1977). According to Bandura (cited in Sherer et al., 1982, p. 663), "expectations of self-efficacy are the most powerful determinants of behavioral change because self-efficacy expectancies determine the initial decision to perform a behavior, the effort expended, and persistence in the face of adversity." Thus, an individual must believe that he or she can perform a given behavior in the required situation for behavior change to occur. Acknowledgment that certain behavior(s) will lead to particular consequences is (are) not sufficient.

For several reasons, self-efficacy theory has particular applicability to the subject of teacher preparation in the area of social skill training. Social skill training is an approach to behavior management that is instructionally-oriented and child-centered, in contrast to the theories and practices of standard classroom management which emphasize the role of the teacher as
organizer and manager (Harris, 1984; Jones & Jones, 1986; Wolfgang & Glickman, 1986). In practice, however, there is question whether prospective teachers feel efficacious about their abilities to properly guide students through the social skill acquisition process (Bain, 1987). Considering that beginning teachers are primarily concerned about discipline or control in their classrooms (Denham & Michael, 1981), they may not be favorably disposed to implement programming which complicates their perceived managerial role. Thus, there exists a need to explore the belief structures which underlie their behavior if social skill training with students is to be accepted as a viable approach. Accordingly, Ashton (1984) proposes that "A teacher education program, designed to help teachers clarify their efficacy beliefs and develop a well-organized conception of how these beliefs would be represented in behavior, should result in increased relationships between efficacy beliefs and teacher behavior" (p. 29). Further, Ashton (1984) advises that teacher education aimed at fostering teacher efficacy must include training experiences which enable preservice individuals to develop the human relation skills necessary to build trusting relationships with students and promote student efforts at self-governance (strategic needs in social skill programming). Through such an introduction, the likelihood is increased that preservice teachers will recognize social
skill training as an important curricular need and see themselves as effective facilitators of social learning for children.

Skill development is also necessary to allay some of the concern experienced by beginning teachers in new learning situations (Denham & Michael, 1981). However, in and of itself, skill building is not sufficient preparation. According to Bandura (cited in Gibson & Dembo, 1984), "Individuals can believe that certain behaviors will produce certain outcomes, but if they do not believe that they can perform the necessary activities, they will not initiate the relevant behaviors, or if they do, they will not persist" (p. 570). As noted by numerous researchers in the social skills field, delivery of social skill programming for classroom students requires skill in a variety of areas (Bargozzi, 1985; Goldstein, Sprafkin, Gershaw, & Klein, 1983; Gresham, 1982; Harris, 1984; Ladd & Asher, 1985; Ladd & Mize, 1983; Schumaker, Pederson, Hazel, & Meyen, 1983; Spence, 1983). Certainly both initiative and persistence on the part of trainees are required to learn these skills and adopt the attitudes necessary to implement such training in classrooms with students. Additionally, the number and variety of situational variables which potentially can influence performance in the school environment have the chance to undermine the intentions of the best of teachers (Ladd & Asher, 1985).
As posited by Bandura (1977, 1982), if belief in one's ability to successfully perform a behavior is lacking, the chances for situational variables to deter specific action is greatly increased.

"Self-efficacy theory asserts that successful performance leads to increases in self-efficacy expectations." (Sherer et al., 1982, p. 668). As such, self-efficacy is proposed to act as an important mediator of behavior. In terms of preservice teachers, the ways in which this theory may contribute to teacher training in the area of social skills is the issue for investigation. Therefore, the purpose of this research is to answer the following questions:

1. Will preservice teachers who are provided self-efficacy training demonstrate more willingness to initiate, expend effort, and persist at social skill training in their directed teaching assignments than preservice teachers exposed to social skills content training?

2. Will preservice teachers who are exposed to self-efficacy training demonstrate more willingness to initiate, expend effort, and persist at social skill training in their directed teaching assignments than preservice teachers who experience the standard classroom management training sequence?
The Research Study

This study was designed to evaluate the effectiveness of utilizing self-efficacy training procedures, i.e., self-study (Ashton, Webb & Doda, 1983; Ellis & Harper, 1975), modeling and role playing (Bandura, 1977), and self-management (Kanfer & Gaelick, 1986; Meichenbaum, 1977), in the preparation of teachers to deliver social skill curricula. An experimental posttest only comparison group design was used to compare the performance of three groups: (1) a treatment group exposed to self-efficacy training procedures, (2) a treatment group exposed to social skill content information, and (3) a comparison group representing the standard classroom management university training sequence. Outcome measures related to knowledge, beliefs, and performance in the classroom were compared to statistically evaluate differences between the three groups.

Rationale

The rationale for this study was the need to determine the importance of addressing the psychological factor of self-efficacy as a precursor to the delivery of social skill curricula by prospective teachers. Contributing to this need were the following issues:

1. The growing interest and use of social skills training curricula with students in special education
classrooms requires that teachers are willing to deliver these programs. Typically, at the preservice level the training emphasis is directed toward classroom/behavior management (Harris, 1984). This orientation encompasses examination of teacher-student relationships and organizational-management practices on the part of the teacher which can result in orderly, productive classroom environments (Jones & Jones, 1986). However, social skill training for children and adolescents reflects a different perspective. This programming is aimed at acquisition of behavior skills which provide the student with the tools to control and direct his/her own behavior. The goal is to teach appropriate interpersonal behaviors to students for their use in a variety of situations. In so doing, the structured environment created by the teacher is enhanced through self-monitoring student behavior.

Essentially, social skill training in classrooms reflects a student-centered orientation to behavior management and requires that teachers are familiar with and accepting of the behaviors and skills necessary on their part to support this type of approach.

2. According to the learning theory of Bandura (1977, 1982), it is important that individuals believe in their ability to produce certain, specified outcomes. Without such self-appraisal, individuals are likely to be less initiative and less persistent in their behavior related to
a given outcome. Thus, preservice teachers need specific
guidance to recognize, understand, and modify the attitudes
and beliefs which underlie their behavior if they are to
feel efficacious about their abilities to act as conveyers
of social skills. In the past, this aspect of teacher
preparation has largely involved a psychodynamic approach
(e.g., human relations training, interpersonal skills
training, context-based instruction, etc. (Fine, 1975;
Glosenger, 1985; Hinz & Saba, 1977; Schmidt, 1982; Tikunoff
& Ward, 1978). Essentially the purpose of these efforts
has been to improve interpersonal functioning through skill
building, e.g., listening, responding, and showing
demonstrations of respect. However, the goal of present
psycho-social theory is not only to improve interpersonal
interaction, but to understand and possibly restructure the
thinking which motivates and supports behavior.
Prospective teachers may be unclear about their own
attributions of self-efficacy, and thus may not feel
efficacious about their abilities to properly guide
students through a systematic behavior change process.
Accordingly, preservice teachers need to explore and learn
about their own behaviors and the sources of motivation
which compel them to act as they do. In the process they
have the opportunity to build personal and professional
self-efficacy about social skills and translate that
learning to actual classroom performance.
Sequence of the Study

Training components for preservice teachers will be developed and implemented in this study which attempt to address the issues discussed. Ultimately, the goal is to make a contribution to existing practice in the teacher preparation area. The study was conducted according to the following general sequence of events:

1. Identification of the sample for study.

2. Arrangement of procedures within the department of special education which provide an appropriate site for the study to be conducted: (a) identification of course(s) containing the preservice population; (b) identification of opportunities for random selection and/or assignment; (c) identification of opportunities for preservice teacher placements in actual classroom situations following treatment; (d) identification of timelines for conducting the study; and (e) identification of instructor(s) willing to participate in the study, e.g., revise course syllabus as necessary, attend to timelines.

3. Develop specifics of the training program based on a literature review of: (a) the nature of social skill training for children and teacher skills related to this type of programming; (b) approaches to teacher preparation related to classroom/behavior management, and human relations training; (c) cognitive psychology and social
learning theory as it applies to motivating teacher behavior.

4. Identify, obtain or construct the instruments/methods for measuring independent and dependent variables in the study.

5. Conduct reliability and validity procedures related to both the social skill and self-efficacy teacher training programs and any instruments constructed for the study.

6. Conduct the study according to predetermined timelines:
   (a) Administer the training programs:
       - Social skills training
       - Self-efficacy training
   (b) Conduct posttesting on all subjects, including follow-up interviews with preservice teachers and their corresponding supervising teachers.

7. Complete data analysis on all posttest information.

8. Present the results of the treatments.

9. Discuss the results and implications of social skill training for teachers.
CHAPTER II

REVIEW OF THE LITERATURE

Introduction

The purpose of this review of the literature is to (a) describe social skill training for children and the difference between this approach and classroom management practice; (b) identify the teacher skills necessary to conduct social skill programming; (c) describe typical methods of teacher preparation related to management of student behavior; and (d) describe the cognitive psychology/social learning theory approach to behavior change. This information is intended to describe the current status of teacher training in the social skill area and the rationale for applying self efficacy theory to development of a social skill training program for teachers.

Approaches to Student Management

Social Skill Training for Students

An Overview

Relative to social skill training, Ladd and Asher (1985) report that "few topics in child development have received as much attention in so short a time from..."
researchers representing such a wide range of disciplines" (p. 219). The reason for this attention is reflected in the philosophy and orientation underlying this type of programming. The basic assumption of social skill training is that social behavior is learned and can be taught using structured teaching methods (Goldstein, Sprafkin, Gershaw, & Klein, 1983; Spence, 1983). Allowing that "many emotional and behavioral problems of children are a result of faulty learning or inadequate socialization opportunities" (Brendtro & Ness, 1983, p. 163), social skill training focuses on teaching specific pro-social behaviors to students for their use in a variety of situations, rather than limiting focus of the classroom teacher to disciplinary or behavior management procedures (Harris, 1984). The goal is to enable students to improve their status within groups as they demonstrate more socially acceptable behavior, a relationship that Ladd and Asher (1985) report is supported in the research. The particular need by exceptional children for training in the social skill area is generally acknowledged (Strain & Odom, 1986). For these youngsters, as peer acceptance, reciprocal positive social interaction and self-acceptance are fostered, the probability of developing problems related to dealing with others is reduced accordingly (Gresham, 1982; Osberg, 1982).
Ladd and Asher (1985) report that research also suggests a link between early peer experiences and later interpersonal disorders. From this perspective, social skill training is viewed as a preventive means of addressing potential problems and concomitantly as a means of focusing on the specific behavioral skill deficits which children exhibit (Goldstein et al., 1983).

In practice, social skill training is based on the teaching of a set of discrete behaviors considered essential for student success in interactions with peers (DeLuke & Knoblock, 1987; Hops, 1983; Schumaker, Pederson, Hazel & Meyen, 1983; Spence, 1983). Although the generalizability of this learning is at issue and is being studied more thoroughly (Bargarozzi, 1985; Hops, 1983; Kiburz, Miller, & Morrow, 1984), there is growing use of social skill training with mildly handicapped students.

**Skills Addressed in Social Skill Training for Students**

The behavioral components which come under the rubric of social skill are diverse and numerous. Since the range of target populations encompassed in this area may include multi-age handicapped and non-handicapped individuals (Jenson, Sloane, & Young, 1988; L’Abate & Milan, 1985), the skills necessary and relevant for a given population can vary widely.
Typically, the content of social skills curricula is based on a general skills or a problem-specific approach (Hops, 1983; Schumaker et al., 1983; Spence, 1983). Either general coping skills or situation specific responses are taught (Cole & Kazdin, 1980), although some packages incorporate both approaches. Depending on the orientation of the curriculum the behaviors addressed are performance aspects of social behavior related to initiating and responding in interpersonal situations, and/or problem solving-cognitive aspects of social behavior.

At a molar level there is basic recognition that the content of social skill training is generally directed to one of three areas: (a) skill deficits, (b) social performance deficits, or (c) self-control deficits (Gresham, 1982). Respectively, there is (a) attention to the acquisition of necessary skills, (b) effort to increase use of existing skills to appropriate levels, and (c) training to improve self-control of impulsive/aggressive social behavior. The means by which social skills are taught reflect several standard practices.

Methods of Implementation

Students are taught social skills in more or less consistent ways depending on the skill deficits to be addressed. In general, implementation includes many
procedures found in behavior modification research (DeLuke & Knoblock, 1987; Goldstein et al., 1983; Spence, 1983):

1. Discussion. Introduction to the skill area, contextual considerations, and personal application.
3. Role-playing. Student demonstration of the skill in a simulated situation.
4. Practice. Repeated demonstration of the skill in actual or simulated situations.
5. Feedback. Reinforcement or correction relative to demonstration of the skill.
6. Coaching. Trainer or peer observation and support of skill demonstration by the student.

In terms of general skill acquisition, Gresham (1982) suggests that training should proceed through three phases: awareness, practice, and application. At each stage, he advocates selective use of the aforementioned procedures—discussion, modeling, etc., and additional reinforcing tasks such as games, homework assignments, goal sheets, and contingency contracts. The training packages available to teachers typically structure lessons according to this format.

**Beyond the Problem-Solving Process**

Along with general skill and problem-solving training, Brendtro and Ness (1983) also advise attention to a broader
construct of learning, the cognitive aspect of social behavior. Described by Martin (1981),

This kind of learning...is not directly linked to conceptions of behavior change. Rather, learning from the cognitivist viewpoint, attempts to describe those changes or alterations in the elaboration or structure of information inside our heads, which may be considered to be basic (prerequisite) to any overt behavioral changes. The implication of this shift in emphasis from behavior to cognitive structure is that teachers should be more concerned with influencing the thinking strategies (cognitive strategies) which pupils use to guide their behaviors, than with influencing pupils' behavior directly. One major advantage of this viewpoint is that it forces teachers and educational theorists to consider the learner as his/her own teacher. (p. 68)

Examples of cognitive restructuring strategies in this domain include self-instructional training (Meichenbaum, 1977), rational emotive therapy (RET) (Ellis, 1962), and self-reinforcement (Kiburz et al., 1984). In his Making Better Choices curriculum, Harris (1984) also supports the teaching and use of cognitive strategies.

Although training curricula are not consistently structured to address the aforementioned cognitive aspects of social skill, packages are available which include both problem-solving strategies and general social skills. From the viewpoint of Schumaker et al. (1983), at the very least a training emphasis on both general and problem-solving skills provides learners with a more complete approach to social skill training and subsequent behavior change maintenance.
Social skill training is a curriculum innovation recognized to have particular value for handicapped individuals. Although the research is equivocal about the maintenance and generalization of these skills outside the classroom and to later social adjustment, the fact remains that social skill programming is gaining acceptance as a complement to standard classroom management practice. According to Stephens (cited in Gresham, 1982), "Teaching socially desirable behavior will probably be heavily emphasized in the schools during the 1980's" (p. 133). Presumably this means that teachers will also be appropriately trained to carry out this mandate. It follows that evaluation of teacher preparation programs in this area is necessary; education which is primarily focused on classroom management may not provide preservice teachers with the in-depth skill and motivation required to keep pace with the demands of social skill programming. However, to draw such a conclusion, an examination of theory and practice in the area of classroom management is necessary.
Classroom Management

An Overview

According to Sanford, Emmer, and Clements (1983), "The concept of classroom management is broader than the notion of student discipline. It includes all the things teachers must do to foster student involvement and cooperation in classroom activities and to establish a productive working environment" (p. 56). In this teacher-directed environment, the focus is on the decision making and management tasks involved in manipulating time, instructional content and delivery, student behavior, physical arrangements, classroom atmosphere, etc. (Stainback, Stainback, & Froyen, 1987).

To establish effective control within the classroom, Jones and Jones (1986) identify several management tasks teachers may perform to achieve an orderly, productive environment. These include:

1. Effectively teaching rules and procedures.
2. Maximizing on-task behavior.
3. Motivating students to increase learning.
4. Reducing unproductive student behavior through problem-solving approaches.
5. Using behavioristic management strategies.
6. Employing schoolwide discipline programs (p. 23).

The description by Sanford et al. (1983) notwithstanding, it is noteworthy that all these components in some way relate to the issue of student behavior management— or as it is better known, discipline. Popularly, this conception
of classroom management suggests that practice is limited to methods of student control and classroom compliance. This is a frame of reference which lends itself to further examination.

The Discipline Aspect of Classroom Management

In contradiction to the perspective of classroom management provided by Sanford et al. (1983), it is the disciplinary aspect of classroom management which emerges as the primary issue for attention from teachers. Recent national reports and numerous surveys have confirmed that teachers place discipline at the head of their concerns about teaching (Charles, 1985).

Within the framework of the classroom, discipline refers to the systematic use of strategies by the teacher to maintain proper student behavior (Wolfgang & Glickman, 1986). The means by which individual teachers gain this cooperation are varied, reflecting diverse styles of interaction with students, personal philosophies, and more or less structured and overlapping use of theoretical and/or methodological models of classroom management (Martin, 1981; Weber, Roff, Crawford, & Robinson, 1983). The literature indicates that numerous models exist to structure this process (Charles, 1985; Martin, 1981; O'Leary & O'Leary, 1972; Weber et al., 1983; Wolfgang & Glickman, 1986). Models range from those based on

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theoretical perspectives, e.g., learning theory, group management, personal/social growth (Martin, 1981), to those based on methodological strategies, e.g., authoritarian, behavior modification, permissive, socioemotional climate, etc. (Weber et al., 1983).

In practice, not all models or strategies of classroom management are compatible with social skill training, for the reason that some only maintain the notion of discipline "as what adults do to 'manage' children" (Morse, 1987, p. 4). In this context, the environment is not conducive to social skill training. Practices which are compatible and permit inclusion of this programming are discussed further.

**Integrating Classroom Management and Social Skill Training**

Several practices utilized in classroom management are also congruous with the methodology and perspective of social skill training. Specifically:

1. The principles and techniques of behavior modification are procedures used widely by practitioners in each area. Interaction between environment and behavior is the frame of reference in both cases. Actual practice is differentiated largely by the purpose to which behavior modification techniques are aimed, that is, in social skill training they are utilized as instructional methods in the training sequence, whereas in classroom management the
emphasis is on use of these strategies for the external management of behavior.

2. Classroom management learning theory (social and cognitive learning) corresponds highly to the cognitive-social learning model of social skill training (Ladd & Mize, 1983). Premised on the assumption that students "learn as much from observing the actions of others as they do from experiencing the direct consequences of their own actions" (Martin, 1981, p. 68), social learning theory combines the key principles of direct operant conditioning with principles of modeling and vicarious reinforcement. Additively, cognitive learning theory suggests that assimilation of new information is an internally mediated process. As a precursor to problem-solving, the task of teaching is aimed at influencing the thinking strategies which children use to guide their behavior (DeLuke & Knoblock, 1987). Whether applied as classroom management methodology or social skill training, the intent and techniques are substantially alike.

3. The problem-solving model is an approach which "attempts to teach children to become sensitive to interpersonal problems, to develop the ability to generate alternative solutions, and to understand means-end relationships and the effects of one's social acts on others" (Meichenbaum, 1986, p. 356). Consistent with the intent of social skill training (Ladd & Mize, 1983), in
classroom management the goal is to help children organize cognitions (thoughts) and behaviors into an integrated course of action directed toward culturally acceptable social or interpersonal goals. This approach supports the importance of teaching students a decision-making framework from which behavior can be monitored. "Just as [students] require assistance in learning mathematical and reading skills, [they] need instruction in and reinforcement of the skills in taking responsibility for their own behavior" (Jones & Jones, 1986, p. 327). When formalized into a curriculum, this is the essence of many social skill training packages.

4. "Preventive approaches to discipline begin with the attitude that alternatives to corrective discipline may be worthy of consideration and that preventive discipline attempts to teach social skills can be taught with the same enthusiasm that is usually directed toward achieving academic objectives" (Sabatino, 1987, p. 8). This acknowledgement, that "preventive discipline" merits the same attention and structure as other instructional areas unequivocally sets the stage for social skill training.

It can be concluded that classroom management and social skill training are not mutually exclusive approaches to student behavior change. In cases where the classroom management model reflects any of the aforementioned orientations, there is some compatibility. At this point
It is largely the teacher's decisions relative to formalization, comprehensiveness, and orientation of the instruction which spell the difference between a behavior management or social skill training purpose.

Given the potential for overlap, it is important to consider the features of teacher preparation in the social skills area which distinguish it from classroom management. Through this examination an overview of the required skills can be gained and an assessment conducted of the pending needs for training.

Skills Required of Teachers to Engage in Social Skill Training

The consideration of differential teacher preparation for social skill training in the schools is an issue supported in many ways by the structure of present educational programming. Ladd and Asher (1985) maintain that teachers are logical choices for implementing social skill training because their roles allow them to exert considerable influence over the social development of their students. Admittedly, while their influence and attention must be distributed over a number of youngsters, this disadvantage is balanced by their opportunities to observe the behavior of students in a wide variety of situations. Additionally, teachers bring with them training related to instructional programming, basic principles of learning,
classroom management practices, individual differences in learners, and use of varied resources.

Notwithstanding all of the aforementioned, teaching social skills to students is an instructional process which requires many additional skills and information on the part of teachers. For the most part, these can be extrapolated from the writings of the numerous researchers who discuss social skill training. The following general categories reflect recommended areas of skill or information acquisition for preservice teachers.

Knowledge of Social Skill Content

Knowledge of the complexity, diversity, and sequence of social skill is compulsory for teachers to effectively interpret and use the instructional materials which accompany commercially packaged social skill curricula. Schumaker et al. (1983) observe that social skill, as a whole, is a "complex composite of several skills" (p. 2), comprised of equally complex individual skills. Of necessity, these skills must become familiar to preservice teachers. The complexity of the social problem-solving approach overall, in terms of both mechanisms and effects, also requires considerable exploration (Spence, 1983).
Knowledge of Training Procedures

"The social skills trainer must take into consideration how to facilitate the integration of new behavioral systems within those skills systems already possessed by the learner" (Bagarozzi, 1985, p. 607). Thus, instruction in social skill involves knowledge of a diverse body of procedures and strategies. At a prerequisite level, knowledge of behavior modification methodology is essential, e.g., modeling, role-playing, performance feedback, and transfer of learning, as well as the ability to task-analyze a skill (DeLuke & Knoblock, 1987). Also important is knowledge of appropriate strategies for reaching a social goal, knowledge of appropriate goals for social interaction, and knowledge of the context(s) in which specific strategies may be appropriately applied (Ladd & Mize, 1983).

At an operational level, another set of needs exist. Kiburz et al. (1984) advise that trainers need (a) instruction on the behavioral steps of the skills addressed, (b) training on how to model the skill appropriately, and (c) instruction in how to provide social reinforcement to students for appropriate performance of the skill. Harris (1984) recommends that teachers must also know how to lead a discussion which enhances each step of a social skill and enables pupils to think about verbal/nonverbal dimensions of the skill. Ladd and Mize
(1983) add that ability to foster skill maintenance and generalization is another key component of training, which suggests that teachers need to be familiar with techniques employed in cognitive psychology and social learning theory, e.g., self-instruction, self-reinforcement.

Knowledge of Assessment

As a prerequisite to training, establishing valid and reliable methods of assessing social skill is an issue of considerable importance (Spence, 1983). Knowledge of these methods is essential if educators are to direct their training appropriately. To determine the seriousness of a problem, and its etiology (Ladd & Asher, 1985), Gresham (1982) offers that the most commonly used methods of social skills assessment include: (a) teacher ratings, (b) sociometric assessment, and (c) naturalistic observations. He urges use of all three methods to gain an overall view of the social skill quotient of a student. For the preservice teacher this means gaining familiarity with the measures, the applicability of obtained data to social skill training, and the ways these measures can be used to assess the possible impact of newly gained skills on the learner in his or her environment (Bagarozzi, 1985).
Knowledge of Materials

Identification and use of relevant, effective social skills materials is another important consideration for the preservice teacher. The need for this aspect of training is reinforced by Harris (1984) who reports "Curriculum materials and programs directed toward social skills training are relatively new to the educational marketplace, and are little known by most practicing teachers" (p. 17). Further, Schumaker et al. (1983) indicate that teachers of the mildly mentally impaired, emotionally disturbed, and learning disabled identify social skill materials as their greatest curricula need (for preadolescent and adolescent age students). Additional training needs involve skill in interpreting instructions of commercially prepared curricula and/or creative adaption of available materials for use with exceptional students.

Knowledge of Student Responses

Knowledge of the kinds of resistance to social skill instruction which students may demonstrate is another essential aspect of training for which the preservice teacher must be prepared. Unexcused absence, tardiness, active or passive refusal to participate, and inappropriate participation are all possible responses students may exhibit (Goldstein et al., 1983). Procedures for coping
with and countering these situations are important and germane to any instructional situation.

Knowledge of Situational Variables

The role conflict into which the teacher may step is a situational variable with which the preservice teacher may be unfamiliar. Because many school districts and communities define the educator's role strictly in terms of academic learning, instruction related to social behavior may not have equal value, or support (Ladd & Asher, 1985). This presents an obstacle with which special educators, in particular, must contend as these are the individuals who typically have the youngsters most in need of social skill training.

Knowledge of Teacher Behaviors

"Even the most well-designed and all-inclusive training program may be rendered ineffective if it is conducted in an overly didactic, mechanical, and uninviting manner" (Ladd & Mize, 1983, p. 153.). Development of a relevant teacher training program not only involves content and procedural knowledge, but also knowledge of the interpersonal relationships through which interventions will be operationalized. "The instructor-child relationship may well influence every aspect of the skill-training process" (p. 153). Consequently, the behaviors
and styles of teaching most likely to enhance learning for students must be identified and examined.

Teacher Preparation Approaches To Student Management

The Teacher as Classroom Manager

Typically, the means by which individuals are prepared for roles as teachers involves emphasis on classroom management. However, as noted earlier, the focus of this approach is not altogether consistent and not entirely suited to the requirements of social skill delivery. While teacher training may encompass a broad range of areas related to effective management, instruction, and discipline, the other extreme is also possible—a strict disciplinary interpretation of classroom management focusing on issues of control and compliance. The limitations of the second approach are obvious. It is reactive, fosters compliance rather than socialized behavior, and overlooks the complexities of the children who are being served (Morse, 1987). Moreover, a strict disciplinary interpretation does not help teachers recognize that forethought and preventive action can ultimately increase their effectiveness and direct their energies more proactively (Jones & Jones, 1986).

Conversely, classroom management training which is more comprehensively directed provides greater opportunity
for preservice teachers to expand their thinking about and exploration of the teaching process. In this mode, characteristics which are associated with effective instruction are important elements of training (Bickel & Bickel, 1986). A synthesis of these characteristics is provided by Bickel and Bickel who identify three areas supported by research found to be associated with basic skills achievement. These include:

1. **Teaching behaviors.** Observable behaviors demonstrated by teachers which allow them to "take an active role in creating a positive, expectant, and orderly classroom environment in which learning takes place" (Bickel & Bickel, 1986, p. 493). Primarily these include guided practice, modeling new processes of learning, and corrective feedback.

2. **Organization of instruction.** Decisions exercised by teachers which compartmentalize time, the pace of instruction, structure and delivery of the curriculum, student progress through the curriculum, and grouping of students for instruction.

3. **Instructional support.** Considerations related to class size and teacher inservice training.

Clearly, the aim of this classroom management approach is to broaden the perspective of the teacher and encourage consideration of the multitude of variables which influence student achievement. The major emphasis on teacher-
directed instruction is somewhat mitigated by the underlying motivation to ensure clarity of goals and the shared responsibility by teacher and students for meeting these goals.

On the side of caution, Bickel and Bickel (1986) advise that further research is needed to address the generalization of the characteristics of effective instruction to areas other than basic skills, including social skills. According to Bickel and Bickel,

Effective classroom/teacher research has focused heavily on basic skills achievement as the central outcome measure for judging the worth of a given procedure or practice...What is not well understood, and what remains as an important area of future research, is the relationship of these effective practices to other valued student outcomes. (p. 495)

Therein lies the gist of the challenge for teacher preparation programs in the area of social skills: To integrate and operationalize more extensively the relevant principles of classroom management practice and effective instruction research with the skills required of teachers to engage in social skill training. Consistent with all the discussion thus far, the content of such a program would ideally direct attention to the following areas: (a) behavior modification techniques; (b) cognitive processing; (c) problem-solving strategies; (d) effective instruction practices; (e) the content and procedures specifically related to social skill assessment and training; and (f) the teacher behaviors associated with
competent delivery of social skill curricula. The last area identified, teacher behaviors, is one in particular requiring further exploration.

In terms of the behavioral skills required of teachers to establish a classroom environment conducive to social skill training, Ladd and Mize (1983) note that "Rarely...have previous social-skill training investigators alluded to instructor characteristics or the instructor-child relationship as important aspects of the skill-training process" (p. 153). Nonetheless, this is a critical part of the process. Further, Ladd and Asher (1985) observe, "it has been noted that educators have no established body of practice in the socialization areas and that this poses problems in terms of teacher training and the meaning of professional behavior" (p. 239). The lack of attention to teacher preparation in the behavioral domain reinforces this concern (Hinz & Saba, 1977). Typically, training in this area has taken a humanistic orientation and focused predominantly on the communication skills of the preservice teacher.

The Teacher as Interpersonal Communicator

For the most part, preparation of teachers in the behavioral domain has maintained a relatively uniform focus, that is, a psychodynamic approach based on interpersonal skill development, human relations training,
or affective communication training. Essentially, skills related to empathetic communication (listening and responding) and the structure of this process have comprised the core of instruction (Fine, 1975; Long, Paradise, & Coleman, 1978). The goals of this training have been to provide the trainee with more skill in the interactive process (Gerben & Drezek, 1977; Hinz & Saba, 1977), greater ability to self-explore (Fine, 1975; Fuller, 1974; Noad, 1979), and problem to solve (Southern Regional Education Board, 1974).

The methods by which training have been conducted reflect an effort to expand teacher preparation beyond the mastery of academic subject matter. Hinz and Saba (1977) provide an exemplar of this approach in their discussion of a training program for preservice teachers in interpersonal skills. In their study, training was divided into two phases: (1) interpersonal skills training—strengthening individual undergraduates' attending, perceiving, and responding skills, and (2) capitalizing on these strengths by teaching undergraduates to utilize them in the classroom. The general training strategies included (a) discussion of the new skill, (b) demonstration of the skill, (c) role play, and (d) practice of the skill in an actual or simulated setting. Fundamentally, the issue to which Hinz and Saba (1977) directed their investigation was how to best train teachers to be humane, their premise
originating as "Humane teachers...facilitate learning, personal growth, and social development..." (p. 65) better than those individuals with less or deficient interpersonal skill.

The methodology employed by Hinz and Saba is indicative of similar training conducted by researchers in the area of human relations/interpersonal skills with preservice individuals. In these studies the general aims of skill-building were to: Strengthen the trainee’s role as communicator, enhance the working relationship with students in the classroom, and increase the sensitivity of trainees to the needs of their students (Fine, 1975; Gerber & Drezek, 1977; Glosenger, 1984; Long et al., 1978; Thorman, 1971). According to these researchers, the psychodynamic approach to training has garnered positive results. Despite methodological limitations, this training has assisted undergraduates to better understand themselves and elements of the helping process.

It is also worth noting that there is a limitation to psychodynamic training as it is commonly employed. The distinguishing characteristic of this approach is the interactive nature of the communication, and the emphasis on emotional development of the "helpee." While such an effort is important and necessary in the problem-solving process, such concentration does not imply equal attention to the attitudes, beliefs, and motivations underlying the
behavior of the teacher. As psychodynamic training is aimed largely at enhancing the interaction between the teacher and student and enabling the trained person to assist pupils to negotiate the process of change more effectively (Egan, 1982), the teacher is posed in the "helper" role. Presumably, more direct focus on the teacher, beyond the role of facilitator, could also benefit the relationship. First, communication techniques and problem-solving skills, similar to those procedures used in social skill training and classroom management, could be learned by the teacher in training. Second, this individual would be actively involved in examining the cognitive aspects of his or her own behavior and thereupon using that knowledge to elaborate beliefs and theories in further learning experiences. Ultimately this could enhance the preservice person's role as social skill trainer by providing a practical training component commensurate with that of students and allowing greater personalization of the behavior change process.

The Motivational Aspect of Teacher Behavior

For the most part teacher education is fairly standard, basically encompassing mastery of academic subject matter and the theories applicable to management of student behavior. As discussed thus far, with some accommodation this standard curriculum could be expanded to
meet specific social skill training needs. But, how this preparation could also be constructed to address teacher willingness to deliver social skill training is the issue of interest.

Denham and Michael (1981) indicate that "At first, these beginners [prospective teachers] are attentive to their own satisfactions and gains; only later do they become concerned about pupil achievement" (p. 47). Given other considerations which have been presented, this observation suggests that it is logical and practical to include a process of self-study in teacher education programs, particularly if such an effort can facilitate a quicker and/or more qualitative shift of attention to the needs of students. A child-centered orientation is a critical element of social skill training in the classroom; and allowing for the complex nature of social skill training it is entirely possible that teachers who do not understand their own beliefs, attitudes and opinions, and are not familiar with the source of these cognitions, will not be suitably prepared or motivated to convey this information to children. As noted by Bain (1987),

These attributes [motivations, beliefs, and attitudes] have generally been represented in highly abstract form, and non-operational terminology. This makes it particularly difficult to identify and explain the non-observable factors that contribute to the successful involvement of teachers in procedures like social skill training. (p. 13)
The literature in the area of cognitive psychology has attempted to explain the constructs that underlie attitudes, beliefs and opinions of individuals. Likewise, the literature in the realm of social learning theory considers the interactive relationship among behavioral, personal, and environmental variables that influence the cognitive process (Phares, 1984; Rotter, 1954). Aspects of the aforementioned literature are relevant when applied specifically to identifying the factors that underlie motivated teaching behavior, and the factors that contribute to changing and expanding a person's behavioral repertoire. Of particular interest are those behaviors associated with the delivery of social skill training.

Relevant Cognitive Psychology and Social Learning Theory Principles

Cognitive psychology is concerned with how the mind functions (Wickelgren, 1979), and study is focused on the process of cognition, that is, "all the processes by which...sensory input is transformed, reduced, elaborated, stored, recovered, and used" (Neisser, 1967, p. 4). This includes the processes common to perception, learning, memory, language, and thinking (Wickelgren, 1979). At the same time, social learning theory considers the importance of integrating reinforcement with the concepts of cognitive psychology "that depict a thinking, knowing person who has expectations and beliefs" (Phares, 1984, p. 339).
Metaphorically, in the social cognition approach the human mind is viewed as an information processor, receiving input from the environment, searching memory stores for data structures, and cycling this information through a central processor for outputs related to thinking, reasoning, and making decisions (Bower, 1978; Ostrom, 1984). The analysis of this cognitive process is "the core of psychologists' and educators' attempts to understand the mind and its development" (Murray & Mosberg, 1982, p. 279), and separate the act of cognition into its component processes. The proliferation of literature in this area supports interest by researchers in the cognitive view of behavior (Haaga & Davison, 1986). It is not the intent of this review, however, to discuss the theoretical perspectives of the many individuals who have produced this body of literature or the diverse ways in which this information is being applied. Rather, the purpose is to consider pertinent elements of cognitive psychology and social learning theory that can help to explain motivated teacher behavior. This objective is not without basis as Ball (1984) reports, "Cognitive theories of motivation today represent one of the most dynamic areas of theoretical and research activity" (p. 1256).

In a broader sense, the "cognitive revolution" is a product of the 1980's (Franks, 1984, p. 140), and a synthesis of work begun by theorists in the 50's who
challenged the notion that behavior is only explained by its immediate consequences. While not disregarding environmental influences, cognitive psychologists expand their explanation to also include consideration of other internally mediated forces. They overlap with social learning theorists to view the individual as an accumulator of knowledge about the mutual relationships among events in his/her environment (Bower, 1978). Following this view, there are cognitive structures that have been identified which have particular relevance to the study of teacher attitudes and beliefs. These are discussed further.

**Cognitive Structures**

Cognitive structures are "the general, long-term cognitive characteristics, including beliefs and attitudes" (Haaga & Davison, 1986, p. 250) that act as rules and principles to govern an individual's interpretation of events; accordingly they provide a uniform way of explaining and understanding the self and the world (Meichenbaum, 1986). The background structures related to the beliefs an individual holds about a domain, "serve as a term of reference or basis for the processing of future input about that domain" (Bain, 1987, p. 14). Hence, these organizing structures provide a framework from which behavior patterns develop.
As it pertains to the present study, it is reasonable to assume that the organizational framework of a preservice teacher holds few substantiated beliefs related to the teaching process. However, this does not imply that the individual is lacking in such predispositional beliefs. To the contrary, and according to cognitive theory, the cognitive structures which exist already hold a store of characteristics, including beliefs quite possibly tinged with naivete, bias, and distortion (Neisser, 1967). Accordingly, it is this framework that serves as a point of reference for future behavior. The way in which stored information contributes to motivated behavior is explained further by study of "schemata," a concept which Ostrom (1984) describes "provided the initial meeting ground for the social and cognitive research groups" (p. 335).

Schemata

"Cognitive structures play a particularly interesting role in learning and remembering. In this connection, they are most frequently called 'schemata'" (Neisser, 1967, p. 287). According to Piaget (cited in DiVesta, 1982), schemata are represented in the form of schemes or mental structures. Operating as conceptual frameworks, schemata form the basis in determining (a) what is attended to, (b) what is learned, (c) what kinds of inferences are made, and (d) what is recalled (DiVesta, 1982). Specifically, the

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term "schema" refers to the knowledge structure of an individual, including the facts, concepts, and organization of knowledge acting to determine behavior. "These orientations encompass the stored consequences and interpretations of experiences and thereby represent the current world view of the person" (DiVesta, 1982, p. 290).

The schema facilitates selective attention to and the organized processing of all incoming stimuli (Turk & Salovey, 1985). Likened to a template that is imposed on one's world, a schema enables an individual to perceive relevant events selectively, to fill in the gaps when certain information is missing, and to recall the essential aspects of an incident (Goldfried & Robins, 1983). Thus, the end product can be construed as the dynamic interaction of multiple variables. As new information and experiences are brought to the learner's awareness, the process of encoding the information and integrating it with information previously stored is ongoing.

Fundamentally, the aforementioned description articulates the process in all new learning for preservice teachers. It also describes the identical process through which children proceed as they are presented with new learning opportunities. As it applies to the delivery of social skill training by prospective teachers, knowledge of schema may provide insight into the factors affecting their attitudes and beliefs regarding this methodology (Bain,
1987), facilitate their insight into the learning process of children, and thereupon their willingness to conduct social skill training.

**Self-Schemata**

Extending the concept of schemata one step further, Markus (1977) proposes that individual attempts to organize, summarize, or explain one's own behavior in a particular domain will result in the formation of cognitive structures about the self or what might be called self-schemata. Self-schemata are cognitive generalizations about the self, derived from past experience, that organize and guide the processing of self-related information contained in the individual's social experiences. (p. 64)

Having a well-defined self-schema in a particular behavioral domain (a) facilitates self-judgment in that domain; (b) allows easier retrieval of information which confirms the self-judgment; (c) heightens resistance to disconfirming schematic information; and (d) provides the basis for stronger prediction about further behavior in that domain (Goldfried & Robins, 1982). Stated otherwise from a social learning perspective, as personal experience brings about a generalized expectation (self-schemata) between action and outcome, subsequent individual life experiences translate into expectancies regarding personal ability to effectively influence other outcomes (Bandura, 1977). This expectancy, or belief—that one has the power to produce an effect—is the essence of self-efficacy.
theory and the fundamental reflection of a person's self-schemata for a particular area of functioning (Goldfried & Robins, 1982).

The applicability of self-efficacy theory to the study of teacher motivation in the social skills area is a major area of interest in this review. Research reported by Goldfried and Robins (1983), suggests that a relationship exists between self-schemata and the increased likelihood of detecting evidence consistent with that schemata. Alternatively, "self-schemata are [also] likely to make one more resistant to counterschematic information and can provide a basis for stronger predictions about future relevant behavior" (p. 49). Thus, where preservice teachers are concerned, the probability that an even more generalized self-schemata can influence an individual's expectation for future functioning, is a relationship which must be considered when delivering preparatory training for these individuals. Because social skill instruction represents a different behavioral and instructional orientation, the preconceptions which exist on the part of trainees, must be examined to gain some estimate of their potential influence on future initiation of and persistence with this type of training.
Self-Efficacy and Teacher Motivation

The Construct

According to Bandura (1982), self-efficacy is the perceived capability of an individual to execute a behavior required to meet the expectations of a prospective situation; consequently it influences the nature and extent of behavior, the amount of effort expended, and the duration of effort in the face of obstacles (Bandura, 1977). Thereby, self-efficacy is theorized to be a strategic construct underlying motivation, and a cognitive process which plays an important role in the acquisition and retention of new behavior patterns.

Research in this area has attempted to operationalize and study the construct in several ways. An experiment conducted by Bandura, Adams and Beyer (1977) involving snake phobics is illustrative of one such effort. They theorized that a central processor of efficacy information regulates behavior related to making choices and the expenditure of effort based on perceived self-efficacy. As they conceptualized it, this involves processing, weighing, and integrating diverse sources of information concerning personal capabilities. Depending on the source of the self-efficacy information for subjects in the study, either mastery-based treatment or vicarious experience, the strength and generalizability of self-expectations were
affected. Results indicated that actual behavioral achievements produced more change in self-efficacy than did imagined achievements, suggesting that mastery performance produces more reliable evidence about ability than does vicarious experience. However, regardless of whether the changes in self-efficacy were produced through enactive mastery or by vicarious experience alone, it was found that self-efficacy was a consistently accurate predictor of performance on tasks of varying difficulty.

In another study conducted by Bandura, Adams, Hardy, and Howells (1980), the generality of efficacy theory across another behavioral domain (agoraphobia) was tested. Agoraphobics, those with a fear of public places, were treated through a combination of preparatory and field mastery experiences. The preparatory aspect of the training included such elements as self-relaxation, goal setting, assertiveness, and self-expressiveness. The results of the experiment again supported a relationship between self-efficacy and performance on individual tasks.

Empirical tests have also demonstrated that "efficacy expectations vary on several dimensions that have important performance implications" (Bandura, 1977, p. 194). That is, they vary in magnitude, or the level of difficulty of a task individuals believe they can accomplish; they vary in generality, or a situational versus a broader mastery expectation; and they vary in strength, or the relative
ease or difficulty with which the efficacy expectation may be modified. According to Bandura, "an adequate expectancy analysis...requires detailed assessment of the magnitude, generality, and strength of efficacy expectations commensurate with the precision with which behavioral processes are measured" (p. 194).

From their study of the construct, Denham and Michael (1981) found that one of the cognitive factors recognized to exert considerable influence on the strength of self-efficacy expectancies is the source of attribution, or "cause" for one's success or failure. An experience of success attributed to performance ability is proposed to generalize a stronger sense of efficacy than success attributed to external factors or luck. Vice versa, failure attributed to lack of performance ability is thought to be more debilitating to a sense of efficacy than failure attributed to lack of effort or factors outside one's control. Hence, as indicated in the aforementioned studies by Bandura et al. (1977, 1980), the mode by which efficacy expectancies are derived is recognized to exert considerable influence on the strength of a person's beliefs.

The sources of information influencing self-efficacy expectation is a variable which Bandura (1977) indicates can be manipulated through various modes of treatment. In descending order of strength in the following list, he
identifies four major sources by which efficacy expectancies are established; Goldfried and Robins (1982) add the situational variable(s) under which the source is most effective as a learning mechanism. Also identified are the principal methods by which a source of efficacy expectation is induced (Bandura, 1977, p. 195):

1. Performance accomplishments - Direct exposure or participant modeling; a particularly influential source because it is based on personal mastery experience. (Most effective when success is attributed to one's ability or to a variable within one's control).

   \[
   \text{Mode of induction} \quad \text{-participant modeling} \\
   \text{\quad -performance desensitization} \\
   \text{\quad -performance exposure} \\
   \text{\quad -self-instructed performance}
   \]

2. Vicarious experience - Observing the performance of others and persuading oneself that he or she can be similarly successful. (Effective if the model is credible and similar in characteristics to the learner).

   \[
   \text{Mode of induction} \quad \text{-live modeling} \\
   \text{\quad -symbolic modeling}
   \]

3. Verbal persuasion - Information provided by another source which attempts to convince the learner that he or she can be successful at a given task. (Effective when the persuader is viewed as credible and expert.)

   \[
   \text{Mode of induction} \quad \text{-suggestion} \\
   \text{\quad -exhortation} \\
   \text{\quad -self-instruction} \\
   \text{\quad -interpretive treatments}
   \]

4. Emotional arousal - Information appealing to the emotions intended to diminish the physiologically aroused state of the individual so that inducement to action can be accomplished. (Dependent on an individual's own inadequacy or other situational factors).

   \[
   \text{Mode of induction} \quad \text{-attribution} \\
   \text{\quad -relaxation} \\
   \text{\quad -biofeedback} \\
   \text{\quad -symbolic desensitization} \\
   \text{\quad -symbolic exposure}
   \]
According to the evidence presented, it appears that judgments of personal efficacy involve at least two considerations, generalized perceptions (or self-schemata) gained from learning experiences, and the interplay of these perceptions with situational factors. Depending on the strength of the source of the efficacy expectation, e.g., performance accomplishment, vicarious experience, verbal persuasion, or emotional arousal, the greater is the predictive relationship between self-expectation and successful future performance. The significance of the source of efficacy expectation is particularly noteworthy when one considers Ross's (cited in Goldfried & Robins, 1982, p. 367) proposition "that in cases of conflict between generalized beliefs and situational information, people tend to rely more heavily on their beliefs, ignoring conflicting information." Similarly, Tversky and Kahnemann (1974) have shown that people tend to minimize objective evidence if this information is not consistent with their more general beliefs and expectations.

For prospective teachers, self-efficacy concepts have application to their roles as social skill trainers. According to cognitive theory, a well-defined self-schemata in a behavioral domain is a cornerstone of self-efficacy and enhances the perceived capability of the individual to acquire and maintain new learning in that domain. Therefore, examination of the beliefs which comprise the
self-schemata of a preservice teacher in the area of social skill training and the strength of these generalizations, is important to consider if new information related to social skills is to be integrated and translated into future performance. As the research supports, the means by which these generalizations are instilled is an equally critical consideration and a view which has direct application to the preparation of individuals as social skill trainers.

Application of the Self-Efficacy Concept to Education

While not specific to the behavioral domain of social skills training, the literature indicates that some attention has been given to the study of "teacher efficacy," a modification of Bandura's self-efficacy theory (Ashton, 1984; Ashton, Webb & Doda, 1983; Denham & Michael, 1981). Research indicates that psychological constructs encompassed in the area of cognitive psychology have appeared in the teacher preparation literature as proposed theoretical frameworks to guide education programs (Denham & Michael, 1981). Of particular interest in this literature has been the emergence of research on teacher efficacy, a concept reflecting modification of Bandura's (1977) concept of self-efficacy. Specifically, Ashton et al. (1983) define teacher efficacy as "the extent to which teachers believe they have the capacity to affect student
contrast to the classroom effectiveness research that focuses on observable teacher behaviors, e.g., guided practice, modeling new learning, and corrective feedback (Bickel & Bickel, 1986), research on teacher efficacy is aimed at analysis of the unobservable, psychological processes that underlie motivated teaching behavior.

An illustration of research in the area of teacher efficacy is a study conducted by Ashton and Webb (1986) which involved an ethnographic comparison of two middle schools and a process-product study of 48 high school basic skills teachers. The study was based on two Rand Corporation evaluation studies (Armor et al., 1976; Berman, McLaughlin, Bass, Pauly & Zellman, 1977), which reported a significant relationship between teacher efficacy and student achievement. Findings by Ashton et al. (1983) supported the conclusion of the Rand project. The researchers primarily aimed at developing a conceptual framework for understanding the nature, antecedent conditions, and consequences of efficacy attitudes in teachers. Major findings indicated differences in the behaviors of identified high and low self-efficacy teachers with regard to their attitudes toward students and expectations related to academic standards. Ashton and Webb (1986) reported that "Teachers with a high sense of efficacy seemed to employ a pattern of strategies that minimized negative affect, promoted an expectation of
achievement, and provided a definition of the classroom situation characterized by warm interpersonal relationships and academic work" (p. 125). On the other hand, teachers with a low sense of efficacy employed strategies that heightened negative affect, more often promoted an expectation of failure for low-achieving students, and defined classroom situations in terms of conflict rather than warm interpersonal relationships.

In their study of disciplinary style, Barfield and Burlingame (1974) studied the relationship between teacher sense of efficacy and "pupil control ideology" as measured on a custodial-humanistic scale. They observed that teachers reporting an average to high sense of efficacy indicated a preference for humanistic control more often than did teachers with a low sense of efficacy. Cooper (1979) also found that teacher expectations influenced their perceptions of the control they needed over student performance in various situations.

An implication of the above findings is that the disciplinary mode that a teacher favors and enforces is related to the strength of the individual's self-efficacy. Ostensibly, increased belief in one's ability to affect student performance would manifest itself in a willingness to approach behavior management in a more broad-based way. As a result, the possibility would increase that an
Instruction mode such as social skill training would be regarded as a viable approach.

According to Denham and Michael (1981), teacher sense of efficacy is an important educational variable, and one that can be manipulated. Ashton (1984) concurs that "A powerful paradigm can be developed on the basis of the construct of teacher efficacy" (p. 28) and maintains that "a teacher education program that has as its aim the development of teacher efficacy, and which includes the essential components of a motivation change program, should develop teachers who possess the motivation essential for effective classroom performance" (p. 28). As it applies to the delivery of social skill curricula, it is the intent of this research to develop and test a teacher training approach that employs principles from cognitive psychology and social learning theory.

**Training in Self-Efficacy for Preservice Teachers**

Denham and Michael (1981) identify teacher preparation as an important antecedent condition to a teacher's sense of efficacy and suggest several training approaches. In particular, two of their suggestions have relevancy to this study: (1) increasing actual effectiveness of the trainee in the specified domain, e.g., social skills, and (2) engaging in self-efficacy training directly.
In reference to the first suggestion by Denham and Michael, it is the intent of this research project to provide a training component for prospective teachers in the area of social skills programming. Research support notwithstanding, intuitively, it is essential for people in service roles to feel efficacious about their ability to help others. Skill in the area of prospective instruction is a critical prerequisite.

With regard to the second recommendation, training in self-efficacy, a case has also been presented for the inclusion of this component in a preparation program. It provides the prospective teacher with a learning experience commensurate with that of his or her future students, encourages trainees to explore their own behavior in terms of the cognitive repertoire each has established, and ultimately serves as a term of reference for understanding the complex behavior change process. Elements of training which could comprise this component can be drawn from the literature in cognitive psychology and social learning theory.

As Bandura (1977) proposed, there are several sources of information by which efficacy expectancies are derived. These include: (a) performance accomplishments, (b) vicarious experience, (c) verbal persuasion, and (d) emotional arousal. How these information sources are operationalized is the key consideration. As posited,
cognitive theorists advocate the existence of "mental structures" upon which behavior is predicated. In a
dynamic fashion these frameworks interact with
environmental stimuli and are selectively reinforced
according to the repertoire of the individual.
Accordingly, it is in consideration of these theories that
the following training elements are proposed:

1. Assist individuals to identify the attitudes, beliefs, and opinions which comprise their self-schemata
about social skill training. Necessarily this involves
(a) some preview of social skill training and the way in
which this approach is similar to and different from
standard classroom management programming, and
(b) recycling of the self-exploration process whenever new
information is introduced.

2. Assist trainees to analyze the strengths of their attitudes, beliefs, and opinions (Denham & Michael, 1981)
about social skill training, and their potential for
learning or resistance to change based on these cognitions.

3. Introduce a skill building component directed at
tapping the sources of efficacy expectancies aforementioned
by Bandura (1977), with direct emphasis on performance
accomplishments and vicarious experience in the content
area of social skill training for students. As modes of
induction, utilize the following strategies:
(a) performance accomplishment--participant modeling and
role-playing of appropriate responses, and (b) vicarious experience—observing others modeling appropriate responses (Bandura, 1977).

4. Compatible with the approach typically taken in social skill training for students, in this proposed training for adults, follow a general pattern which includes: (a) introduction/discussion of new material, utilizing schematic information as a term of reference; (b) modeling and instructions; (c) participant modeling and role-playing; and (d) some form of feedback (Bouchard, Wright, Mathieu, LaLonde, Bergeron, & Toupin, 1980; Galvin, 1985; Goldstein & Goedhart, 1973).

5. As a means of generalizing and maintaining new learning, include exposure to cognitive self-control models identified by Ellis (1962) and Martin (1981). Respectively, these include (a) rational emotive therapy, the alteration of dysfunctional self-statements which support irrational belief systems, and (b) problem-solving, the recognition and use of systematic self-help steps to identify problems and operationalize solutions.

This set of procedures reflects the general structure of a teacher training component that incorporates attention to the cognitive structures underlying preservice teacher behavior, and manipulation of self-efficacy through performance and vicarious modes of induction. As has been discussed and supported throughout this review, social
skill training is a complex process, and an instructional challenge which requires teachers who are both well prepared and duly motivated. It is the contention of this researcher that utilization of theories in the areas of cognitive psychology and social learning theory can provide an integrative and far-ranging perspective to addressing this preparation task.

Cautions

While a considerable portion of this review has addressed the merit of employing training procedures associated with the concept of self-efficacy, the task would be incomplete without acknowledging opposing views and a cautionary concern about this approach. In terms of criticism, the gist of opposition is articulated by Biglan (1987) who expresses concern that self-efficacy theory explains behavior in terms "that explicitly de-emphasize the role of the environment in determining behavior" (p. 1). Essentially, he argues for a re-emphasis on environmental influences and recognition that cognitions are not behaviors, but only hypothetical constructs used to account for relationships between the environment and behavior. In a similar vein, other critics pose that "self-efficacy expectancies are simply epiphenomena that only reflect behavior change, and are in no sense its cause" (Goldfried & Robins, 1982, p. 365). These criticisms are refuted by
Bandura (1977, 1982) who argues that expectancy is fundamental to an individual's perception of information and thereby a mediating influence on the behavior of that person in a given situation. Interpreting this point further, Gibson and Dembo (1984) add, "Individuals can believe that certain behaviors will produce certain outcomes, but if they do not believe that they can perform the necessary activities, they will not initiate the relevant behaviors." (p. 570).

The above concerns notwithstanding, Goldfried & Robins (1982), submit that self-efficacy theory "seems to possess a number of advantages as a conceptualization of behavior change" (p. 365). In their view, the theory is broad and integrative; testable because it separates the aspect of expectancy from performance; and specific rather than global about expectancies, thus providing a means of cognitive-behavioral assessment.

Another note of caution is related to adequate measurement of the construct of self-efficacy, and the modified version "teacher efficacy." Assessment of self-efficacy has generally been conducted in clinical experiments attempting therapeutic fear reduction or desensitization of an individual to previously identified sources of the fear or anxiety (Bandura et al., 1977; Bandura et al., 1980; Lazarus, 1964; Phares, 1984). Methodology has generally involved a series of performance
tasks requiring increasingly threatening interactions with the identified source of fear or anxiety. Accordingly, effectiveness of the treatment condition(s) has been assessed through repeated measurement of the subject on the graduated performance tasks. In terms of the educational environment, however, measurement of self-efficacy is less clearly defined. Of concern are the ways researchers can conceptualize and adequately measure the construct (Gibson & Dembo, 1984). According to Gibson and Dembo, many questions exist:

What are the dimensions of teacher efficacy? How do these dimensions relate to Bandura's theory of self-efficacy? What is the internal consistency of the teacher efficacy measure? Does evidence of teacher efficacy gathered from different sources in different ways converge? Can teacher efficacy be differentiated from other constructs? Do high- and low-efficacy teachers exhibit differential patterns of behaviors in the classroom related to academic focus, feedback, and persistence in failure situations? (pp. 570-571)

As the search continues for observable sources of teacher motivation, these questions all point to future research needs.

A final note of caution is provided by Guskey (1984) and is related to the influence of change strategies and the affective outcomes for involved participants. Research by Guskey suggests that experienced teachers who undergo learning experiences may actually feel less confident about their teaching abilities as a result of training, not because they lacked confidence to begin with, but because
the teachers perceived their feelings of confidence to be misguided having seen the results of more effective methodology. Guskey also points out that "in-service training and the implementation of new strategies alone may be insufficient conditions for affective change in teachers" (p. 258). According to his research, only when positive student outcomes were evidenced did affective changes result for the teachers involved.

The aforementioned list of cautions reflects the many issues that continue to require consideration and further investigation relative to the construct of self-efficacy.

Social Skill Training for Teachers

In terms of investigative practice, educational researchers are utilizing the psychological constructs advanced in cognitive psychology and social learning theory literature to examine teacher education practices. Nevertheless, review of current research reveals that the application of theory as a model of and foundation for the preparation of teachers is still in the formative stage (Ashton et al., 1983; McEntire & Kitchens, 1984). Operational strategies based on rigorous experimental design are limited and more progress is needed toward meaningful use of cognitive psychology and social learning theories. As supported in this review, a prerequisite construct for investigative study is the one of self-
efficacy. As noted by Bandura (1977), "The stronger the perceived self-efficacy, the more active the efforts" (p. 194). For preservice teachers, involvement in training to address a personal sense of efficacy may have the advantage of strengthening their self-expectations and increasing motivation. A training program that can integrate that knowledge with pro-social behavioral training for students appears to have merit—not only for strengthening teacher self-efficacy, but also for providing a logical, compatible application to the behavior/attitude change process associated with social skill training.

Self-efficacy training has application to teachers and teaching. It has relevance for understanding personal behavior, and potentially, as an influence on motivation represents a powerful way of influencing actual performance in the classroom.
CHAPTER III

METHOD

This chapter contains a description of the two-phase study developed to investigate the effect of self-efficacy training on the teaching performance of preservice teachers in the instructional area of social skills. Included in this description are: (a) the design of the study, (b) the methodology used to develop and validate the training programs and instruments, and (c) the methodological procedures involved in conducting the study.

Design of the Study

A modified posttest only control group design was utilized to compare the performance of three groups: (1) a treatment group exposed to self-efficacy training procedures, (2) a treatment group exposed to social skill training content information, and (3) a comparison group representing the standard classroom management university training sequence. A comparison rather than a control group was utilized because randomized assignment was not possible with all subjects.
Hypotheses

Based upon the theory that self-efficacy is a strategic psychological construct underlying behavior, the following hypotheses were established:

1. Preservice teachers who are exposed to self-efficacy training will demonstrate more willingness to initiate and persist at social skill training in their student teaching assignment than preservice teachers exposed to social skills content information.

2. Preservice teachers who are exposed to self-efficacy training will demonstrate more willingness to initiate and persist at social skill training in their student teaching assignment than preservice teachers who experience the standard classroom management university training sequence.

3. Preservice teachers in preparation programs at two different universities will demonstrate equal willingness to initiate and persist at social skill training in their respective teaching assignments dependent upon the training sequence to which they are exposed.

Operational Definitions

Social skill training: Instruction utilizing a commercial social skills curriculum, delivered a minimum of two times per week to students.
Social skill training content information: The knowledge information pertinent to delivery of social skill training by teachers (i.e., training procedures, assessment, curricula, student responses).

Self-efficacy: The belief that a preservice teacher can successfully conduct social skill training in the classroom as demonstrated through initiation, effort expended, and persistence.

Initiation: Demonstrations of behavior that illustrate a preservice teacher’s willingness to "take the first step or move."

Effort expended: Demonstrations of behavior that illustrate "effort spent or used up."

Persistence: Demonstrations of behavior that illustrate "refusal to give up, especially when faced with opposition."

Modeling: Symbolic or live exposure to a desired behavior to be learned.

Role-playing: Participant rehearsal of a new behavior to be learned.

Self-efficacy training: Training designed to increase personal self-efficacy specific to social skills instruction that incorporates elements of cognitive behavior modification (self-study and self-management), and social learning theory (modeling and role playing).
The standard classroom management university training sequence: Course instruction provided at either Western Michigan University (WMU), Kalamazoo, or Grand Valley State University (GVSU), Allendale, aimed at teaching the decision making and management tasks on the part of the teacher which create an orderly classroom environment, e.g., manipulating time, determining instructional content and delivery, managing student behavior, and determining physical arrangements.

Preservice teacher: A student admitted into the special education teacher training program at either WMU or GVSU currently assigned to a special education classroom for directed teaching.

Supervising teacher: A teacher in the public education system currently assigned to directly supervise the directed teaching experience of a preservice teacher from WMU or GVSU.

Independent Variables

Independent Variable #1--Type of Training

It was hypothesized that instruction in the area of social skills is a sufficiently new and challenging approach as to require increased self-efficacy on the part of the preservice teacher to initiate learning in this area, expend effort, and persist in the face of situational variables present in the school setting. Thus, the "type
of training" utilized to prepare the preservice teacher to deliver social skills curricula was identified as one of the independent variables. For the purposes of this study, type of training was operationalized through three approaches: (1) self-efficacy training, (2) social skill training content information, and (3) the standard classroom management university training sequence.

**Independent Variable #2—Institution**

It was additionally hypothesized that there would be no difference between the performance of university students from two different teacher training institutions, Western Michigan University and Grand Valley State University, exposed to similar preparatory experiences, e.g., one of the three types of training. Accordingly, "institution" was chosen as the second independent variable.

**Dependent Variables**

**The Self-Report Measure**

As a means of measuring general self-efficacy, "The Self-Efficacy Scale," constructed and validated by Sherer, Maddux, Mercandante, Prentice-Dunn, Jacobs, and Rogers (1982) was used. For purposes of this study, the measure was titled, "The Self-Report Measure" (see Appendix A). Other than the title no other modifications were made to
the instrument. The scale includes 30 items, 17 measuring general self-efficacy, six measuring social self-efficacy, and seven fillers. Of specific interest in this study were the 17 items addressing general self-efficacy. It was only those items which were scored using a Likert-type scale. As reported by Sherer et al. (1982), "there was tentative evidence that General Self-Efficacy might be broken into two components reflecting (a) initiation/persistence and (b) efficacy in the face of adversity" (p. 666). A Cronbach alpha reliability coefficient of .86 was obtained for the General Self-efficacy subscale (Sherer et al., 1982). Evidence of construct validity was provided by confirmation of several predicted conceptual relationships between self-efficacy subscales and other personality measures (i.e., Locus of Control, Personal Control, Social Desirability, Ego Strength, Interpersonal Competence, Self-esteem, the Minnesota Multiphasic Personality Inventory, the Rathus Assertiveness Schedule, and the Bem Sex Role Inventory) (Sherer et al., 1982; Sherer & Adams, 1983).

The Self-Efficacy Scale was designed to measure self-efficacy not tied to a specific situation or behavior (Sherer et al., 1982). However, as recommended by Bandura (see Appendix B), self-efficacy theory advises use of efficacy measures that are domain specific (in this case specific to social skill training). For that reason the following measure was also employed.
Classroom Scenarios

This self-report questionnaire is a series of 13 situations regarding social skill training, with five additional filler items (see Appendix C). All 18 items represent possible behavior by a first year teacher in the classroom setting and are intended to measure the extent of the test taker's willingness to initiate, expend effort, and persist in the face of situational obstacles. Subjects were asked to express their agreement with each of the scenarios on a Likert-type scale. Under test-retest conditions with two different groups of undergraduate students reliability coefficients of .84 and .62 were obtained. Four teachers in special education who rated each item for its adequacy as a situational obstacle provided evidence of content validity of the instrument. (The development of the Classroom Scenarios measure by the researcher in this study and the procedures involved in determining its reliability and validity are discussed in greater detail in later sections of this chapter.)

The Social Skill Training Knowledge Inventory

The Social Skill Training Knowledge Inventory (SSTKI) (Miller, 1987a) is comprised of 20 questions designed to test the knowledge of the subject in each of the following areas: Beginning and advanced social skills, training procedures and approaches, assessment, materials, student
responses, situational variables, and teacher behaviors (see Appendix D). Each item on the measure is in the form of a multiple choice question with five possible answers. Under test-retest conditions with two different groups of undergraduate students reliability coefficients of .67 and .53 were obtained. Three individuals identified as experts in the field of social skill training, four teachers in special education, and 34 undergraduate students in a special education training program provided evidence of content validity of the instrument. (The development of the SSTKI by the researcher in this study and the procedures involved in determining its reliability and validity are discussed further in later sections of this chapter.)

The Performance Measure

The Performance Measure (Miller, 1987b) consists of 10 items that operationalize a preservice teacher's behavior in the areas of initiative, effort expended, and persistence. All items are situationally specific to social skill training in the classroom (see Appendix E). The willingness of a preservice teacher to engage in social skill training is measured by the total number of items to which the individual responds "yes." The questionnaire is graduated and begins with items that demonstrate initiative on the part of the preservice teacher, i.e., ASKS the
supervising teacher if social skills training is conducted. It proceeds to items that demonstrate effort expended, i.e., OBTAINS lessons used by the classroom teacher in ongoing instruction, and concludes with items that demonstrate persistence, i.e., DELIVERS a social skill lesson(s) from materials provided in the training package, even though social skills training is not conducted by the supervising teacher as part of ongoing instruction. The Performance Measure was administered in an interview format and required the subject to respond with a "yes" or "no" answer to each item. Interrater agreement between pairs of preservice teachers and supervising teachers was obtained to determine reliability of the responses from the preservice teachers. Three practicing teachers and two individuals who had conducted their directed teaching in the fall of 1987 provided evidence of the content validity of the measure. (Development of The Performance Measure by the researcher in this study and procedures conducted to establish its validity are explained further in later sections of this chapter.)

Subjects

The subjects in this study were all undergraduate students enrolled in the special education teacher training programs at Western Michigan University or Grand Valley State University. These universities have total student
populations of 23,000 and 6,500, respectively. Western Michigan University is located in Kalamazoo, Michigan, and Grand Valley State University in Allendale, Michigan, two communities in the southwestern portion of the state. Kalamazoo is a large urban city with a population of 100,000 and Allendale a small, rural city with a population of 10,000.

The subjects were all enrolled in directed teaching for the winter semester, 1988. However, as preservice teachers at GVSU gain certification in two areas of impairment, these students engage in two 10-week student teaching assignments. The subjects from WMU participate in one 15-week assignment. Follow-up of the subjects occurred during week 8 for GVSU students and week 14 for WMU students.

For the majority of subjects this was the culminating experience of their university training sequence. Each person was assigned to a special education classroom in the Michigan public education system where he or she was daily supervised by a teacher certified in an area of exceptionality. A total of 61 students were available for the subject pool from WMU (27) and GVSU (34). Of this number 34 females and males volunteered to participate in one of the two training groups or as a member of the comparison group; 21 of the subjects were from WMU and 13 from GVSU (Table 1).

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Subjects were provided the choice between training
dates of January 23, 1988, or January 30, 1988, or random
assignment to either date. Thirteen of the 24 students who
participated in one of the two training sessions were
randomly assigned to either the January 23 or January 30
date. None of the subjects was informed of the type of
training to be delivered on either date.

Table 1
Distribution of Subjects from WMU and GVSU

<table>
<thead>
<tr>
<th>University</th>
<th>N</th>
<th>Sex</th>
<th>Type of Training</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Female</td>
</tr>
<tr>
<td>WMU</td>
<td>21</td>
<td>20</td>
<td>1</td>
</tr>
<tr>
<td>GVSU</td>
<td>13</td>
<td>11</td>
<td>2</td>
</tr>
<tr>
<td>Totals</td>
<td>34</td>
<td>31</td>
<td>3</td>
</tr>
</tbody>
</table>

aSET: Self-efficacy training
bSST: Social Skill Training Content Information
cCG: Comparison Group

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Development of the Training Programs

Self-Efficacy Training

Content of the Program

Self-Efficacy Training (SET) was conceptualized to employ intervention and learning strategies from two theoretical perspectives, cognitive behavior modification and social learning theory. Accordingly, the training merges both views and includes the following sequence of strategies: Self-study, modeling, role playing, and self-management. Ultimately the intent was to build the self-efficacy of preservice teachers in the behavioral domain of social skill training (see Appendix F). Based on the premise that self-efficacy is an important precursor to successful performance in the social skills area, the purpose of training was to increase the subject's expectations of personal mastery and success. Hypothetically, the subject would then demonstrate more initiative, effort, and persistence relative to this type of instruction in his or her directed teaching assignment.

Consistent with the theoretical foundation underlying this approach, the following units were developed for presentation to the 11 subjects in the training group:

Unit #1: Identifying the Self-Schemata. According to Goldfried and Robins (1983), a person's self-schemata plays an important self-serving role in establishing bias.
Whether the predisposition in a given area tends to be positive or negative influences the subsequent process of storing, organizing, integrating, and retrieving information. Additionally, research indicates that the cognitive processing of life experiences is more likely to confirm information consistent with the predisposition (Markus, 1977). Thus, the primary goal in this unit was to initiate the process of self-study and assist each subject to recognize the attitudes, beliefs, or opinions he or she held about social skill training. Operationally, it was necessary to enable participants to identify the set of associations they had about themselves in the specific domain of social skill training.

To address the aforementioned goal, the introductory unit was organized in the following way. First, to gain some indication of past experience subjects were surveyed verbally to determine their extent of exposure to social skill training in classroom settings. Second, all subjects were shown an eight-minute videotape of a teacher conducting social skill training in a classroom for educable mentally impaired students. This videotape was intended to portray a typical approach to social skill training for those individuals who have had no previous experience and secondarily to act as a prompt to stimulate thinking about personal attitudes, opinions, and beliefs on the part of all subjects. The teacher in the videotape
conducts a lesson from *Skillstreaming the Elementary School Child*, a social skills curriculum developed by McGinnis and Goldstein (1984). The Skillstreaming materials are illustrative of recommended instructional procedures, e.g., discussion, modeling, role playing, feedback, and transfer of learning activities (Spence, 1983). (The videotape was filmed by the researcher with the assistance of a teacher in the Kalamazoo Public Schools.)

Third, to physically obtain some evidence of self-schemata a worksheet containing four empty boxes was distributed to each subject for their completion (see Appendix G). Subjects were instructed as follows: "In each of the boxes on this page I would like you to write out an attitude, a belief, or an opinion you hold about the social skill training approach to working with kids, based on what you have seen today and what you may have already read or experienced. The more honest you can be about your perceptions, the better it will be as feedback to yourself." The information provided in these boxes constituted some measure of subjects' predispositions toward social skill training. When all individuals completed this written exercise, ensuing discussion provided the opportunity to share individual perceptions.

**Unit #2: Objectifying the Self-Schemata.** Continuing the process of self-study, the second unit focused on facilitating subjects' review of the attitudes, beliefs,
and opinions expressed on their self-schemata worksheets. This self-examination was intended to "present evidence" to the subjects for their objective consideration (Raimy, 1975). Specifically the following topic questions were advanced to help individuals focus their discussion of a strongly held positive or negative belief (Bain, 1987):

1. What is the source of your knowledge?
2. Is your belief supported by what you currently know?
3. Is there contrary information?
4. What else do you need to know to provide a stronger base for positive beliefs about social skill training?

Along with assisting each subject to objectify his or her predispositions, this exercise also served the purpose of identifying beliefs as an important influence on behavior. To carry this task one step further, the A-B-C model was introduced. The A-B-C model is an integral part of Rational Emotive Therapy, a cognitive restructuring procedure that involves systematic examination of an individual's thought patterns and irrational beliefs (Ellis, 1962; Ellis & Harper, 1975; Greiger & Boyd, 1980; Ivey & Simek-Downing, 1980; Meichenbaum, 1986). In the model A is the objective fact, events, or behaviors which an individual encounters, B the person's belief about A, and C the emotional consequence, or how a person feels
about A (Ivey & Slmek-Downing, 1980). As presented in this unit, it is stressed that it is not the event that really troubles us, but the way we think about the event. Several examples were provided to stimulate thinking and discussion in this direction as it related to social skill training.

Unit 3: Successful Modeling of Social Skill Training in the Classroom. According to Bandura's (1977) social learning theory, efficacy expectancies for a given individual are established most effectively through performance accomplishments. Vicarious experience, although a less reliable source of efficacy expectancy, is also recognized to exert considerable influence on the learner. Among other strategies, the modes of induction by which these sources of efficacy are operationalized include participant modeling, symbolic modeling, and live modeling.

While modeling in and of itself has value, the influence of this approach is significantly increased when certain situational variables exist (Bandura, 1971; Melchembaum, 1977). Essentially, the conditions under which modeling is optimized include the following: (a) the sex, age, and experience of the model(s) are similar to that of the learner(s), (b) multiple models are employed (demonstrating to the learner that the task can be accomplished by a variety of persons), and (c) the model is not immediately competent but demonstrates increased skill as more practice is conducted.
As organized, Unit 3 contained two demonstrations of symbolic modeling, e.g., videotaped presentations of teachers conducting social skill lessons. The first demonstration was provided by a female teacher, 29 years old, who has been teaching in special education for four years. She is a teacher of the educable mentally impaired and is in a self-contained classroom at the elementary level. She has a caseload of 12 elementary school aged children. In the videotape she addresses the lesson, "responding to teasing," a skill from *Skillstreaming the Elementary School Child* (McGinnis & Goldstein, 1984). The second demonstration was conducted by a female teacher, 25 years old, in her second year of teaching. She is a teacher of the emotionally impaired and is also in a self-contained classroom at the elementary level. Her caseload is a cross-categorical mix of students identified as emotionally impaired and learning disabled. In the second videotape she also addressed the lesson, "responding to teasing," but from *Making Better Choices: A Cognitive-Behavioral Approach for Teaching Social Skills and Cognitive Planning* (Harris, 1987). (This videotape was also produced by the researcher with the assistance of a teacher in the Lansing Public Schools.)

From the perspective of the researcher it seemed important to focus the attention of the subjects on specific teaching behaviors demonstrated by the models so
that more directive use could be made of the modeling vignettes. Accordingly, the "Teacher Self-Evaluation Measure" was distributed to each subject for his or her use while viewing the second videotape (see Appendix H). This evaluation measure identified a range of behaviors and skills necessary for good teacher delivery of social skills information. It was developed by the researcher and is largely based on information gleaned from the social skills and teaching effectiveness literature (Bickel & Bickel, 1986; Kiburz et al., 1984; Ladd & Mize, 1983).

Following viewing of the videotaped demonstrations, discussion concerned evaluation of the behaviors modeled, using the Teacher Self-Evaluation Measure as a point of reference. The researcher took this opportunity to offer both evaluative feedback (praise, approval) and informative feedback (redefinitions, highlighting important elements of the performance) to the participants as they described their assessments of the models (Ladd & Mize, 1983).

Finally, in this third unit, the subjects were instructed to complete the Teacher Self-Evaluation Measure in the context of their own strengths. As a means of reinforcing practice from Units 1 and 2, the purpose of this exercise was to promote continued self-study.

Unit 4: Live Modeling of Social Skill Training/Participant Rehearsal. Relative to vicarious experience as a source of efficacy information, symbolic and live
modeling are both identified as important forms of induction (Bandura, 1971). In Unit 4, the intent was to add live modeling as a second form of demonstration. As before, it is important that the model appear similar to the subjects in terms of age and experience. The model role-played a social skill lesson, involving several of the subjects as actors. The model also included discussion of her strategies, contingency management plan, and general processing of the situation. As a complement to previous activity, follow-up of this demonstration provided the opportunity for subjects to question the model regarding elements of her performance. Additionally other questions were presented by the researcher that allowed the model to verbally persuade subjects of the importance of social skill training, even in the face of obstacles. Verbal persuasion is identified as another useful source of efficacy information, although a source acknowledged to be weaker than either performance accomplishment or vicarious experience for sustaining behavior in the face of obstacles (Bandura, 1977, 1982).

Finally, in Unit 4 subjects were provided the opportunity to begin rehearsal of an introductory social skill lesson. Overt rehearsal is a strategy that serves to establish matching responses between current performance and a standard (Bandura, 1971; Ladd & Mize, 1983). In this
case, the standard was the demonstration presented by the model.

Subjects were instructed to use a set of materials provided at the outset of training. These materials included: (a) a list of 60 skills taught in Skillstreaming the Elementary School Child (McGinnis & Goldstein, 1984), a script for an opening lesson in this curriculum, the script for an initial lesson, a scripted outline for teacher use in later lessons, and the specific steps to four classroom survival and seven friendship-making skills, and (b) a list of 50 skills taught in Skillstreaming the Adolescent (Goldstein et al., 1980), the script for an opening structured learning lesson, a scripted outline for teacher use in later lessons, and the steps to eight beginning and three advanced social skills (see Appendix I). The remainder of time in this session was directed to rehearsal of the lesson. Equal-sized groups of four or five were organized to conduct this activity. Both the researcher and the model were available to provide evaluative and informative feedback to the subjects as they rehearsed.

Unit #5: Participant Modeling--Phase 1. Performance accomplishment is acknowledged to be a particularly influential source of efficacy information because it is based on personal mastery experiences (Bandura, 1971, 1977, 1982; Bandura, Adams, & Beyer, 1977; Goldfried & Robins, 1982). According to Bandura (1977), "Regardless of the

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methods involved, results of comparative studies attest to the superiority of performance-based treatments" (p. 196). The principal sources through which different modes of treatment are operationalized include: Participant modeling, performance desensitization, performance exposure, and self-instructed performance (Bandura, 1977).

For purposes of this study, participant modeling was operationalized for use in the following way. Subjects were requested to model the introductory lesson they had rehearsed in Unit 4 in front of the entire group. Each demonstration was videotaped by the researcher so that evaluative and informative feedback could be provided on an individual basis following all demonstrations. In each modeling demonstration, one individual was designated as the "teacher" and the remaining participants as "classroom students." (These decisions were made within each group.) Subjects observing the models were provided with the Teacher Self-Evaluation Measure so that specific behavioral feedback could be provided to the individual acting in the teacher role. Subsequently, questions to the group from the researcher included the following:

1. What specific behaviors indicate skill on the part of the (model)?

2. What improvements might be considered?

3. (To the model) What particular thoughts were going
on in your mind? Were these thoughts positive or negative? What are the implications of positive or negative thoughts?

Finally, modeling of the initial structured learning lesson (see Appendix I) was conducted by the live teacher model. The primary purpose of this demonstration was to provide subjects with a sequenced introduction to the Skillstreaming curriculum. As recommended in the trainer's guide (Goldstein et al., 1980), this lesson followed preparing the students for structured learning (modeled by participants in this unit) and precedes the "outline for teachers in later structured learning lessons" (p. 204) (see Appendix I). Follow-up discussion was conducted to focus subjects on specific behaviors of the model as well as aspects of the material that would signal potential problems when presented in a classroom setting.

Unit 6: Participant Modeling--Phase 2. In this unit subjects continued the activity of Unit 5, participant modeling. Once again, utilizing materials from the Skillstreaming curriculum (McGinnis & Goldstein, 1984) the participants were instructed to present a skill lesson using the outline for teachers in later structured learning lessons. (As noted previously, this followed the sequence recommended in the trainer's guide.) Specifically, each of the following beginning social skill lessons were presented by one of the four-to-five member groups: (a) listening (as presented to elementary-aged
students), (b) listening (as presented to secondary-aged students), (c) asking for help, and (d) saying thank you. Time was provided for subjects to rehearse their modeling demonstrations. As before, demonstrations by the models were videotaped so evaluative and informative feedback could be provided to each subject acting in a teacher role. Observers were instructed to use the Teacher Self-Evaluation Measure to record their observations. During follow-up discussion directive questions from the researcher sought to prompt objective and operational thinking on the part of all subjects.

Unit #7: Self-Management. The final unit of the Self-Efficacy Training program involved subjects in a discussion of an important self-management need, problem-solving skills. According to Kanfer and Gaelick (1986),

What is learned in therapy should include a set of generalizable skills such as coping strategies, ability to assess situations and behavioral outcomes, and development of rules of conduct for common problem situations, all of which aid the client in avoiding or handling future problems more effectively than in the past. (p. 284)

Although this rationale is offered within the context of a therapeutic intervention, it has applicability to the present study. Kanfer and Gaelick (1986) further note that self-management methods help an individual acquire new behaviors, although not necessarily as part of the daily repertoire. Rather, in a future sense self-management techniques are useful when, and if, problems arise. The
generalized need for individuals in teaching roles to act as problem-solvers is further supported by Tetenbaum and Mulkeen (1986) who emphatically support knowledge of this cognitive process by every prospective educator.

In terms of the self-efficacy concept, self-management methods have important applicability. Bandura (1977) states that "successes are more likely to enhance self-efficacy if performances are perceived as resulting from skill rather than from fortuitous or special external aids" (p. 201). Mastery of difficult tasks conveys noticeable evidence of increased competence. Problem-solving is a skill and a sequence of behaviors which allow an individual to maintain a measure of control in a difficult situation, and therefore enhance self-efficacy. As evidence of success (or failure) is accumulated, the information encoded in the self-schemata offers greater confirmation to the learner that personal mastery is achievable (or not achievable) in that situation.

Unit 7 was primarily directed toward discussion of the importance of and need for problem-solving skills in the area of social skills. First, subjects considered the ways in which their behavior may be influenced by negative beliefs, i.e., a greater sensitivity to behavioral problems, the provision of less challenging lessons, or perhaps termination of formal social skills instruction altogether. Second, participants considered a variety of
problems which the teacher might encounter in the classroom setting. Third, subjects reviewed a set of five recommended steps to problem-solving (Martin, 1981) and considered the ways these steps may be applied to the identified problems.

Validation of the Self-Efficacy Training Program

A content validation approach (Kerlinger, 1973; Popham, 1975) was used to ascertain the degree to which the Self-Efficacy Training program was grounded in research theory and practice. As Kerlinger (1973) describes it, "Content validity is the representativeness or sampling adequacy of the content—the substance, the matter, the topics—of a measuring instrument" (p. 458). Of import is the question, "Is the substance or content of this measure representative of the content or the universe of content of the property being measured?" (Kerlinger, 1973, p. 458). To determine the representativeness of the measuring instrument Kerlinger and Popham advise that other "competent" judges should judge the contents of the items. So that this process is best facilitated, the judges must be furnished with specific directions for making judgments, as well as with specification of what they are judging. Accordingly the following procedures were conducted in this study to measure content validity of the SET program.
In its original form the program consisted of 12 hours of training. Five "expert" judges, individuals all published in the field of social learning theory, cognitive psychology, and/or teacher self-efficacy, were asked to evaluate the content of the training program and respond to the following questions: (a) Are principles from social learning theory and/or cognitive psychology appropriately applied to this instructional program for training in self-efficacy?, and (b) according to research theory and practice, are the strategies employed appropriate for training in self-efficacy? (See Appendix J for a copy of the letter sent to each expert.)

The three experts who responded to this request included: Dr. Albert Bandura, a prominent social learning theorist from Stanford University who has authored numerous books and articles on self-efficacy, Dr. Marvin Goldfried, a prominent cognitive psychologist from State University of New York at Stony Brook who has also authored many publications, and Dr. Patricia Ashton, a researcher from The University of Florida who has investigated teacher efficacy and published several articles on this topic. Both Dr. Bandura and Dr. Ashton responded with formal letters that evaluated the training program relative to the aforementioned questions (see Appendices B and K). Dr. Goldfried returned the copy of the training program sent to him and recorded his recommendations directly on
the copy. Dr. Ashton did not recommend any changes to the training program and Dr. Goldfried identified only minor clarifications. However, Dr. Bandura cautioned that the efficacy training program seemed to rely heavily on the verbal persuasion mode, especially Ellis' A-B-C model, and that such verbal approaches alone often have weak effects on perceived self-efficacy. Thus, the self-efficacy training might have a weak impact on self-efficacy because it relied on a relatively weak mode of efficacy induction. Instead he suggested more emphasis on modeling of the relevant skills, and guided practice under simulated conditions to perfect the skills. He also recommended inclusion of an application phase to allow practice of the newly acquired skills under natural conditions.

Although Dr. Ashton and Dr. Goldfried approved the format of the self-efficacy training as presented, this researcher elected to make several modifications suggested by Dr. Bandura. Essentially this choice was made because Bandura is widely acknowledged to be the conceptual artist of self-efficacy theory (Gibson & Dembo, 1984; Goldfried & Robins, 1982; Phares, 1984). Phares (1984) states,

Bandura's work has had an important impact on both learning and personality as well as on the treatment of clinical problems. In no small way this has been the result of the large volume of carefully executed research stimulated by his theoretical approach. (p. 341)

In deference to Bandura's evaluation of the program,
and to enhance content validity of the training, the following changes were made in the final product:

1. An introductory unit including social skill content information was eliminated. (Bandura noted that this element of social skill training might confound treatment conditions.)

2. Emphasis on the A-B-C model was reduced. (This is viewed by Bandura as a verbal persuasion mode. The modified training addresses this concept in a more concise form.)

3. Emphasis on symbolic, live, and participant modeling was increased. (This is consistently acknowledged to be the most influential source of efficacy expectancy information.)

4. Attention to self-management information in the final unit was also abbreviated to allow more time for guided practice and modeling.

Bandura also advised a transfer program designed to allow application of the newly acquired skills to natural conditions. While the significant value of this methodology is not lost on this researcher, it was not a training component that could be readily accommodated. However, taking other recommendations into consideration, in its final form Self-Efficacy Training incorporated a stronger sequence of guided practice, modeling, and cognitive behavior modification strategies.

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The need to establish valid instruments and tests is a widely recognized research goal. In this study the method used to evaluate the SET program was content validation. It is worth noting, however, that this approach does have its weaknesses. These are noted by Brown (1983) who suggests three possible limitations. First, there is no quantitative index established to serve as a single definitive measure, rather, it is the judgment of the reviewers that serves as the point of reference. Second, a lack of clarity on the part of the researcher in defining the domain or any of the subcategories will make judgment by the experts more difficult. And third, various judges may use different standards and criteria to judge the test or instrument. Regarding the SET program, a divergence of opinion by the judges, i.e., Bandura versus Goldfried and Ashton, was apparent. That is, Bandura advised use of a stronger source of self-efficacy information while both Goldfried and Ashton essentially supported the training as it was originally designed. Whether this divergence can be attributed to lack of clarity of the domain and/or differences among the judges is unclear. However, in terms of establishing content validity of the SET, it was the decision of the researcher in this study to incorporate the changes recommended by Bandura.
Social Skill Training Content Information

Content of the Program

Unlike Self-Efficacy Training which employed methodology to facilitate self-study, active participant learning, and self-management, the program involving Social Skill Training Content Information (SST) (Miller, 1987c) was conceptualized to address knowledge-type information. This academic content approach is not unlike that delivered in many teacher education programs (Pugach, 1987). However, as training manuals or texts directly applicable to this purpose were not available, it was necessary to extrapolate the specific elements of training from the social skills literature. Operationally, the training was organized in a lecture-style format involving discussion and limited active participation by the subjects (see Appendix L). Eight units of information were identified for presentation to the subjects in this group.

Unit #1: Introduction to Social Skill Training.

Basically, the purpose of Unit 1 was to provide an overview of social skill training. In this review the following introductory clarifications were provided: (a) a definition of social skills by Foster and Richey (cited in Jenson, Sloane, & Young, 1988); (b) a rationale for social skill training; (c) the systematic, instructional nature of this training; (d) the "skills" approach of this type of
instruction and identification of the kind of skills that may be addressed in curricula; (e) the ways in which social skill training differs from classroom management; and (f) the potential outcomes of this instruction. It was largely through discussion that subjects explored these areas, although one hands-on exercise was conducted to facilitate participants' understanding of the skills nature of this instruction.

Unit #2: Examination of the Skills. In this unit, the researcher addressed the two areas into which social skills are typically divided in commercial curricula. According to the literature this is usually interpersonal skills and problem-solving skills (Brendtro & Ness, 1983; Osberg, 1982; Spence, 1983). A general description was provided of each approach and then subjects were asked in work in small groups of four or five to consider several relevant questions: (a) Identify situations in which kids must use interpersonal or problem-solving skills, (b) identify ways in which kids who are deficient in social skills typically respond when put in these situations, and (c) identify the advantages to be gained from use of more appropriate behavior. Ensuing discussion focused on subject responses to these questions.

Unit #3: The Curriculum. The goal of Unit 3 was to introduce subjects to social skill training curricula and to identify objective ways of evaluating programs in this
area. This is a process advocated by Schumaker, Pederson, Hazel, and Meyen (1983). To begin with, participants were provided with a packet of information containing descriptions of 10 curricula. In this packet each curriculum was described according to the following criteria: (a) target population, (b) physical description, (c) ability and/or motivational components, (d) learning characteristics addressed, (e) skills or topics covered, (f) approach (skills or situation), and (g) teaching methodology (see Appendix M) (Schumaker et al., 1983, pp. 8-10). As a follow-up to identification of these elements, subjects were divided into groups of four or five to review first-hand one of the curricula provided by the researcher, three of which are described in the packet. These curricula include: Thresholds to Adult Living (Craig, 1982), Skillstreaming the Elementary School Child (McGinnis & Goldstein, 1984), Skillstreaming the Adolescent (Goldstein, Sprafkin, Gershaw, & Klein, 1980), The Choice (Roderman, 1980a), The Promise (Roderman, 1980b), The Big Hassle (Canario, 1980a), The Put-Down (Canario, 1980b), and Person to Person (Sasse, 1981). Each group then described the merits of the program they reviewed relative to the aforementioned criteria.

Unit #4: Methodology. In Unit 4 the goal was to apprise subjects of the methods and strategies used to implement social skill training. As an overview, a
three-stage process described by Schumaker et al. (1983) was used to frame discussion. As Schumaker et al. identify it, this process involves awareness, practice, and application. The variety of strategies utilized at each stage to operationalize instruction of a specific skill was also delineated more fully, e.g., awareness level—discussion and modeling of the skill (Brendtro & Ness, 1983; Carter & Sugai, 1988; Galvin, 1985; Gresham, 1982; Harris, 1984; Osberg, 1982); practice level—rehearsal, role play, and corrective feedback (Carter & Sugai, 1988; Gresham, 1984; Harris, 1984 & 1987; Hops, 1983; Ladd & Mize, 1983; Osberg, 1982); and application level—transfer of learning activities (Goldstein et al., 1983; Kiburz et al., 1984; Spence, 1983).

Unit #5: Adaptation of Commercial Curricula. The primary purposes of instruction in Unit 5 were:

1. To discuss the problems current social skill curricula may present (Bargarozzi, 1985; Harris, 1984) and the adaptations this may require on the part of the teacher.

2. To identify a variety of cues that may signal a poor match between curriculum and the students (Goldstein et al., 1983).

3. To identify an operational strategy for addressing curriculum problems (Martin, 1981).
Essentially, these objectives were facilitated through discussion, using a variety of concrete examples.

Unit #6: Assessment. The major goal of Unit 6 was to acquaint subjects with typical methods of assessment, a sample of measures used to evaluate social skill, and recognition of the importance of gathering objective information. According to Gresham (1982), the most commonly used methods of assessment include: (a) teacher ratings, (3) sociometric assessment, and (c) naturalistic observations. In this unit the focus was on increasing awareness of these methods of assessment, the procedures involved, and sample instruments currently in use, e.g., "The Behavior Rating Profile" (Brown & Hammill, 1983) and the "Behavior Evaluation Scale" (McCarney, Leigh, & Cornbleet, 1983). The instructional format included discussion and a "hands on" look at instrumentation.

Unit #7: Situational Variables and Student Responses. According to Ladd and Asher (1985), the situational variables that may obstruct the provision of social skill training are of significant importance. In this unit, one goal was to inform subjects of these potential problems. Ladd and Asher (1985) and Goldstein et al. (1983) concur that social skill training may not be viewed as a legitimate course offering, in comparison to other academic areas of instruction. Additionally, the time it takes to incorporate this type of training into the curriculum may
pose a particular problem at the secondary level where students encounter specific graduation requirements. As noted previously in Unit 3, the problems associated with curricula also exist as another deterrent to active use of social skill instruction. Utilizing a discussion format, in this portion of Unit 7 subjects considered a variety of situational obstacles that may exist to influence their performance in the classroom setting.

For the subjects Unit 7 also included an examination of student responses that may serve to discourage teacher effort in the social skills area. Goldstein et al. (1983), identify several potential problem behaviors students may demonstrate in the classroom, including: Deliberate absence, active and/or passive refusal to participate, and inappropriate participation. Schumaker et al. (1983), also note a variety of learning and social characteristics associated with the mildly handicapped that further challenge a teacher in this instruction area. In discussion, these factors were also shared with the subjects.

Unit #8: Teacher Behaviors. The final unit of the SST approach focused on the identification of pertinent teacher behaviors necessary for successful instruction in the social skills area. In this regard, Ladd and Mize (1983) offer that "overly didactic and mechanical" instruction can seriously undermine even the most well-
designed and all-inclusive of training programs (p. 153),
thus making it particularly important that preservice
teachers recognize the skills they must possess in order to
maximize learning experiences for their students.
Accordingly, for purposes of this instruction the social
skill literature was reviewed to identify specific teacher
skills necessary to effectively conduct social skill
training.

Unit 8 emphasized two categories of necessary teacher
competence—interpersonal skill and managerial skill.
Within these categorizations specific skills needed by the
teacher were further delineated, e.g., positive
relationships with students (Ladd & Mize, 1983); role-model
credibility (Ladd & Mize, 1983); knowledge of behavior
modification strategies and social learning theory methods
(Carter & Sugai, 1988; Gresham, 1984; Harris, 1984; Jenson,
Sloane, & Young, 1988; Kiburz et al., 1984); and classroom
management skills (Bickel & Bickel, 1986). Through
discussion and use of concrete examples, subjects briefly
considered their strengths and weaknesses as potential
social skill trainers according to the aforementioned skill
areas.

Validation of the Social Skill Training Content Information
Program

A content validation approach (Kerlinger, 1973;
Popham, 1975) was utilized to ascertain validity of the SST
program. As recommended by Borg and Gall (1979), the "experts" in this process were provided with a definition of the universe to be sampled (social skill training), the objectives of training, and a description of how the content universe was sampled to develop training items (see Appendix N). The experts in the validation of this program included 16 professionals in the field of special education. The group was comprised of 10 teachers, three administrators, and three teacher consultants (see Table 2 for additional demographic information).

The experts were requested to review the social skill training program and evaluate it according to the following questions:

1. Content—Does the information have potential usefulness for teachers in training? Does it cover important areas?

2. Arrangement of the units and teaching strategies—Do the units proceed in a logical order? Are there appropriate teaching strategies employed for delivering the information?

The following breakdown provides an overview of the feedback received from the reviewers:

Unit #1: Introduction. (a) Discuss more fully what it means for a special education student to be "successful," e.g., this may mean graduation in some cases or something less in others; (b) in the summary section,
emphasize that social skill training is supplemental to behavior management in the classroom; (c) stress that self-monitoring behavior on the part of students is a potential and important outcome; and (d) explain that valuable generalization activity can be conducted in the full school setting (lunchroom, playground, etc.).

Unit #2: Examination of the Skills. (a) Under the heading, Interpersonal Skills, include "giving and accepting POSITIVE AND negative feedback"; (b) under the heading, Problem-Solving Skills, add item f to the set of steps provided, "check to see if the response worked"; (c) in part (2) modify step 2 to read, "Identify ways in which kids WHO ARE DEFICIENT IN SOCIAL SKILLS typically respond when put in these situations"; and (d) as a summary statement, indicate that social skill expertise can add to the self-image of a youngster.

Unit #3: The Curriculum. (a) Use as many sample materials as possible for first-hand examination by the subjects.

Unit #4: Methodology. (a) Regarding the application phase of this unit, include "use of confederates" as a strategy for generalizing learning; (b) also, indicate that a program like Skillstreaming the Elementary School Child (McGinnis & Goldstein, 1984) has application exercises built into its sequence of training.
Table 2
Demographics of Professionals Reviewing the SST Program

1. SEX:
   Female 12
   Male 4

2. TYPE OF EXCEPTIONALITY WITH WHOM PROFESSIONALS WORK:
   Emotionally impaired 7
   Emotionally impaired/learning disabled 4
   Learning disabled 2
   More than two exceptionalities 3

3. LEVEL OF EXCEPTIONALITY WITH WHICH PROFESSIONALS WORK:
   Elementary 5
   Junior high 3
   Senior high 3
   More than one level 5

4. SITE OF EMPLOYMENT:
   Public school 12
   Residential facility 3
   Public agency 1

5. INSTRUCTIONAL SETTING:
   Self-contained classroom 8
   Resource room 3
   More than one instructional setting 2
   Supervisory role 3

6. AVERAGE YEARS OF TEACHING OR EDUCATIONAL EXPERIENCE:
   Teaching 9.39
   Educational 15.50

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Unit #5: Adaptation of Commercial Curricula.
(a) Emphasize to subjects that as teachers they may need to pull from many programs to create a suitable curriculum; (b) note that adapting curriculum may be difficult to accomplish because social skill training is generally delivered to a group of students; (c) offer specific strategies for dealing with problem situations; and (d) help participants to understand that misbehavior by students may also signal that the social skill instruction is hitting "on target" and addressing behaviors that students know they lack or perform poorly.

Unit #6: Assessment. (a) Utilize more popularly used sample assessment instruments for demonstration to the subjects, e.g. The Behavior Evaluation Scale (McCarney, Leigh, & Cornbleet, 1983) and The Behavior Rating Profile (Brown & Hammill, 1983), and (b) explain to subjects that naturalistic observation can be very time-consuming.

Unit #7: Situational Variables and Student Responses. (a) When discussing situational variables, emphasize the importance of the time factor, that is: When can social skill training be fit into the curriculum? What gets thrown out? How can training be accommodated when there are other graduation requirements to meet?, and (b) in the summary portion, stress that social skill training may create more work for the teacher who is already attempting to learn other material, and that it may put the teacher in
situations which require considerable group management skill.

**Unit #8: Teacher Behaviors.** (a) In the summary, add that teachers must be able to maintain realistic expectations of their students.

In its final form, the SST program incorporated the majority of content information recommendations provided by the expert reviewers. Outside of feedback from the experts, the only major modification made by the researcher was to eliminate four hours of practice originally scheduled in the training. This change was necessary to reduce the possibility that the SST program and the SET program would utilize similar procedures and thereby confound obtained results.

**Development of the Dependent Measures**

**The Classroom Scenarios**

**Development of the Instrument**

Popham (1975) states, "the first thing to recognize is that the creation of valid affective measuring devices is a difficult and ingenuity-taxing enterprise" (p. 174). This is generally acknowledged to be true for two reasons: (1) the measurement exercise does not truly replicate the situation of interest, therefore the typical performance of the individual in a given situation is difficult to
discern, and (2) attitudes, values, etc., do not lend themselves easily to observation; instead researchers are obliged to deal with demonstrated behavior believed to be reflective of the influence of unseen factors. Further, "The terms 'attitude,' 'opinion,' and 'belief' all refer to psychological states that are in principle unverifiable except by the report of the individual" (Sudman & Bradburn, 1982, p. 120). Thus the importance of utilizing a systematic, rigorous approach to development of a self-report measure increases directly.

The Classroom Scenario instrument was intended to measure the beliefs of preservice teachers related specifically to social skill training, and to ascertain the strength of these beliefs in a variety of classroom situations. Popham (1975) advises that the first requisite step in such a process must be the generation of an adequate domain definition so that a clear understanding can be gained of exactly what is involved in the measurement instrument being constructed. As he recommends, this means that the key stimulus elements, response options, and criteria of correctness must all be identified. In the present study this was the process followed by the researcher in creation of the Classroom Scenarios measure. The following domain description was developed following a model proposed by Popham:
1. Establish the objective. The preservice teacher will respond to hypothetical situations in such a way as to indicate agreement with the behavior of hypothesized persons which reflect belief in his/her ability to deliver social skill training (SST) in a direct service context, and disagreement with behavior reflecting disbelief.

2. Stimulus limits. Syntactical structure: In situation (A), a person (P1) with belief (B1) encounters another person (P2) expressing belief (B2). (P1) exhibits behavior (C) toward (P2). Do you agree with the behavior of (P1)?

3. Replacement sets.

   A = any hypothetical situation judged to be within the realm of experience or comprehension of a majority of preservice teachers in special education.

   B = Belief or disbelief in one’s ability to deliver SST in a direct service context, such that the belief is not in violation of generally agreed upon educational and social standards.

   C = Positive and negative instances of the following behavioral indicators of belief: (a) initiates performance of a behavior, (b) expends effort to maintain behavior, and (c) persists in behavior in the face of adverse circumstances.

   P1 = A hypothetical person responding positively or negatively to P2 expression of belief.
P2 = A hypothetical person expressing divergent opinion, either verbally or nonverbally.

4. Response limits. Possible responses: Agree strongly, agree moderately, neither agree nor disagree, disagree moderately, disagree strongly. Subjects will select one response per situation to indicate the extent to which they agree with the behavior of the classroom teacher.

5. Scoring criteria. (a) For items reflecting belief (positive instances of the variable in set C), responses will be scored: Strongly agree--5, agree moderately--4, neither agree nor disagree--3, disagree moderately--2, and disagree strongly--1, and (b) for items reflecting disbelief (negative instances of the variables in set C), the responses will be scored: Strongly agree--1, agree moderately--2, neither agree nor disagree--3, disagree moderately--4, and disagree strongly--5.

Following identification of the domain definition Popham (1975) proposes that the second step of test development involves the generation of measurement items. For this purpose he suggests a process involving four specific steps. It is this approach which was employed to identify items for the Classroom Scenarios measure. The steps include the following:

1. Identify an imaginary person who possesses the
desired affective attribute (belief in the importance of social skill training).

2. Identify an imaginary person who does not possess the desired affective attribute.

3. Generate potential behavior-differentiating situations.

4. Consider whether the situations generated are practical and usable. Using this four-step guide, 13 items specific to social skill training were generated, plus five filler items. All items were written according to the aforementioned model in the domain description. As further advised by Popham, as a means of reducing the social desirability of some responses, the items were written from a third person perspective (the classroom teacher) and were presented in a past tense rather than present tense form.

To gain some information regarding its discriminability and clarity, the Classroom Scenarios measure was administered to 62 students in the special education training programs at WMU. Following these administrations, the results and any recommendations offered were considered in further development of the measure.

Validation Procedures

Content validity is usually associated with achievement tests, but not exclusively. According to Brown
"Content validity can be investigated whenever the boundaries of the domain being measured can be adequately specified and the test designed to sample this domain." In terms of applying this standard to the Classroom Scenarios measure the first step of the content validation process required definition of the content domain "social skill training" and a subcategory in this domain, "situational variables." A synthesis of descriptions from prominent authors in the social skills area were utilized to construct the following definitions:

SOCIAL SKILL TRAINING is a behaviorally-oriented, instructional approach to teaching individuals interpersonal, coping, and planning behaviors; training is based on the assumption that social behavior is learned and can be taught using structured teaching methods (Goldstein, Sprafkin, Gershaw, & Klein, 1983; Spence, 1983). "The goal is typically to train individuals in more appropriate interpersonal skills in order to develop more adaptive interaction patterns with others" (Osberg, 1982, p. 58). The teaching of interpersonal skills can also be supplemented by teaching specific steps which help an individual to mentally examine the consequences of choices before they are performed (Harris, 1984).

SITUATIONAL VARIABLES are obstacles and/or circumstances which may exist in a school setting to
encourage or discourage the delivery of social skill training (Ladd & Asher, 1985).

The second step was to identify expert judges to review the measure. As the Classroom Scenarios measure is intended to describe situations that may occur in a classroom setting, it was the decision of the researcher to seek the input of classroom teachers for this review. Accordingly, four teachers in special education served as expert judges. (See Table 3 for more detailed description of this group.)

Table 3
Demographics of Teachers Reviewing the Classroom Scenarios Measure

<table>
<thead>
<tr>
<th>Teacher</th>
<th>Years of Experience</th>
<th>Designation of Classroom</th>
<th>Setting</th>
<th>Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>#1</td>
<td>4.0</td>
<td>EMI</td>
<td>Self-contained</td>
<td>El</td>
</tr>
<tr>
<td>#2</td>
<td>5.0</td>
<td>LD</td>
<td>Self-contained</td>
<td>El</td>
</tr>
<tr>
<td>#3</td>
<td>12.0</td>
<td>El</td>
<td>Resource room</td>
<td>Jr</td>
</tr>
<tr>
<td>#4</td>
<td>6.5</td>
<td>El</td>
<td>Dep'talized</td>
<td>Sr</td>
</tr>
</tbody>
</table>

The review by these teachers addressed the following areas: (a) adequacy of the domain definition, "social skill training," (b) adequacy of the subcategory definition "situational variables," and (c) adequacy of the test items to measure the subcategory "situational variables." There
was strong agreement among the judges that the definitions and the measurement items were adequate (see Table 4), thus providing support for content validity of the Classroom Scenarios measure.

Table 4
Judge's Rating of the Classroom Scenarios Measure

Item #1: Adequacy of the definition of the domain, social skill training.

  ____4____ Adequate
  ____0____ Not adequate

Item #2: Adequacy of the category "situational variables".

  ____4____ Adequate
  ____0____ Not adequate

Item #3: Adequacy of the following test items to measure the category "situational variables".

<table>
<thead>
<tr>
<th>Question</th>
<th>Yes, adequate</th>
<th>No, inadequate</th>
</tr>
</thead>
<tbody>
<tr>
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<tr>
<td>18</td>
<td>3</td>
<td>1</td>
</tr>
</tbody>
</table>

NOTE: Questions 1, 5, 7, 12, and 14 are filler items.
Test-Retest Reliability

This aspect of the study involved administering the Classroom Scenarios measure to preservice individuals on two occasions to determine the extent to which their scores remained stable over time.

The 45 subjects who were administered the test included two sets of undergraduates, Group 1—21 students in the beginning stage of their special education programs, and Group 2—24 students at more advanced stages of their programs. All students were part of the WMU special education training program, but not part of the subject pool identified for the SET or SST programming.

The procedures involved in conducting the testing were the same for each group. The researcher met with each group during a regularly scheduled class and administered the first test. One week later during the same class the process was repeated. Students were only informed that the researcher was involved in test development as part of a research project. The same amount of time was available to subjects on each occasion to complete the test. The time interval between testing (one week) was chosen to minimize the opportunity for other training or relevant experiences to influence responses on the second testing.

Respectively, .84 and .67 reliability coefficients were obtained from test-retest with subjects in Groups 1 and 2. Mitchell (1985) reports that other self-report
measures, utilizing test-retest methodology, have obtained reliability coefficients of .92 (The Irrational Beliefs Test, Mitchell, 1985), .87 to .92 (The Coopersmith Self-Esteem Inventory, Mitchell, 1985), and .75 to .87 (Bem Sex-Role Inventory, Sherer & Adams, 1983). One of the dependent measures utilized in this study, The Self-Efficacy Scale (Sherer et al., 1982), is a self-report measure which its authors report obtained a Cronbach alpha reliability coefficient of .86.

The .84 reliability coefficient obtained from test-retest of Group 1 subjects, students in the beginning phase of their program, compares favorably with the stability index obtained by other self-report measures. However, the .67 obtained test-retest of subjects from Group 2 does not compare favorably. This difference may be considered from one important perspective. Whereas subjects in Group 1 had not been exposed previously to the Classroom Scenarios measure, as it turned out many subjects in Group 2 had been involved in prior practice test sessions of the measure. Although a logical argument is that prior exposure should have resulted in spuriously inflated scores, it is also possible that interest and therefore conscientiousness in completing the measure may have been influenced negatively. Either way, it is the case that Group 2 subjects were confounded by prior experience. The end results, .84 and .67 reliability coefficients, suggest that the Classroom
Scenarios measure may be a stable measure over time, although more research is in order to make this statement more definitively.

The Social Skill Training Knowledge Inventory

Development of the Instrument

The Social Skill Training Knowledge Inventory (SSTKI) is an achievement test designed to measure knowledge developed in the content domain of social skill training. It was constructed by the researcher in this study according to steps recommended by Brown (1983), Kerlinger (1973), and Popham (1975). The procedures involved are described further.

Step one. A review of the social skills literature was conducted to identify recommended areas of skill or information acquisition for prospective teacher trainers. The information obtained in this review was organized into seven general categories comprising the content domain:

1. Knowledge of social skills. Knowledge of the rationale for, and diversity and sequence of social skills found in commercially packaged curricula (Schumaker et al., 1983).

2. Knowledge of training procedures and approaches. Knowledge of behavior modification methodology, e.g., modeling, roleplaying, performance feedback, transfer of
learning, and task analysis (DeLuke & Knoblock, 1987), and the skill versus problem-solving approach (Spencer, 1983).


4. Knowledge of materials. Knowledge of the social skill training curricula available for use with special education students and the possible need for adaptation of materials (Schumaker et al., 1983).

5. Knowledge of student responses. Knowledge of the kinds of resistance to social skill instruction students may demonstrate (Goldstein et al., 1983).

6. Knowledge of situational variables. Knowledge of the obstacles and/or circumstances which may exist in the school setting to encourage or discourage the delivery of social skill training (Ladd & Asher, 1985).

7. Knowledge of teacher behaviors. Knowledge of the behaviors and styles of teaching most likely to enhance learning for students (Ladd & Mize, 1983).

Step two. Items for the test were formulated from the aforementioned seven categories. Two to 5 questions were generated for each category as part of the total 20 questions (see Appendix 0 for a breakdown of the category items.) The questions were written in multiple choice form, five choices per question.
Step three. To gain some measure of its discriminability and clarity, SSTK1 practice tests were administered to 51 students in the special education training program at WMU. Following these administrations, the results and any recommendations provided were considered in further development of the measure.

Validation Procedures

"As most achievement tests are designed to measure command of a specified content and/or skills domain, and as the test items are selected to represent this domain, in most situations the appropriate method of validation is content validation" (Brown, 1983, p. 213). For the SSTK1 this involved the following procedures:

Step one. The same definition constructed to identify the content domain, "social skill training" for the Classroom Scenarios measure was utilized, along with the definitions constructed for each of the seven knowledge subcategories. In addition to these definitions, the questions on the test that pertained specifically to each subcategory were identified.

Step two. A letter was sent to five expert judges seeking their review of the SSTK1. These were individuals who have contributed to the literature in the social skills area. Specifically their assistance was requested for one task: To review the measure and rate it against the

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identified content domain and seven subcategories. They were asked to respond using the "Judge's Rating" sheet (see Appendix P).

Step three. The input of four teachers in special education was also solicited to judge the content validity of the SSTKI. These were the same teachers who reviewed the Classroom Scenarios measure. All four teachers were known to have past or current experience with social skill training in the classroom. These individuals were asked to judge whether the questions in the measure were clearly stated.

Step four. To gain the input of individuals representative of the preservice teacher population addressed in this study, 34 undergraduate students in the special education training program at WMU were asked to respond to two questions:

1. If you were provided with the social skill training information, could you answer the question?
2. Is the question clearly stated? The participants in this component of the study were all students in an introductory course to special education.

Three expert judges responded with a review of the SSTKI, Walter Harris, author of Making Better Choices (1987), a social skill training program; Larry Brendtro, co-author with Ness of Re-educating Troubled Youth (1984); and Joanne Milburn, noted researcher in the social skills
area. All three indicated that the definitions of social
skill training and the seven subcategories were adequate.
However, there were many recommendations expressed
concerning the measurement items. Brendtro indicated that
six of the items were inadequate, Harris rated three of the
items inadequate, and Milburn rated twelve items
inadequate. In most cases, the experts indicated there
could be several correct answers to the given question.
The judges recognized, however, that the questions were
specific to training and difficult to judge without
specific knowledge of this component (see Appendix Q for
response letter from Joanne Milburn).

The four teachers who judged the SSTKI for clarity of
the questions all responded favorably. The 34
undergraduates who rated the instrument for its clarity and
answerability (given training) also responded favorably.

Test-Retest Reliability

The SSTKI was administered on a test-retest basis to
the same subject group to whom the Classroom Scenarios
measure was given, e.g., 22 students in the beginning
sequence of their special education programs, and 24
students at more advanced stages of their programs.

Respectively, .62 and .53 reliability coefficients
were obtained from test-retest with subjects in these two
groups. These indexes fall well below the obtained indexes
from other achievement measures (Mitchell, 1985). The concerns expressed by the expert judges regarding the quality of several of the questions appears to be the relevant issue. As evaluated by the judges, several of the items seemed to have more than one correct answer. Without benefit of the SST training experience (which emphasized specific "correct" answers) untrained test takers could reasonably choose from several seemingly correct responses.

The achievement of subjects relative to knowledge-type information was not the primary focus of this study. However, insofar as knowledge in a specific domain influences self-efficacy in that domain this aspect of a subject's performance does have importance. Although numerous changes were made in many items based on input from the experts, further test development and item analysis is required if the SSTKI is to be considered a valid, reliable measuring tool.

The Performance Measure

Development of the Instrument

The Performance Measure was developed by the researcher in this study to measure the differential effects of training on subjects' follow-up performance in the classroom (see Appendix E). It was hypothesized that those subjects exposed to SET would demonstrate more willingness to initiate and persist at social skill
training in their directed teaching assignment than those subjects exposed to SST or the standard curriculum. The Performance Measure is a 10-item instrument intended to evaluate the magnitude and strength of a subject's self-efficacy related to social skill training based on demonstrations of initiative, effort expended, and persistence in the classroom setting.

Subjects involved in either SET or SST received stimulus materials at the outset of their training, e.g., packets of social skill training materials from the Skillstreaming (McGinnis & Goldstein, 1984) curriculum (see Appendix I). This packet provided subjects with the basic materials to conduct social skill training in situations outside the SET or SST structured training components. The procedures in the development of this instrument involved the following steps:

**Step one.** For purposes of generating items for the Performance Measure, three behavioral categories were defined: initiative, effort expended, and persistence. These categories were based on Bandura's (1977) premise that, "through expectations of eventual success, [perceived self-efficacy] can affect coping efforts once they are initiated... determine how much effort people will expend and how long they will persist in the face of obstacles" (p. 194). Webster's dictionary (Gurainik, 1982) provided the basis for definitions. These included: (a)
initiative—taking the first step or move, (b) effort expended—effort spent or used up, and (c) persistence—to refuse to give up, especially when faced with opposition.

**Step two.** Relative to the definition of each category, interview items were generated that explicated each definition within the context of social skill training and specified pertinent behavioral demonstrations. For the first category, "initiative," this involved generating items that operationalized "taking the first step or move". The items identified included the following: (a) ASKS the supervising teacher if SST is conducted in the classroom; (b) ASKS the supervising teacher if SST is conducted by a teacher or other professional in the building; (c) ASKS to conduct a SST lesson (using the lessons provided in the [SET or SST] training packet); and (d) ASKS to conduct a SST lesson (using lessons provided by the teacher). For the second and third parts, "effort expended" and "persistence," pertinent behavioral demonstrations were also identified.

**Step three.** A "yes-versus-no" response format was specified for self-report by the subjects. It was intended that a "yes" rather than "no" response to items numbered higher in the questionnaire would demonstrate the magnitude of a subject's self-efficacy related to social skill training.
Validation Procedures

The procedure employed to determine the validity of the Performance Measure was content validation. Two teachers of special education and two preservice individuals who had completed their directed teaching assignments in the fall of 1987 were asked to judge the instrument. The teachers were in the Kalamazoo Public School system. They had both served as a supervising teacher for preservice individuals and had 19 and 13 years of teaching experience. One teacher worked with emotionally impaired (El) students and the other with physically impaired (POHl) and educable mentally impaired (EMI) students. The teacher of El students was situated in a self-contained upper elementary classroom, and the second teacher in a center-based program with 19-26 aged students. The teacher of El conducted social skill training with her students twice weekly using the Making Better Choices program (Harris, 1987). The second teacher did not conduct social skill training formally.

The two preservice individuals who reviewed the measure had both completed 15-week directed teaching assignments in special education. One served in a self-contained EMI classroom with 19-to-26-year-olds, and the other in a resource room with severely El and learning disabled children, 11 to 12 years old. The individual in the EMI classroom had experienced informal social skill
training, e.g., instruction on a situational basis without use of a specific curriculum. The other individual reported that social skill training had not been conducted in her assignment, although there had been a strong system of behavior management.

All four subjects were provided with the previously identified definition of social skill training and then asked to review the Performance Measure against the following criteria: (a) the behavior is feasible within the typical classroom setting, (b) the behavior is fully stated, and (c) the order of behaviors is appropriate. Subjects were also asked whether there were other behaviors that would be more pertinent to the issue of social skill training.

The preservice teachers responded positively to criteria 1 and 3 and did not identify any other illustrations of behavior. They suggested, however, that item 1B in the instrument be expanded to read, "Asks supervising teacher if SST is conducted by any teacher in the building OR OTHER PROFESSIONAL IN THE BUILDING. In their review, the two teachers also responded favorably to the items and did not suggest further additions or changes.

**Interrater Reliability**

The Performance Measure was designed to obtain self-report responses from subjects in the three groups specific
to their classroom behavior in the categories of initiative, effort expended, and persistence. The supervising teacher was also interviewed using the same instrument and the responses obtained from their corresponding preservice teacher to determine the extent of agreement. According to Brown (1983, p. 92), "Whenever more than one person . . . judges a performance, the question of interscorer (or interrater) reliability arises. That is, do the scorers assign the same score to each individual's performance?" Brown states that a common procedure is to calculate the percentage of scores that agree. For the Performance Measure the procedure involved calculating scores on 10 individual items and determining the extent of exact agreement between the preservice teacher and supervising teacher. The average percent of agreement obtained among the 34 preservice teachers and their corresponding supervising teacher was 96%.

Procedures

Four major components comprised this research project. These included: (a) development of the training programs and instruments, (b) identification of subjects, (c) data collection--phase 1, and (d) data collection--phase 2. Figure 1 illustrates the time lines under which the study was conducted and the overlap or extension of certain activities beyond the identified phase. The following
Figure 1. Schematic Diagram of Research Procedures and Time Lines

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account details more specifically the range of procedures involved in each of the four components:

(1) Development of Training Programs and Instruments

1. The Self-Efficacy Training and Social Skill Training components were developed. Based upon extensive literature review in both cases, the initial products included two 12-hour training programs.

2. Following development of the SET and SST programs, validation procedures were begun. The SET program was sent to five experts for their review and the SST program was distributed to 21 special education professionals. Revisions in the training programs were made dependent upon reviewer feedback.

3. A videotape was produced for use in the SET program illustrating the performance of two teachers conducting social skill training in the classroom setting.

4. Identification and/or development of the testing instruments was completed. In terms of obtaining existing instrumentation, Dr. Mark Sherer was contacted about use of the Self-Efficacy Scale developed by Sherer et al. (1982). The three measures developed by the researcher were also completed (Classroom Scenarios, the Social Skill Training Knowledge Inventory, and the Performance Measure).

5. Practice versions of the Classroom Scenarios measure and the Social Skills Knowledge Inventory were
administered to various populations of undergraduates in WMU's special education program.

6. Validation procedures for the Classroom Scenarios, SSTKI, and Performance Measure were conducted. In all cases teachers and preservice teachers were involved in the process. Research experts were also solicited for review of the SSTKI.

7. Test-retest was conducted for both the Classroom Scenarios and SSTKI measures.

(2) Identification of Subjects

1. To control for a number of possibly confounding selection variables, the sample was limited to preservice teachers in special education training programs. The Coordinator of the Directed Teaching Office at WMU and the Chairperson of the Special Education Department at GVSU were contacted to enlist their assistance in the identification of this sample. The two administrators indicated they had populations of 33 and 37 preservice teachers, respectively, scheduled for directed teaching in winter, 1988, and agreed to make these groups available for inclusion in the study.

2. A letter was sent, requesting participation in formal training, to all 37 individuals at GVSU and 22 of the students at WMU scheduled for an on-campus directed teaching seminar (see Appendix R). In response, nine
individuals from GVSU and 15 from WMU requested to participate in the training. In terms of random assignment, five students from GVSU and nine students from WMU indicated they were available for assignment to either the January 23 or 30 training date. The remaining 10 students expressed preference for one date or the other, although none was aware of the type of training scheduled for either time.

3. The comparison group of 10 subjects was identified during the latter part of January, 1988. This was accomplished through a letter request to the remaining population of preservice individuals involved in directed teaching at both GVSU and WMU who had not participated in either SET or SST training (see Appendix S). The 10 subjects who responded included four students from GVSU and six from WMU. These individuals were only requested to complete the three measurement instruments, Classroom Scenarios, SSTKI, and the Performance Measure.

4. Once the sample was identified and the groups established, the following controlling variables were specified: (a) grade point average, (b) major area of certification, (c) accumulated number of hours in the university training sequence, (d) type of certification to be granted (elementary or secondary), and (e) number of weeks in the directed teaching assignment when treatment and/or the dependent measures were administered.
Statistical procedures were employed respective to these variables to determine whether the three groups were equivalent. (The results of this analysis are reported in Chapter III.)

(3) Data Collection: Phase 1

1. The SST program was provided to 13 subjects on January 23, 1988 at Pine Rest Psychiatric Hospital in Grand Rapids, Michigan. Subjects were provided with a complimentary packet of social skill training materials described on page 80. The training began at 9:00 a.m. and concluded at 4:00 p.m., utilizing the teaching curriculum previously described and developed by the researcher in this study. Subjects were given a half-hour lunch and five-minute break times throughout the day. Immediately following the conclusion of training, subjects were then requested to complete three measures: The Self-Report Measure, Classroom Scenarios, and the Social Skill Training Knowledge Inventory. They were also asked to complete a 10-item evaluation of the trainer's performance (the researcher in this study) (see Appendix T). Following all testing and completion of the evaluations, subjects were then presented with a certificate validating their participation in the day-long training (see Appendix U). At the conclusion of all activities, subjects were reminded they had participated in a research project and were asked...
to maintain confidentiality about the specifics of their training.

2. The SET program was presented to 11 subjects on January 30, 1988, also at the Pine Rest site. Other than the training emphasis and content, all other details of the day were the same.

It was the decision of the researcher to conduct SST the week before SET for one primary reason. The Social Skill Training program represented a fairly standard approach to instruction, that is, lecture, discussion and limited participation by group members. The researcher guessed that it might be the approach subjects would expect. As SET represented the experimental approach it seemed necessary to minimize any advance warning or possible breach of confidentiality by the subjects.

(4) Data Collection: Phase 2

1. Phase 2 data collection involved a follow-up interview of all subjects utilizing the Performance Measure. As noted previously, GVSU preservice teachers engage in two 10-week directed teaching assignments. Thus, it was the decision of the researcher to contact the 13 individuals involved in the three groups during the ninth week of their first assignment, approximately two weeks before the assignments would conclude. Subjects were contacted by telephone at home and asked to respond to the
10-item questionnaire. During the following week, or week #10, the corresponding supervising teacher of each preservice teacher was contacted to respond to the 10 items on the Performance Measure relative to the performance of his or her assigned preservice teacher. The teachers were contacted at their schools, also by telephone.

2. To maintain the same proportion of time in the directed teaching assignment, subjects from WMU were also contacted approximately two weeks before the conclusion of their assignments, or week #15. The corresponding supervising teachers were contacted during week #16. The aforementioned procedures described for subjects from GVSU were also conducted for the WMU participants and their supervising teachers.

Summary

Described in this chapter was the methodology used to investigate the effect of self-efficacy training on the teaching performance of preservice teachers in the instructional area of social skills. This included a description of the following: (a) the design of the study, (b) the methodology used to develop and validate the SET and SST training programs, (c) the methodology used to develop and validate the Classroom Scenarios measure, the SSTK1, and the Performance Measure, and (d) the procedures involved in conducting the study.
CHAPTER IV

RESULTS

This chapter will identify the statistical procedures used to analyze the obtained data and report the results of this data analysis specific to the following hypotheses:

1. Preservice teachers who are exposed to self-efficacy training will demonstrate more willingness to initiate, expend effort, and persist at social skill training in their directed teaching assignment than preservice teachers exposed to social skills content information.

2. Preservice teachers who are exposed to self-efficacy training will demonstrate more willingness to initiate and persist at social skill training in their directed teaching assignment than preservice teachers who experience the standard classroom management university training sequence.

3. Preservice teachers in preparation programs at two different universities will demonstrate equal willingness to initiate, expend effort, and persist at social skill training in their respective teaching assignments dependent upon the training type to which they are exposed.

The following results are reported specific to the hypotheses:
1. The statistical equivalence of the three groups in this study—Self-Efficacy Training (SET), Social Skill Training Content Information (SST), and the Comparison Group (CG), according to specified controlling variables.

2. The statistical comparison of the groups on the Classroom Scenarios, the Self-Report Measure, and The Social Skill Training Knowledge Inventory (SSTKI) following treatment.

3. The statistical comparison of the groups on the Performance Measure at the follow-up stage of data collection.

4. The statistical equivalence of the subjects from Western Michigan University (WMU) versus Grand Valley State University (GVSU) relative to training type and subsequent classroom performance.

Considerations Influencing Statistical Analysis

The statistical tests employed in this study were used to determine whether the data collected from the three samples were equivalent and, further, to determine the possibility that any differences between the samples were due to chance. As a means of improving the probability that significant differences could be detected through use of the appropriate test statistics, Tuckman (1978) advises consideration of several elements of the research design. As it applied to this study, these included the following:
Independent and Dependent Variables

Two independent variables were identified for investigation: (a) type of training, i.e., self-efficacy training, social skill training content information, and standard university training sequence, and (b) institution, i.e., WMU versus GVSU.

To measure the effect of the independent variable, four dependent variables were identified: (a) Classroom Scenarios (a social skill training belief measure); (b) the Self-Report Measure (a measure of general self-efficacy); (c) the Social Skill Training Knowledge Inventory (SSTKI); and (d) the Performance Measure.

Measurement Scale

Both independent variables, type of training and institution, were considered nominal since they represented discrete conditions or categories.

The four dependent variables yielded interval data. That is, the Classroom Scenarios and the Self-Report Measure involved use of rating scales, and the SSTKI and Performance Measure provided a discrete range of correct answers.

The Statistical Procedures Employed

According to Tuckman (1978), tests such as t-test and analysis of variance (ANOVA) are appropriate for use when
the independent variable is nominal and the dependent variable is interval. In this study the two-group and three group comparisons generated by the hypotheses and the level of measurement represented by the independent and dependent variables allowed use of the t-test and ANOVA procedures for statistical analysis of the data. Frequency distributions were also utilized in some cases to permit comparisons of the raw data.

Statistical Equivalence of the Sample Across Groups

In an effort to control a number of possibly confounding selection variables, the sample was limited to preservice teachers in special education training programs. However, as random assignment to either an SET or SST group was conducted for only 38% of the subjects (13 of 34) and not at all for the CG, various procedures were employed to analyze the data gathered on several variables to determine the equivalency of the three groups once the groups were established. The control variables in this investigation included the following: (a) grade point average (GPA); (b) major area, e.g., emotionally impaired (EI), mentally impaired (MI); (c) accumulated number of hours in the university training sequence; (d) type of certification to be granted (elementary or secondary); and (e) number of weeks in the directed teaching assignment when treatment and/or the dependent measures were administered.
Variable #1: GPA

An ANOVA was computed to determine the statistical significance of differences in GPA among the three groups. Table 5 presents the descriptive statistics; Table 6 contains summary table information and indicates that the difference among groups was not significant.

Table 5

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<td>.43</td>
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Table 6

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Variable #2: Major area

A frequency count of the identified major areas was conducted for subjects in each group. Table 7 illustrates the distribution by treatment group. Overall, it appears that large differences were not systematically present.

Table 7
Frequency Distribution Based on Major Area

<table>
<thead>
<tr>
<th>Major Area</th>
<th>SET</th>
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<td>El</td>
<td>2</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>POHI</td>
<td>2</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>VI</td>
<td>0</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>MI</td>
<td>4</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>HI/El</td>
<td>0</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>MI/El</td>
<td>3</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>POHI/El</td>
<td>0</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>11</td>
<td>13</td>
<td>10</td>
</tr>
</tbody>
</table>

Note: The major area abbreviations include the following: El - emotionally impaired, POHI - physically and otherwise health impaired, VI - visually impaired, MI - mentally impaired, and HI - hearing impaired.

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Variable #3: Accumulated number of semester hours in the university training sequence

An ANOVA was computed to determine the statistical significance of differences among the three treatment groups. Table 8 presents the descriptive statistics and Table 9 the results of this analysis. As Table 9 depicts, the difference among groups was not significant.

Table 8
Difference Among Groups Based on Number of Semester Hours in the University Training Sequence: Means and Standard Deviations

<table>
<thead>
<tr>
<th>Group</th>
<th>N</th>
<th>SD</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>SET</td>
<td>11</td>
<td>12.60</td>
<td>131.64</td>
</tr>
<tr>
<td>SST</td>
<td>13</td>
<td>20.91</td>
<td>134.31</td>
</tr>
<tr>
<td>CG</td>
<td>10</td>
<td>23.75</td>
<td>129.70</td>
</tr>
</tbody>
</table>

Table 9
Difference Among Groups Based on Number of Semester Hours in the University Training Sequence - ANOVA Summary Table

<table>
<thead>
<tr>
<th>SOURCE</th>
<th>SS</th>
<th>DF</th>
<th>MS</th>
<th>F</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>12030.74</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Treatment</td>
<td>123.32</td>
<td>2</td>
<td>61.66</td>
<td>.16</td>
<td>.25</td>
</tr>
<tr>
<td>Error</td>
<td>11907.41</td>
<td>31</td>
<td>384.11</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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Variable #4: Type of certification to be granted
(elementary or secondary)

Preservice teachers in special education obtain either elementary or secondary certification upon completion of their training programs. In this study, 100% of the subjects were to receive elementary certification.

Variable #5: Number of weeks in the directed teaching assignment when treatment and/or the dependent measures were administered

The time frame in which the dependent measures were administered was not significantly different for subjects in any of the three groups. Subjects in the SST group were tested immediately following their training session, two weeks into their teaching assignments. Subjects in the SET group were tested immediately following their training session, three weeks into their teaching assignment. Subjects in the control group were provided the measures two-and-one-half weeks into the assignment.

Comparison of Groups at Phase I Data Collection

Both the SET and SST groups were administered three test measures immediately following training. The CG was provided these measures at approximately the same time. These instruments included the Classroom Scenarios, the Self-Report Measure, and the SSTKI.
Classroom Scenarios

This instrument was intended to measure the beliefs of subjects specific to social skill training in the classroom. An ANOVA was computed to determine the differences among groups. Table 10 reports the descriptive statistics, and Table 11 indicates that the difference among groups was not significant on this measure.

Table 10
Classroom Scenarios: Comparison of Means and Standard Deviations

<table>
<thead>
<tr>
<th>Group</th>
<th>N</th>
<th>SD</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>SET</td>
<td>11</td>
<td>4.89</td>
<td>52.91</td>
</tr>
<tr>
<td>SST</td>
<td>13</td>
<td>4.91</td>
<td>48.31</td>
</tr>
<tr>
<td>CG</td>
<td>10</td>
<td>5.20</td>
<td>50.80</td>
</tr>
</tbody>
</table>

Table 11
Classroom Scenarios: ANOVA Summary Table

<table>
<thead>
<tr>
<th>SOURCE</th>
<th>SS</th>
<th>DF</th>
<th>MS</th>
<th>F</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>898.47</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Treatment</td>
<td>127.19</td>
<td>2</td>
<td>63.60</td>
<td>2.56</td>
<td>.09</td>
</tr>
<tr>
<td>Error</td>
<td>771.28</td>
<td>31</td>
<td>24.88</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
The Self-Report Measure

An ANOVA was computed to measure the difference among groups on general self-efficacy. Table 12 contains descriptive statistics regarding this comparison and Table 13 reports the results of analysis. As the summary table in Table 13 indicates, the differences among groups was significant. To determine further which of the comparisons were significant, a Tukey multiple comparison test was computed. Table 14 identifies that there were significant differences between two groups: (1) SET versus CG, and (2) SST versus CG.

Table 12
Self-Report Measure: Comparison of Means and Standard Deviations

<table>
<thead>
<tr>
<th>Group</th>
<th>N</th>
<th>SD</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>SET</td>
<td>11</td>
<td>5.38</td>
<td>69.82</td>
</tr>
<tr>
<td>SST</td>
<td>13</td>
<td>6.75</td>
<td>68.54</td>
</tr>
<tr>
<td>CG</td>
<td>10</td>
<td>8.03</td>
<td>61.70</td>
</tr>
</tbody>
</table>

Table 13
Self-Report Measure: ANOVA Summary Table

<table>
<thead>
<tr>
<th>SOURCE</th>
<th>SS</th>
<th>DF</th>
<th>S</th>
<th>F</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>1815.88</td>
<td></td>
<td>199.46</td>
<td>4.36</td>
<td>.02</td>
</tr>
<tr>
<td>Treatment</td>
<td>398.92</td>
<td>2</td>
<td></td>
<td>199.46</td>
<td></td>
</tr>
<tr>
<td>Error</td>
<td>1416.97</td>
<td>31</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
SSTKI

An ANOVA was computed to determine the difference among groups based on knowledge of social skill training content information. Table 15 contains the descriptive statistics and Table 16 the ANOVA summary table. As indicated in Table 16, the difference was significant; Table 17 indicates that two of the comparisons were significant: (1) SET versus SST, and (2) SST versus CG.

Table 14
Self-Report Measure: Tukey Multiple Comparisons

<table>
<thead>
<tr>
<th>Comparison</th>
<th>Q-Statistic</th>
<th>Critical Value</th>
<th>Conclusion</th>
</tr>
</thead>
<tbody>
<tr>
<td>SET vs SST</td>
<td>.63</td>
<td>2.88</td>
<td>Not significant</td>
</tr>
<tr>
<td>SET vs CG</td>
<td>4.02</td>
<td>2.88</td>
<td>Significant*</td>
</tr>
<tr>
<td>SST vs CG</td>
<td>3.39</td>
<td>2.88</td>
<td>Significant*</td>
</tr>
</tbody>
</table>

*p < .05, 31-df

Table 15
SSTKI: Comparison of Means and Standard Deviations

<table>
<thead>
<tr>
<th>Group</th>
<th>N</th>
<th>SD</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>SET</td>
<td>11</td>
<td>2.68</td>
<td>9.82</td>
</tr>
<tr>
<td>SST</td>
<td>13</td>
<td>2.70</td>
<td>13.15</td>
</tr>
<tr>
<td>CG</td>
<td>10</td>
<td>2.32</td>
<td>8.40</td>
</tr>
</tbody>
</table>
Table 16
SSTKI: ANOVA Summary Table

<table>
<thead>
<tr>
<th>SOURCE</th>
<th>SS</th>
<th>DF</th>
<th>MS</th>
<th>F</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>347.44</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Treatment</td>
<td>139.71</td>
<td>2</td>
<td>69.86</td>
<td>10.42</td>
<td>.01</td>
</tr>
<tr>
<td>Error</td>
<td>207.73</td>
<td>31</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 17
SSTKI: Tukey Multiple Comparisons

<table>
<thead>
<tr>
<th>Comparison</th>
<th>Q-Statistic</th>
<th>Critical Value</th>
<th>Conclusion</th>
</tr>
</thead>
<tbody>
<tr>
<td>SET vs SST</td>
<td>4.32</td>
<td>2.88</td>
<td>Significant*</td>
</tr>
<tr>
<td>Significant* SET vs CG</td>
<td>1.84</td>
<td>2.88</td>
<td></td>
</tr>
<tr>
<td>Not significant SST vs CG</td>
<td>4.75</td>
<td>2.88</td>
<td></td>
</tr>
</tbody>
</table>

*Significant* *p < .05, 31-df

(Comparison of) Groups at Phase II Data Collection

Hypotheses #1 and #2 of the Investigation

All three groups, SET, SST, and CG, were administered the Performance Measure two weeks prior to the end of their respective directed teaching assignments. This instrument was intended to measure the initiative, effort expended,
and persistence of subjects in all three groups specific to application of social skill training in the classroom.

**ANOVA Statistical Comparison**

The 10 questions on the Performance Measure were organized on an interval scale, with 0 representing the lowest level of application (initiative action) and 10 the highest level of application (persistent action). The average scores of each group were compared by means of an ANOVA. Table 18 presents the means and standard deviations and Table 19 the results of analysis. As indicated in Table 19, the difference among groups was significant. The Tukey multiple comparisons presented in Table 20 identify specifically that a significant difference existed between two groups: (a) SET versus CG, and (b) SST versus CG.

**Table 18**

The Performance Measure: Comparison of Means and Standard Deviations

<table>
<thead>
<tr>
<th>Group</th>
<th>N</th>
<th>SD</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>SET</td>
<td>11</td>
<td>4.09</td>
<td>6.20</td>
</tr>
<tr>
<td>SST</td>
<td>13</td>
<td>3.15</td>
<td>5.92</td>
</tr>
<tr>
<td>CG</td>
<td>10</td>
<td>3.34</td>
<td>1.70</td>
</tr>
</tbody>
</table>

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Table 19

The Performance Measure: ANOVA Summary Table

<table>
<thead>
<tr>
<th>SOURCE</th>
<th>SS</th>
<th>DF</th>
<th>MS</th>
<th>F</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>520.12</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Treatment</td>
<td>133.50</td>
<td>31</td>
<td>66.73</td>
<td>5.40</td>
<td>.01</td>
</tr>
<tr>
<td>Error</td>
<td>386.70</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 20

The Performance Measure: Tukey Multiple Comparisons

<table>
<thead>
<tr>
<th>Comparison</th>
<th>Q-Statistic</th>
<th>Critical Value</th>
<th>Conclusion</th>
</tr>
</thead>
<tbody>
<tr>
<td>SET vs SST</td>
<td>.24</td>
<td>2.88</td>
<td>Not significant</td>
</tr>
<tr>
<td>SET vs CG</td>
<td>4.25</td>
<td>2.88</td>
<td>*Significant</td>
</tr>
<tr>
<td>SST vs CG</td>
<td>4.01</td>
<td>2.88</td>
<td></td>
</tr>
</tbody>
</table>

*Significant *p < .05, 31-df

Frequency Distribution Comparison

A frequency count of the number of "yes" observations by each group for each item on the questionnaire was also tabulated. A "yes" response indicates that the subject engaged in the behavior described by the item while in the classroom setting. Table 21 illustrates the results of this analysis and indicates that both the SET and SST.
groups were more initiative, expended more effort, and were persistent at social skill training than the CG subjects.

Table 21
Frequency Distribution of Responses on the Performance Measure

<table>
<thead>
<tr>
<th>Question</th>
<th>SET</th>
<th>SST</th>
<th>CG</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. INITIATIVE:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>&quot;TAKING THE FIRST STEP OR MOVE&quot;</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. ASKS the supervising teacher if SST is conducted in the classroom.</td>
<td>5</td>
<td>7</td>
<td>2</td>
</tr>
<tr>
<td>2. ASKS the supervising teacher if SST is conducted by a teacher or other professional in the building.</td>
<td>3</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>3. ASKS to CONDUCT an SST lesson (using the lesson provided in the training packet).</td>
<td>6</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>4. ASKS TO CONDUCT an SST lesson (using lesson(s) provided by the teacher).</td>
<td>1</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Subtotal:</td>
<td>15</td>
<td>12</td>
<td>4</td>
</tr>
</tbody>
</table>

B. EFFORT EXPENDED: "EFFORT SPENT OR USED UP"

| 5. SHOWS prepared lessons obtained from training to the supervising teacher. | 4   | 8   | 0  |

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Table 21—Continued

Frequency Distribution of Responses on the Performance Measure

<table>
<thead>
<tr>
<th>Question</th>
<th>SET</th>
<th>SST</th>
<th>CG</th>
</tr>
</thead>
<tbody>
<tr>
<td>6. OBTAINS lessons used by the supervising teacher in ongoing classroom instruction.</td>
<td>1</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>7. PURCHASES social skill training materials.</td>
<td>1</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>8. DELIVERS a SST lesson(s) used by the classroom teacher in ongoing classroom instruction.</td>
<td>1</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Subtotal:</td>
<td>7</td>
<td>12</td>
<td>4</td>
</tr>
</tbody>
</table>

C. PERSISTENCE: "TO REFUSE TO GIVE UP, ESPECIALLY WHEN FACED WITH OPPOSITION"

9. OBSERVES another teacher in the building or related program, if SST is not conducted in the supervising teacher's classroom.
Table 21--Continued

Frequency Distribution of Responses on the Performance Measure

<table>
<thead>
<tr>
<th>Question</th>
<th>SET</th>
<th>SST</th>
<th>CG</th>
</tr>
</thead>
<tbody>
<tr>
<td>10. DELIVERS SST lesson(s) from materials provided in the training package, even though SST is not conducted by the supervising teacher as part of ongoing instruction.</td>
<td>4</td>
<td>3</td>
<td>0</td>
</tr>
</tbody>
</table>

Subtotal: 5 3 0
TOTALS: 27 27 8

(Comparison of) Subjects from WMU and GVSU

Hypothesis #3 of the Investigation

To determine the equivalency of subjects from the two university teacher training programs, WMU and GVSU, t-tests were computed on the four dependent measures used in this study. It was hypothesized that preservice teachers in preparation programs at two different universities would demonstrate equal willingness to initiate, expend effort, and persist at social skill training in the classroom setting dependent upon the training sequence to which they had been exposed. The results of comparison of the two
groups on each of the dependent measures are presented in the following six tables: Tables 22 and 23—the SET group, Tables 24 and 25—the SST group, and Tables 26 and 27—the Comparison Group. For each training group, the mean performance of subjects from WMU was compared to the mean performance of subjects from GVSU. A total of 12 t-tests were computed. Of this number only one comparison indicated a significant difference, the CG comparison on the SSTKI (knowledge measure). Students from WMU obtained a higher mean score on this measure.

Summary of Results

Presented in this chapter were the statistical procedures utilized to analyze the obtained data and the results of this statistical analysis. Specific to the established hypotheses, the following results were obtained:

1. Preservice teachers who were exposed to self-efficacy training demonstrated equal willingness to initiate, expend effort, and persist at social skill training in their directed teaching assignment as preservice teachers who were exposed to social skills content information. Statistically there was no significant difference between the performance of these two treatment groups. The hypothesis that self-efficacy
Table 22
Comparison of WMU and GVSU Subjects in the SET Group on the Dependent Measures: Means and Standard Deviations

<table>
<thead>
<tr>
<th>Measure</th>
<th>N</th>
<th>SD</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>SSTKI</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>WMU</td>
<td>8</td>
<td>3.09</td>
<td>10.12</td>
</tr>
<tr>
<td>GVSU</td>
<td>3</td>
<td>1.00</td>
<td>9.00</td>
</tr>
<tr>
<td><strong>Classroom Scenarios</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>WMU</td>
<td>8</td>
<td>5.40</td>
<td>52.62</td>
</tr>
<tr>
<td>GVSU</td>
<td>3</td>
<td>4.04</td>
<td>53.67</td>
</tr>
<tr>
<td><strong>Self-Report</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>WMU</td>
<td>8</td>
<td>4.85</td>
<td>70.12</td>
</tr>
<tr>
<td>GVSU</td>
<td>3</td>
<td>7.81</td>
<td>69.00</td>
</tr>
<tr>
<td><strong>Performance Measure</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>WMU</td>
<td>8</td>
<td>3.80</td>
<td>6.00</td>
</tr>
<tr>
<td>GVSU</td>
<td>3</td>
<td>5.77</td>
<td>6.67</td>
</tr>
</tbody>
</table>

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<table>
<thead>
<tr>
<th>SOURCE</th>
<th>SS</th>
<th>DF</th>
<th>MS</th>
<th>t</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>SSTKI</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>71.64</td>
<td>1</td>
<td>2.76</td>
<td>.60</td>
<td>.25</td>
</tr>
<tr>
<td>Treatment</td>
<td>2.76</td>
<td>1</td>
<td>2.76</td>
<td>.60</td>
<td>.25</td>
</tr>
<tr>
<td>Error</td>
<td>68.87</td>
<td>9</td>
<td>7.65</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Classroom Scenarios</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>238.91</td>
<td>1</td>
<td>2.37</td>
<td>.30</td>
<td>.25</td>
</tr>
<tr>
<td>Treatment</td>
<td>2.37</td>
<td>1</td>
<td>2.37</td>
<td>.30</td>
<td>.25</td>
</tr>
<tr>
<td>Error</td>
<td>236.54</td>
<td>9</td>
<td>26.28</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Self-Report</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>289.64</td>
<td>1</td>
<td>2.76</td>
<td>.29</td>
<td>.25</td>
</tr>
<tr>
<td>Treatment</td>
<td>2.76</td>
<td>1</td>
<td>2.76</td>
<td>.29</td>
<td>.25</td>
</tr>
<tr>
<td>Error</td>
<td>286.87</td>
<td>9</td>
<td>31.88</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Performance</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>167.64</td>
<td>1</td>
<td>.97</td>
<td>.23</td>
<td>.25</td>
</tr>
<tr>
<td>Treatment</td>
<td>.97</td>
<td>1</td>
<td>.97</td>
<td>.23</td>
<td>.25</td>
</tr>
<tr>
<td>Error</td>
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Table 26
Comparison of WMU and GVSU Subjects in the Comparison Group on the Dependent Measures: Means and Standard Deviations

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Table 27
CG Comparisons: ANOVA Summary Table

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* p < .05, 31-df
training would produce more initiative, more effort expended, and more persistence was not supported.

2. Preservice teachers who were exposed to self-efficacy training demonstrated more willingness to initiate, expend effort, and persist at social skill training in their directed teaching assignment than preservice teachers who experienced the standard classroom management university training sequence. Statistically there was a significant difference between the classroom performance of the Self-Efficacy Training group and the Comparison Group. This hypothesis was supported.

3. Preservice teachers in preparation programs at two different universities, Western Michigan University and Grand Valley State University, demonstrated equal willingness to initiate, expend effort, and persist at social skill training in the classroom context contingent upon the training to which they were exposed. Statistically there was no significant difference between the performance of subjects from WMU and GVSU. The hypothesis was supported that there would be no difference in the classroom performance of subjects from two different universities dependent upon their training type, i.e., SET, SST, or CG.
CHAPTER V

DISCUSSION

The purpose of this study was to investigate the effectiveness of including self-efficacy training in the preparation of teachers to deliver social skill training in the classroom setting. It was hypothesized that individuals who were exposed to this type of training would demonstrate more willingness to engage in social skill training activity than their counterparts exposed to social skill training content information or the standard university training curriculum focused on classroom management.

Self-efficacy is the belief that one can successfully perform a behavior. According to Bandura (1977, 1982), it is distinguished from outcome expectancy in that it is a singular person's belief in his or her ability to succeed. Hence, while an individual may recognize that specific behaviors can result in a particular outcome, personalized belief that one can perform those behaviors is largely involved with sense of efficacy in that domain. Thus, self-efficacy is a cognitive structure theorized to mediate behavior relative to initiative, effort expended, and persistence demonstrated (Bandura, 1977).

The sources of information influencing self-efficacy expectation is a variable that Bandura (1977, 1982)
explains can be manipulated through various modes of treatment. In descending order of strength, these include: Performance accomplishment, vicarious experience, verbal persuasion, and emotional arousal. These approaches have been utilized as modes of induction in several empirical efforts to assist individuals to establish and/or increase self-efficacy in a specific behavioral domain. In this study both performance accomplishment and vicarious experience methodologies were employed in training.

Training in self-efficacy, as it was developed for this study, also included specific attention to the belief structure or "schema" of each subject. As noted by Markus (1977) and by Goldfried and Robins (1982, 1983), this predispositional set serves as a highly influential mediator of behavior. The expectancy, or belief, that one has the power to produce an effect is the essence of self-efficacy theory and the fundamental reflection of a person's self-schemata in a particular area of functioning. Goldfried and Robins (1983) indicate that research has supported a relationship between self-schemata and the increased likelihood of finding evidence consistent with that schemata. This finding had relevance to the present study as it identified an area of focus in teacher preparation applying to the social skills area.

Social skill training for children is grounded in a self-management premise, an orientation potentially
incompatible with the status of prospective teachers who have not yet established themselves as authorities in the classroom. It followed that preservice teachers needed to consider their personal beliefs and attitudes about collaborating with students in the matter of behavior management, and concomitantly, to acquaint themselves personally with the behavior change process that is the end goal of social skill training. In this study, it was arguable that preservice teachers, largely unfamiliar with this instructional area, would require exploration of their previously formed opinions and predispositions to determine their willingness to acquire and retain new learning in the social skills area. As social skill training represents a broader focus than strict classroom management and more often than not is a voluntary curriculum addition on the part of the teacher, it was hypothesized that this type of curriculum would require the preservice teacher to feel particularly efficacious about his or her ability to deliver effective instruction.

The self-efficacy training designed for this study employed induction modes identified by Bandura (1977) and schemata considerations discussed by both Markus (1977) and Goldfried and Robins (1982, 1983). A discussion format was used to consider the belief aspect of the subjects' experience and a combination of performance accomplishment and vicarious experience methodologies to enhance self-
efficacy. This training was compared against a lecture format-social skill training content information approach and the standard university classroom management training approach. Of specific interest was the follow-up performance of each group in their directed teaching assignments.

Assumptions and Limitations

Included in this study were the following assumptions and limitations:

1. It was assumed that the subjects involved in this study were representative of preservice teachers in special education university preparation programs. Although random selection and assignment was only conducted on a limited basis, statistical equivalency of the groups was established on several controlling variables once the groups were formed.

2. Another assumption concerned independence of treatments. Subjects involved in the two training groups, i.e., Self-Efficacy Training (SET) and Social Skill Training Content Information (SST), were requested to maintain confidentiality regarding their training content. As well, their instructors in a seminar class were requested to respect and encourage this confidentiality when subjects were brought together for the weekly class.
3. A third assumption related to the instruments utilized in this study and their validity and reliability as measures of knowledge, situational belief, general self-efficacy, and performance specific to social skill training. While the test-retest reliabilities of the Classroom Scenarios measure and the Social Skill Training Knowledge Inventory (SSTKI) were less than those obtained by comparable, standardized measures, statistical analysis indicated that the SSTKI was able to discriminate differences among groups. That the Classroom Scenarios measure did not reflect significant differences does not necessarily imply a test weakness, but perhaps more accurately the predispositional set of preservice teachers.

4. A limitation was the relatively small size of the sample of preservice teachers from each of the university training institutions, Western Michigan University (21) and Grand Valley State University (13), and the small number of individuals in each treatment group from WMU and GVSU. Potentially, the small sample size limits the stability of the findings obtained.

5. A second limitation involved the delivery of both Self-Efficacy Training (SET) and Social Skill Training Content Information (SST) by the researcher involved in conducting this study. Potentially this served as a threat to internal validity in the form of experimental bias. To determine whether bias was demonstrated, each subject in
the SET and SST training groups evaluated the trainer's performance against several specified criteria. A statistical comparison did not indicate that a difference in delivery existed between the two groups.

6. A third limitation of the study was the specific application of the self-efficacy training to preservice teachers. The training was developed for use with this group and within the context of teacher preparation. While the training components may generalize to practicing teachers, this application has not been investigated and validated.

7. A fourth limitation concerned the time and operational constraints related to the SET component. Initially this training was designed for 12 hours. In its final form, however, it was reduced to six hours. Both the logistics of the situation, e.g., subjects in two geographical locations, and the difficulty of identifying a mutually agreeable time period served to decrease the actual time available for mastery training. As it was not feasible for this investigator to extend training to onsite practice in the classroom, treatment was restricted to simulated practice. In this regard the time constraints did pose a limitation as not all subjects had the opportunity to engage in direct and lengthy practice of the teacher trainer role. Potentially, this restriction served
to influence the outcomes of the SET treatment by prohibiting full utilization of the training methodology.

Conclusions

In consideration of the stated purpose of the study, the hypotheses established, the assumptions and limitations, and the results of data collection, the following conclusions were drawn:

1. Contrary to hypothesis #1, preservice teachers exposed to self-efficacy training do not demonstrate more willingness to initiate, expend effort, and persist at social skill training in their directed teaching assignment than their counterparts exposed to social skills content information alone. It appears that exposure to either type of treatment results in a willingness to engage in social skill training activities in the classroom setting. Bandura’s (1977) contention that efficacy expectancies are a major determinant of an individual's choice of activities was not supported. However, Bandura also acknowledges that skill competence is an important element of performance in any behavioral domain. In the case of preservice teachers who have limited experience and little awareness of situational variables, skill-building may be sufficient to initially motivate performance, as was demonstrated with the SST group in this study.
2. In support of hypothesis #2, preservice teachers who are exposed to self-efficacy training do demonstrate more willingness to initiate, expend effort, and persist at social skill training in the classroom context than preservice peers who experience the standard university training sequence. Subjects involved in self-efficacy training were significantly more active in all the aforementioned areas in the classroom setting. It must be noted, however, that the results of this study suggest that sensitization to the instructional area of social skill training alone may be sufficient to gain short-term performance from trainees. As results of this study suggest, the type of training is less a factor than exposure to a previously unfamiliar content area.

3. In support of hypothesis #3, preservice teachers in preparation programs at different universities demonstrated comparable performance in the classroom dependent upon the treatment approach to which they were exposed. This suggests that institutions which incorporate structured social skill training into their preparation curriculums have a better chance of prompting this kind of instruction from their graduates once they enter the teaching field.

4. According to results obtained from administration of the Classroom Scenarios measure, it appears that preservice teachers are favorably predisposed to conduct
social skill training. In terms of self-report, they express a belief in the importance of social skill training for children and see themselves as implementors of this kind of instruction in the classroom. In spite of the fact that these prospective teachers are largely unfamiliar with the concrete aspects of social skill training, their bias is apparent. This finding is compatible with cognitive theory which maintains that the cognitive structures of individuals entering new learning situations already hold a store of characteristics, including beliefs that may reflect naivete, bias, and distortion (Nelsser, 1967). As social skill training for children is a highly defensible practice, it is not surprising that preservice teachers support the efficacy of this approach, even without full knowledge of the instructional challenges involved.

5. Results of this study suggest that methodology employed in Self-Efficacy Training has merit where training of individuals in new areas of learning is concerned. While the Self-Efficacy Training treatment approach did not result in significantly more active performance from subjects than did the Social Skill Training Content Information approach, the SET approach was comparably effective in gaining differential behavior at the follow-up phase. In fact, as the data collected on the Performance Measure illustrated, subjects in the SET group were more willing to persevere in the face of obstacles than their
counterparts in either of the other treatment groups. Five of the 11 members of the SET group (45%) persevered even when the teacher did not offer social skill training as a formal part of the curriculum. In the SST group only three of 13 (23%) demonstrated this persistence. None of the subjects in the comparison group demonstrated such perseverance. This finding offered support for Bandura's (1977, 1982) contention that performance accomplishment and vicarious experience are particularly influential sources of behavior, especially where situational obstacles exist and persistence is required. It was only the SET approach that utilized these specific training strategies.

Implications and Recommendations

The results of this study indicate that preservice teachers can be influenced, through training, to pursue social skill training in the classroom. Even when important obstacles exist, e.g., the classroom teacher does not formally deliver this type of instruction, trainees can be motivated to perform relevant activities. Given the high level of initiative social skill instruction requires, and the belief structure it suggests, it is important to recognize that performance can be influenced through differential training. The results of this study indicate that the standard preparation program does not motivate
equally initiative and persistent behavior on the part of its preservice teachers.

The type of training utilized to gain performance in the classroom may not be a central issue; it is possible that a threshold of exposure to social skill information is sufficient. However, it is important to note that the self-efficacy model of training investigated in this study achieved an equally successful rate of performance by its subjects as that produced by the information, lecture-based approach. The SET approach utilized learning strategies that have been validated empirically, i.e., performance accomplishment, vicarious experience, and verbal persuasion. The experiential, hands-on approach to learning which this model promotes suggests that even when field-based mastery opportunities are not feasible, influential modes of learning can still be operationalized, an outcome that increases its versatility as an instructional approach.

In addition to simulated, experiential learning, the SET approach incorporated attention to the predispositional frameworks of the prospective teachers. The importance of conducting this type of self-assessment is intuitively logical. Prospective teachers hold many biases and expectations that may or may not be accurate and productive. As Ashton and Webb (1986) advise, "When students enter a teacher education program, the generality,
magnitude, and strength of their sense of efficacy in teaching should be assessed and reassessed intermittently as they participate in experiences that are likely to affect their sense of efficacy" (p. 153). This implies that it is important to address this aspect of individual functioning and that specific attention can be directed toward increasing sense of efficacy.

Further research in the area of teacher self-efficacy is clearly a need, not only as it applies to social skill training but to teacher preservice and inservice training in general. As research in this area has largely occurred in the clinical, therapy setting, the application of social learning theories and cognitive psychology principles to the educational setting is a broad area for study. In this arena, many questions exist. For example, how can sense of efficacy be measured? Which modes of induction are most influential in specific learning contexts? How do the proposed dimensions of sense of efficacy—strength, magnitude, and generalizability—relate to teacher performance? Are there other relevant dimensions? Longitudinally, what importance does sense of efficacy play in job satisfaction?

Clearly, the study of individual self-efficacy is a topic that has many facets. From the perspective of this researcher, however, it is a subject worth investigating, particularly if it means that teachers can operationally...
become more adaptive and more in control of their own outcomes.
Appendix A

The Self-Report Measure (General Self-Efficacy Scale)
SELF-REPORT MEASURE

INSTRUCTIONS:

This questionnaire is a series of statements about your personal attitudes and traits. Each statement represents a commonly held belief. Read each statement and decide to what extent it describes you. There are no right or wrong answers. You will probably agree with some of the statements and disagree with others. Please indicate your own personal feelings about each statement below by marking the letter that best describes your attitude or feeling. Please be very careful and describe yourself as you really are, not as you would like to be.

Mark:

A = If you AGREE STRONGLY with the statement.
B = If you AGREE MODERATELY with the statement.
C = If you neither agree nor disagree with the statement.
D = If you DISAGREE MODERATELY with the statement.
E = If you DISAGREE STRONGLY with the statement.
1. I like to grow house plants.
2. When I make plans, I am certain I can make them work.
3. One of my problems is that I cannot get down to work when I should.
4. If I can't do a job the first time, I keep trying until I can.
5. Heredity plays the major role in determining one's personality.

6. It is difficult for me to make new friends.
7. When I set important goals for myself, I rarely achieve them.
8. I give up on things before completing them.
9. I like to cook.
10. If I see someone I would like to meet, I go to that person instead of waiting for him or her to come to me.

11. I avoid facing difficulties.
12. If something looks too complicated, I will not even bother to try it.
13. There is some good in everybody.
14. If I meet someone interesting who is very hard to make friends with, I soon stop trying to make friends with that person.
15. When I have something unpleasant to do, I stick to it until I finish it.

16. When I decide to do something, I go right to work on it.
17. I like science.
18. When trying to learn something new, I soon give up if I am not initially successful.
19. When I'm trying to become friends with someone who seems uninterested at first, I don't give very easily.
20. When unexpected problems occur, I don't handle them well.

21. If I were an artist, I would like to draw children.
22. I avoid trying to learn new things when they look too difficult for me.
23. Failure just makes me try harder.
24. I do not handle myself well in social gatherings.
25. I very much like to ride horses.

26. I feel insecure about my ability to do things.
27. I am a self-reliant person.
28. I have acquired my friends through my personal abilities at making friends.
29. I give up easily.
30. I do not seem capable of dealing with most problems that come up in my life.
Appendix B

Response from Dr. Albert Bandura:
Content Validity of Self-Efficacy Training
Ms. Linda Miller
Department of Special Education
Western Michigan University
Kalamazoo, MI 49008-3899

Dear Ms. Miller:

Your letter arrived while I was away on sabbatical leave. Because of the large volume of correspondence that has accumulated, my comments will have to be brief.

Self-efficacy beliefs can be induced in principal ways: (1) mastery performance experiences, (2) modeling, (3) social persuasion, and (4) modification of physiological states.

The most powerful way of enhancing self-efficacy beliefs is by modeling the relevant skills, providing guided practice under simulated conditions to perfect the skills, followed by a transfer program designed to provide succession applying the newly acquired skills under natural conditions.

Your efficacy training program seems to rely heavily on the verbal persuasion mode, especially Ellis' ABC model. Such verbal approaches alone often have weak effects on perceived self-efficacy. See the study by Biran & Watson, *Journal of Consulting and Clinical Psychology*, 1981, 886-899, demonstrating the greater power of mastery modeling. In short, your self-efficacy training may have a weak impact on self-efficacy because it relies on a relatively weak mode of efficacy induction.

Since the efficacy training program also has some elements of social skill training, critics would argue that your treatment conditions are confounded. You will do better to compare social skill training alone against social skill training combined with cognitive procedures designed to enhance self-efficacy.

Self-efficacy theory prescribes that efficacy measures be used that are tailored to the domain of functioning being studied (i.e., social skills training). The Sherer and Maddux scale is probably too insensitive to reveal differences. See page 397 in the book described in the enclosed flier for a discussion of this issue.

I hope these comments have been helpful.

Sincerely,

Albert Bandura

January 5, 1988
Appendix C

Classroom Scenarios Measure
CLASSROOM SCENARIOS

Instructions:

This questionnaire is a series of situations regarding social skill training (SST). Each item represents possible behavior by a first year teacher in the classroom setting. Read each statement and decide to what extent you agree with the behavior described in the situation. You will probably agree with some of the statements and disagree with others. Please indicate your own personal feelings about each situation below by marking the letter that best describes your opinion. Please be very truthful and describe your opinion as it exists now, even though you are not a teacher yet.

Mark:

A = If you AGREE STRONGLY with the behavior
B = If you AGREE MODERATELY with the behavior
C = If you neither agree nor disagree with the behavior
D = If you DISAGREE MODERATELY with the behavior
E = If you DISAGREE STRONGLY with the behavior
1. In a discussion with the teacher consultant, the new teacher expresses belief that special education kids need lots of love and attention. The TC answers, "Yes, but it's just as necessary to have a good system of behavior management." The new teacher decides to see the kids first and get a "feel" for them before coming up with tight rules and regulations.

2. In her new teaching situation, the first year teacher thinks social skill training should be part of her instruction. The previous teacher believed kids needed basic academics and a good system of behavior management. Nevertheless the new teacher plans to make social skill training part of her instruction starting second semester.

3. Social skill training (SST) involves teaching kids interpersonal and/or problem-solving skills. The first year teacher believes he may not have the skill to do this well and doesn't want to make the experience a bad one for his kids. His teacher consultant says, "But you learn by trying and making mistakes." The first year teacher still decides to postpone SST until much later when he is more experienced with teaching.

4. In talking about her curriculum, the first year teacher expresses belief that SST is valuable instruction for kids. The principal thinks there is little value in SST and time shouldn't be taken away from areas like reading and math. The first year teacher tries to convince her principal to let her try it.

5. When planning for a field trip, the new teacher believes that clear cut consequences should be set in advance for the kids who misbehave. But, the other teacher thinks this is unnecessary. The kids will be great! They're not in school after all. The new teacher chooses to set rules anyway.

6. There are few, updated social skill materials in the classroom for the new teacher to use, so he goes to the district's media center. Discovering there is nothing appropriate, he still believes he can teach with what he has until he gets better materials. A fellow teacher believes that good materials are essential for good teaching. However, the new teacher decides to use his collection of materials and begin some social skill instruction.

7. One of the students asks to bring in cupcakes for everyone in class for his birthday. Another teacher says that a "sugar fix" may lead to bad behavior. The new teacher believes the opportunity to share is worth the risk. The new teacher permits the student to bring in treats.

8. Seeing her classroom budget of $350, the first year teacher believes that $50 for an SST package is definitely worth the expense. Another first year teacher believes that money spent for good academic materials should be the priority. The first year teacher goes ahead with her order anyway.

9. In a discussion of curricula, the first year teacher expresses belief that SST isn't worth doing if it's not required. The other special education teacher thinks that even though SST is a voluntary offering, it has positive payoffs. Still, the new teacher decides to concentrate more on his behavior management system.
10. Having found some social skill program materials, the new teacher believes that considerable adaptation and piecemealing from the different materials will be necessary for their use with his kids. The experienced teacher next door says, "In the social skill area, adaptation is an absolute necessity." The new teacher decides to do something else.

11. Knowing that she has six kids in her classroom, the first year teacher does not believe she'll be able to manage them in a group SST situation. The other special education teacher expresses belief that a teacher is wasting a valuable teaching opportunity if she doesn't use groups. The new teacher still decides to postpone SST until next year when she's better able to manage the behavior of kids in groups.

12. When her students misbehave, the new teacher believes a warning, a time-out, and then return to the group are good disciplinary procedures. The other teacher believes a discussion of "behavior options" should always be part of the routine. The new teacher worries this is too time consuming and chooses to stick to her behavior management practices.

13. There are three boys who obviously are going to be big problems during the year. The first year teacher believes he wouldn't be able to manage these boys if he tries SST. The other teacher says, "Then they really need this kind of instruction". But, the first year teacher decides to save SST until later when the boys have gained a bit more self-control.

14. In the resource room, the students in the class ask to have a free day. The new teacher thinks this is a good reward and could motivate learning later. The other special education teacher thinks it is too unstructured for kids to handle. The new teacher decides to try it anyway.

15. Voluntary staff inservice related to SST is planned later in the month. The first year teacher thinks this could be a valuable time to catch up on reports home to parents she believes are long overdue. Another teacher believes the chance to learn more about SST should not be wasted. The new teacher elects to use the time to write the reports.

16. After working with her students for only a short time, the new teacher comes to believe that assessing the social skills needs of her students is a big job. Her teacher consultant says the time it takes is really worth the effort in the long run. Still, the new teacher chooses to concentrate more on assessing academic skills.

17. After looking at a social skills curriculum, the first year teacher sees that it will require use of many procedures (like discussion, modeling, role play, and corrective feedback). He believes these steps should be effective. Another teacher thinks kids treat these activities too much like play time and they don't apply what they learn in real life. The new teacher decides to go ahead with SST which uses these procedures anyway.

18. In a discussion with her coordinator, the first year teacher says she believes she is a very good role model for her kids in the area of social skills. However, the coordinator says, "you have good personal qualities, but still a great deal to learn to be consistent as a model". Nevertheless, the new teacher decides to begin social skill training anyway.
Appendix D

Social Skill Training Knowledge Inventory
SOCIAL SKILL TRAINING KNOWLEDGE INVENTORY

DIRECTIONS: CIRCLE THE LETTER OF THE MOST APPROPRIATE ANSWER.

1. Social skill training is promoted for use with handicapped children and youth because:
   a. They all have a need to learn appropriate interactions with others
   b. It is typically recommended in the Individualized Education Plan (IEP)
   c. It is a systematic approach to teaching appropriate actions
   d. Behavior management strategies are not effective without this support
   e. Parents are insisting more and more on this type of curricula

2. Typically, the two areas most often addressed by social skill training curricula are:
   a. Listening and responding
   b. Interpersonal skills and problem solving
   c. Recognizing feelings and appropriately expressing them
   d. Decision making and time management
   e. Personal adjustment and goal setting

3. The order of steps generally recommended for conducting social skill training are:
   a. Modeling, rehearsal, role play, discussion, and feedback
   b. Discussion, modeling, rehearsal, role play, and feedback
   c. Modeling, rehearsal, discussion, role play, and feedback
   d. Any of the above sequences are appropriate
   e. None of the above sequences are advised

4. The "skill approach" and the "situation-specific" approach to teaching social skills are:
   a. Approaches which are better suited to special education students
   b. Approaches which work better for older children
   c. Typical approaches to the delivery of social skill training
   d. Approaches which use different training sequences and procedures
   e. Smoothly integrated in most social skill training programs

5. According to researchers, an important component of social skill training which is too often absent from training packages is:
   a. Teacher instructions
   b. Awareness procedures
   c. Practice strategies
   d. Application exercises
   e. Sufficient materials for large groups

6. The need for adaptation of social skill curricula FIRST requires a teacher to:
   a. Look for better, more appropriate materials
   b. Employ a problem-solving strategy
   c. Reconsider the feasibility of teaching social skills
   d. Improve the behavior management system
   e. Seek help from the principal or special education support person
7. An example of a beginning level social skill is:
   a. Asking for help
   b. Responding to teasing
   c. Dealing with embarrassment
   d. Dealing with group pressure
   e. Having a conversation

8. Assessment of social skill needs is most commonly done by three methods, teacher ratings, sociometric assessment, and
   a. Parent ratings
   b. Projective tests like the Rorschach
   c. Direct observation
   d. Self-report by students
   e. Review of accumulated school files

9. To conduct social skill training effectively in the classroom, which of the following teacher behaviors is NOT a necessary pre-condition?
   a. Good relationships with students
   b. Classroom management skills
   c. A supportive relationship with parents
   d. Knowledge and use of behavior modification principles
   e. Ability to pace materials

10. Social skill training differs from behavior management systems in one important respect:
    a. It involves step-by-step instructional procedures
    b. It requires a small group of students
    c. It takes more time to implement and monitor
    d. It is more likely to result in positive behavior
    e. It does not require the use of reinforcement and consequences

11. Which of the following is a commercial curricula available for teaching social skills to children or adolescents?
    a. Growing Up
    b. Social Consequences
    c. Making Better Decisions
    d. Successful Mainstreaming
    e. It's Your Choice

12. Circumstances existing in the school setting which either promote or discourage the use of social skill training are known as:
    a. Consequences
    b. Corrective feedback
    c. Situational variables
    d. Obstacles
    e. Time constraints

13. Which of the following is NOT a commercial instrument used for assessing the social skills of children:
    a. Vineland Social Maturity Scale
    b. Quay-Peterson Behavior Problem Check List
    c. Cooper Self-Report Behavior Scales
    d. Walker Problem Behavior Identification Check List
    e. Behavior Evaluation Scale
14. Greeting, asking a question, cooperating, complimenting others, saying thank you, and apologizing are all examples of:
   a. Advanced level social skills
   b. Skills found in social skill curricula
   c. Skills particularly useful for adolescents
   d. Problem solving skills
   e. Skill areas in which the handicapped are deficient

15. According to research, which of the following MUST accompany a well-designed social skill training curriculum?
   a. Parent support
   b. A minimin level of basic reading skills on the part of students
   c. Administrative support from the school principal
   d. Instruction by an individual with good teaching skills
   e. Materials specially developed for the handicapped

16. Contingency contracts, homework assignments, and games are strategies used in the _________phase of a social skill training program.
   a. application
   b. practice
   c. awareness
   d. beginning
   e. final

17. Unlike other instructional areas, social skill training is difficult for many teachers to accept and adopt because
   a. The materials may require adaptation
   b. It may not be recognized as a legitimate achievement area
   c. Students often have different skill levels
   d. Parents are not supportive of this approach
   e. Students are not accepting of the instruction

18. A teacher wishing to conduct social skill training for mildly EI, LD, and EMI students will confront which of the following obstacles?
   a. Inability of these individuals to work in groups
   b. Greater need of the students for academically-oriented instruction
   c. Large class sizes
   d. Below average intellectual abilities
   e. Disinterest by the students

19. Sociometric assessment requires the teacher to:
   a. Observe student behavior as it occurs naturally in the classroom
   b. Develop informal checklists
   c. Obtain informal self-reports from students
   d. Time sample a particular activity
   e. Measure the grouping patterns of students

20. Whining, challenging the teacher, refusing, laughing, unexcused absence, and deliberately misresponding all are:
   a. Examples of possible student responses to social skill training
   b. Behaviors which will occur with youngsters who are emotionally impaired
   c. Behaviors which will not occur with students who are learning disabled
   d. Problem situations specific to social skill training
   e. Reasons to discontinue social skill training

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Appendix E

The Performance Measure
THE PERFORMANCE MEASURE

A. INITIATIVE - "TAKING THE FIRST STEP OR MOVE"; DEMONSTRATIONS OF INITIATIVE WILL INCLUDE THE FOLLOWING:

1. ASKS supervising teacher if SST is conducted in the classroom. Y___ N___

2. ASKS supervising teacher if SST is conducted by a teacher or other professional in the building. Y___ N___

3. ASKS TO CONDUCT a SST lesson (using the lesson provided in the training packet) Y___ N___

4. ASKS TO CONDUCT a SST lesson (using lesson(s) provided by the teacher). Y___ N___

B. EFFORT EXPENDED - "EFFORT SPENT OR USED UP"; DEMONSTRATIONS OF EFFORT EXPENDED WILL INCLUDE THE FOLLOWING:

5. SHOWS prepared lessons obtained from training to the supervising teacher. Y___ N___

OR

6. OBTAINS lessons used by the supervising teacher in ongoing classroom instruction Y___ N___

7. PURCHASES social skill training materials (Making Better Choices, Skillstreaming, or other) Y___ N___

8. DELIVERS a SST lesson(s) used by the classroom teacher in ongoing classroom instruction Y___ N___

C. PERSISTENCE-"TO REFUSE TO GIVE UP, ESPECIALLY WHEN FACED WITH OPPOSITION"; DEMONSTRATIONS OF PERSISTENCE WILL INCLUDE THE FOLLOWING:

9. OBSERVES another teacher in the building or related program, if SST is not conducted in the supervising teacher's classroom Y___ N___

10. DELIVERS a SST lesson(s) from materials provided in the training package, even though SST is not conducted by the supervising teacher as part of ongoing instruction Y___ N___
Appendix F

The Self-Efficacy Training Program
Unit 01: Identifying the Self-Schemata

(1) Introduction

a. Survey the class to determine who has observed an actual demonstration of social skill training in the classroom.

b. Conduct a "drawing exercise" to make the point that we need to start with a common frame of reference. (Instruct each participant to draw a person; compare the diverse interpretations.)

(2) Videotape example of a social skill training lesson.

For those of you who haven't participated in SST or seen a teacher deliver SST lessons, it seems worthwhile to see an actual demonstration of what this kind of instruction is like. In the video I am about to show you, a teacher, Cindy Green, is delivering a review lesson for her six students. Cindy is in her late 20's; her students are identified as EMI primarily, although she has TMI students also. (Show 10 minutes of this videotape.)

(3) Identifying the self-schemata

Having seen this videotape demonstration, it is important to get some idea of the attitudes, beliefs, and opinions you have about this kind of training for kids. Social skill training does represent a different orientation on the part of the teacher and for you as prospective teachers it is worth considering the perceptions you have about this approach before you have to take that big step into the classroom.

Utilizing the schemata worksheet

(a) Instructions - I am handing out a sheet of paper to each of you which has a configuration of four boxes (distribute handout). In each of the boxes on this page I would like you to write out a: an attitude, b) a belief, or c) an opinion you hold about the social skill training approach to working with kids, based on what you have seen today and what you may have already read or experienced. The more honest you can be about your perceptions, the better it will be as feedback to yourself. Don't worry about making your statements too detailed—but do try to capture your thought completely enough.

For example, someone might think:

-This means working with kids in a group and that's tough.

-I think it's great but maybe it takes an experienced teacher to carry it off well. (Check further for understanding.)

(b) When all individuals have completed the assignment...seek individual responses, however encourage other group members to participate regarding their agreement or disagreement with the opinions expressed.

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Unit #2: Objectifying the Self-Schemata

(1) Now, I would like to look at some of these statements in a little more detail and explore the sources of your knowledge a little more fully.

(a) (Select one individual who has presented a frequently cited belief:)
   Examples: -Student interest may be hard to hold.
             -Behavior problems by students will make SST hard to do.
             -Groups are hard to work with.

(b) Utilizing the following topic questions discuss strongly held positive or negative beliefs expressed by the individual selected above.

<table>
<thead>
<tr>
<th>BELIEF</th>
<th>WHAT IS THE SOURCE OF YOUR KNOWLEDGE?</th>
<th>IS YOUR BELIEF SUPPORTED BY WHAT YOU CURRENTLY KNOW?</th>
<th>IS THERE CONTRARY INFORMATION?</th>
<th>WHAT ELSE DO YOU NEED TO KNOW TO PROVIDE A STRONGER BASE FOR POSITIVE BELIEFS ABOUT SST?</th>
</tr>
</thead>
</table>

(c) (When this exercise is completed) What is the value of looking at beliefs in this way? What have we gained by "dissecting" what this person thinks?

(d.1.) Desired responses:
- It helps to know why she thinks the way she does
- Is there a sound basis for her thinking?
- We believe what we want to believe
- What we think CAN be changed

(2) According to some very prominent theorists, if we don't look at our beliefs, and try to define what they are, how they came to be, and whether they are positive or negative, we have neglected consideration of a very important influence on our behavior. How can beliefs influence our behavior? Let me give you a situation to consider. (Use the board—begin at the left end to show the A-B-C model (Ellis's Rational Emotive Therapy approach)

I will begin here at (A). We'll call this the Activating Experience.

At (A)—We have a new teacher who is having real trouble maintaining control of her students when she delivers a social skill lesson. The kids are up and down and hard to manage.

At (C), which we shall call Consequences this is what happens: The teacher believes she is a failure and feels helpless and unskilled.

Too often, people go directly from (A) to (C), perceiving that the activating experience itself is the cause of their behavior, or the consequence. We do not consciously think about what might be influencing our behavior, what I will call (B) or belief.
But, a long time ago, a Greek philosopher said, "People are not disturbed by things (A), but by the views which they take of them". So, I would suggest to you that this is what might be happening:

At (B) a Belief that might be at work for this person is----- A good teacher should be able to maintain control of students at all times. If I was a good teacher, I would demonstrate this kind of competence.

(Initiate some discussion about the feasibility of this logic.)

Instead of the (B) I have proposed to you here, what if this teacher's belief was: Like every other kind of instruction, sometimes social skill training will be tough to manage. So...although I don't want to fail intentionally, if it happens somewhere along the line, it doesn't mean I am a total failure.

What might be the (C) (Consequence) for this person?
(Ask everyone to write a response.)

Desired response: (C)---The teacher is disappointed in the results and thinks about how to do better next time.

What is the difference between the first example and the second? How did this change in belief influence her behavior?

1st—demanding, resulting in low self-esteem
2nd—more reasonable, less damaging to the person

(3) To reinforce this concept, provide one more example. (HANDOUT)

a. Teacher introduces a social skill lesson. Students respond with: "Do we hafta do this...we KNOW how to say thank you."

b. Given both positive and negative consequence examples, determine the beliefs which may be influencing behavior.

(4) The purpose of this exercise and whole line of thinking is to set us up for the day, because we are not only going to be "doing" social skill training, but looking at and examining what is going on "in our heads" that can influence our behavior.
Unit #3: Symbolic Modeling of SST in the Classroom

(1) SST in action

Now that we have some understanding of the importance of our beliefs in influencing our behavior, let's go back to the classroom and see the last part of Cindy Green's lesson. (INDICATE THAT SHE IS USING THE SKILLSTREAMING THE ELEMENTARY SCHOOL CHILD CURRICULUM.)

Now, let's look at a teacher in a different classroom. The teacher in this classroom is Carol Williams. Carol is 25 and has actually taught for a year and a half. Her students are identified as EI and LD. She is also teaching the lesson, "responding to teasing", but using a curriculum called MAKING BETTER CHOICES. As we watch this demonstration, I would like you to pay close attention to very specific behaviors which are demonstrated (HANDOUT LISTING THESE BEHAVIORS):

Examples of:

1. caring, respect for students
2. the ability to model good social skills
3. knowledge of principles of behavior modification
4. classroom management skills

(2) Videotaped demonstration of a social skill lesson (20 minutes).

(3) Having seen this demonstration of a social skill lesson, what behaviors did you observe in the four identified areas? Discussion and feedback.

a. It is very important that you look at yourself in terms of these areas as well. The goal is not for you to act exactly as Carol does, but to recognize that certain behaviors can lead to a successful performance.

b. Next it is important to look at yourself and the beliefs you hold about your own behavioral strengths. As we discussed earlier, the kinds of beliefs you hold about yourself and your skills will influence the kind of effort you put into social skill training. (Have each participant complete the self-assessment portion of the handout.) Discuss.
(1) Introduction of the live modeling demonstration

(a) Introduce Carol Williams.

(b) Roleplay by Carol of a social skill lesson (the roleplay will include discussion of her strategies, contingency management plan, and general processing of the situation) (15-20 minutes)

(b.1.) Respond to the following questions from the instructor and questions from the participants:

- Why do you believe SST is important?
- What is the source of your belief?
- What evidence do you have to support its value?
- What circumstances make SST tough to implement?
- Given tough circumstances, why do you persist?
- Why is there a need for a teacher to be a problem-solver in this area of instruction?

(2) Rehearsal by the participants

Finally, it is time to get you involved in actual practice of social skill delivery. In your packets of information you will find some materials which contain a script for carrying out an introductory lesson to Skillstreaming the Elementary School Child and Skillstreaming the Adolescent. (Divide into three groups of 4 and one group of 5).

a. In each group, "draw" to see who plays the role of teacher. Other group members will play the roles of students. Look over the script and be prepared to demonstrate a section of the introductory lesson to this SST curriculum. (Remind students that this lesson assumes that SST is a new instructional area for students in this classroom.)

b. INSTRUCTIONS: Use the curriculum, "Skillstreaming the Elementary School Child"...Preparing the Students for Structured Learning. Assign the segments for roleplaying as follows:

Group 1 - Parts A and B
Group 2 - Part C
Group 3 - Part D
Group 4 - Part E

c. Along with the social skill model, Carol Williams, provide feedback to group members as they rehearse.
Unit #5: Participant Modeling of the Opening Skill Lesson

(1) **Modeling an introductory lesson**

(a) In front of the entire group, roleplay the sequence of an introductory lesson rehearsed in the small groups. (FIRST HAVE ALL GROUPS PRESENT THEIR ROLEPLAY, THEN SHOW THE VIDEO OF EACH ONE). Discuss each with the roleplayers and class participants. (Use the teacher evaluation form utilized previously--give these to the individual who played the teacher role.)

(a.1) What specific behaviors indicate skill on the part of the teacher?

(a.2) What improvements might be considered?

(a.3) (To the teacher) What particular thoughts were going on in your mind? Were these positive or negative? What are the implications of positive or negative beliefs?

(2) **Verbal demonstration of the initial skill lesson by the teacher model**

(a) Ask Carol to demonstrate the "Initial Structured Learning Lesson". Out loud have her process the sequence of teaching steps through which she is proceeding.

(b) Discussion and feedback.

a. What specific behaviors on the part of the teacher are necessary?

b. What potential problems must the teacher be prepared to handle?
(3) **Modeling by participants of a skill lesson**

(a) Conducting an actual skill lesson is the best way to learn about SST so let's look at the "Outline for Teachers in Later Structured Learning Lessons - Elementary Level".

(b) **INSTRUCTIONS:** Our four groups will present three skills:

- **Group 1** - listening
- **Group 2** - asking for help
- **Group 3** - listening
- **Group 4** - saying thank you

(c) Just as you would do for your own students when teaching them, it is important that you have time to know what you have to do and to rehearse the appropriate steps. Let's take time now to rehearse in our small groups. Then we will come together to roleplay for the group and provide feedback to the participants. (Set up one person to be a real resistor.)

(d) Rehearsal.

(e) Roleplay in front of the large group. Provide feedback to the participants regarding specific behaviors of the roleplayers after the video is shown so that the participants can see it too. (Complete the teacher evaluation form.)

(e.1.) What specific behaviors indicate skill on the part of the teacher?

(e.2.) What might help this teacher be even more effective?

(e.3.) What potential problems should the teacher be prepared to manage?
(1) Rationale for use of problem solving skills

We have spent some time today considering the kinds of attitudes, beliefs and opinions you have about social skill training and the kinds of skills it takes to deliver this kind of instruction. We have looked at the source of the beliefs we have and the evidence you have or don't have for maintaining them. Also, we've looked at the influence beliefs can have on behavior, in either a positive or negative way.

(2) When talking about SST, and from your perspective as a first year teacher, in what specific ways could your behavior be influenced by negative beliefs?

Desired responses: a) Less frequent lessons
   b) More sensitive to behavior problems
   c) Less challenging lessons
   d) Less effort at generalizing
   e) Perhaps termination altogether

(3) To deal with negative consequences, what else must we know?

(a) Having awareness of the thoughts which influence our behavior is very important and is a necessary first step, particularly when the consequences of our thoughts may be negative ones. What is it we have to be able to do when the going gets tough and problems seem to create serious obstacles? Even though we may offer ourselves a million positive self-statements and believe that what we want to do is ultimately right, we need some strategies for getting solutions to these problems. This is called problem solving.

(b) Let's put this into a frame of reference relative to SST. For example, give me some problems which you might expect once you get out there into the real teaching world related to social skill training:

   Examples: -lack of SST materials
              -the other teacher doesn't believe SST is worth the time it takes

   (b.1.) Have class develop long list of potential situational problems

   (b.2.) No matter how strongly we believe in SST, some of these problems may seem to present insurmountable obstacles, thus the need for problem-solving skills.
(4) What general steps does problem solving include?

Step 1: General orientation

The first step in problem-solving is to recognize that when we feel "upset about something", we must refocus our attention from our emotional states to the situations creating the upsets. It must be recognized that problems are a normal aspect of living and can be dealt with by making active attempts to cope with them.

Step 2: Problem definition and formulation

Once a problem situation has been recognized, it must be analyzed and specified so that we become aware of the true nature of the problem and our present reactions to it. When, and where, the problem situation arises, how we react to it, what we think and feel, and how others react are all aspects of the problem situation which must be examined.

Step 3: Generation of alternatives

During the third step, we generate a variety of alternative responses to the problem situation. This can be done through active brainstorming, either independently or with someone else. The more alternatives produced, the greater the likelihood that "good" ones will be included in the list. No evaluation of the quality of the alternative is allowed.

Step 4: Decision-making

Now that a range of alternatives has been generated, each one must be considered to determine which one is the most promising. A process of "reality testing" is begun during which we consider the likely personal, social, short-term, and long-term consequences of engaging in each alternative. Once we decide upon a specific course of action, attention is directed toward the formulation of a realistic plan to implement the proposed problem solution. Complete mastery or resolution may not always be possible.

Step 5: Verification and Maintenance

The final step in the problem-solving strategy consists of implementing and maintaining the problem solution decided upon. The consequences of this choice should be carefully monitored. If the decided solution produces unsatisfactory consequences, the problem-solving procedure is begun again and other alternative solutions are tried and tested.
(2) Wrap-up

(a) "Schemata Check" - Discussion: What thoughts are going through your mind now about social skill training? (positive and negative)

(b) FIRST, it is vitally important that we recognize the importance of our own thoughts. AS WITH OUR STUDENTS, our behavior is influenced by the positive and negative beliefs which determine our level of self-expectations.

SECOND, it is necessary that we have some skill. We need to model to kids what we want from them.

THIRD, it is also vitally important that we have a self-management plan...a way to keep ourselves going when the going gets difficult. Being able to minimize emotion as much as possible, and actively seek a solution is the best way I know.
Appendix G

Self-Schemata Worksheet
Appendix H

Teacher Self-Evaluation Measure
### TEACHER SELF-EVALUATION MEASURE

<table>
<thead>
<tr>
<th>Skill Demonstrated (∗ if yes)</th>
<th>Quality of Demonstration (Ex, Gd, Av, Pr)</th>
</tr>
</thead>
</table>

#### INTERPERSONAL SKILLS

**a) Relationships with students that are:**

1. Caring
2. Mutually respectful
3. Clear-cut in terms of roles
4. Helpful to the student in the maintenance of his/her dignity and self-respect

**b) A good model of social skills:**

1. Demonstrating interpersonal skill
2. Demonstrating problem-solving skill

#### MANAGERIAL SKILLS

**a) Skill in use of behavior modification techniques:**

1. Discussion
2. Modeling new learning
3. Role-playing
4. Guided practice
5. Corrective feedback and reinforcement
6. Shaping

**b) Classroom management skills:**

1. Organization of an orderly environment
2. Time management
3. Ability to pace assignments
4. Organization and delivery of curriculum
5. Evaluation skills to monitor student progress

Comments:
Appendix I

Elementary and Secondary Lessons from
the Skillstreaming Curriculum
PLEASE NOTE:

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These consist of pages:

P. 198-239

P. 263-272
Appendix J

Letter to Experts Regarding Content Validity of the Self-Efficacy Training Program
November 3, 1987

Dr. Patricia Ashton
Foundations of Education
280 Ginter Hall
University of Florida
Gainsville, FL 32611

Dear Dr. Ashton,

My name is Linda Miller and I am a doctoral student at Western Michigan University in the special education curriculum. Presently, I am in the process of validating the training programs developed to carry out my research. The topic area of my dissertation is social skills, with emphasis on the teacher training aspect. My interest, however, is not in skill development per se, but in examination of the psychological processes which underlie a teacher's behavior related to social skill delivery. In particular, I am concerned with the influence of self-efficacy on a teacher's belief in his/her ability to initiate social skill training and persist with this instructional approach even in the face of obstacles. I am writing to you because I critically need the input of an expert. Your contribution to the literature in the area of self-efficacy and teacher behavior definitely places you, in this category I believe.

Social skill training is an approach to behavior management which is growing in use, particularly in special education classrooms. However, there is some concern that teachers are not being properly trained to conduct this type of instruction. My research project attempts to look at this issue. The study I will conduct compares three approaches to training undergraduate students in the area of social skills. Ultimately, I wish to see which of these approaches most significantly influences self-efficacy, that is, a preservice teacher's belief and commitment to social skill training in the classroom. Briefly, these approaches are:

(1) Classroom management - Instruction in classroom management, with emphasis on establishing a system of specific rules and concrete ways of reinforcing and consequating behavior. This approach represents the standard method typically used in university training programs.

(2) Social skill training - Instruction in the specific area of social skills, with major emphasis on procedures, curricula, and other associated student and classroom variables.

(3) Self-efficacy training - Instruction directed at examining and strengthening the belief system underlying a preservice teacher's willingness and motivation to deliver social skill training in the classroom.

As part of approach number three, self-efficacy training (SET), I have
developed a 12-hour instructional program to be delivered to a group of undergraduate majors in special education. The training is based on a review of past and present literature in the areas of social learning theory and cognitive psychology and accordingly is a synthesis of this review, as applied to teacher training in the area of social skills. To a large extent, your work is an important foundation of my literature review and self-efficacy training program development. In particular, your article, "Teacher Efficacy: A Motivational Paradigm for Effective Teacher Education", and the article produced by yourself, Dr. Webb, and Dr. Doda, "A Study of Teachers' Sense of Efficacy", were extremely valuable and immensely helpful in guiding my study. These were two of the very few pieces of work which applied the principles of the self-efficacy concept to teacher performance and training. In fact, until I read this work I had located no other literature which made the connection or studied the implications of such a link.

As I have largely had to synthesize information from many areas, and the application of social learning theory is relatively new to teaching practice, I am requesting your help to establish the reliability and validity of this training component. Specifically, your assistance is requested for one task: to review the enclosed training program. This involves reading each instructional unit and making any corrections or suggestions directly on the copy which relate to the following questions:

1) Are principles from social learning theory and/or cognitive psychology appropriately applied in this instructional program for training in self-efficacy?

2) According to research theory and practice, are the strategies employed appropriate for training in self-efficacy?

If possible, I am hoping to implement this study the first week in December, 1987. I have enclosed a self-addressed, stamped, large-size envelope for return of the materials.

I truly appreciate your consideration of my request. I recognize you must have innumerable responsibilities to address, and thus appreciate any time you can give to this request. However, to actually receive corrective feedback from you directly would be very gratifying and a contribution which would give immense credibility to my project. If you would find it more convenient I can call and talk with you directly.

Thank you for your attention. I genuinely appreciate any collaborative effort you can provide. If you have further questions, please do not hesitate to contact me. My address and telephone numbers are on the enclosed material.

Sincerely yours,

Linda Miller
Appendix K

Response Letter from Dr. Patricia Ashton:
Content Validity of the Self-Efficacy Training Program
Ms. Linda Miller
3509 Sangren Hall
Western Michigan University
Kalamazoo, MI 49008

Dear Linda:

I have read with interest your social skills training program. Your copy is enclosed, although you will find that I have not made any corrections or suggestions. I believe the program adequately incorporates the principles and strategies of social learning theory and cognitive psychology.

My one concern is that in spite of the excellent program you have developed, teachers' self-efficacy may not increase and, in fact, could decrease. Although I am hopeful that your program will be successful, I want to alert you to the possibility of negative effects. Thomas Guskey found such an effect in his study entitled "The Influence of Change in Instructional Effectiveness upon the Affective Characteristics of Teachers," published in the American Educational Research Journal in 1984, Volume 21, pp. 245-259. Perhaps his program did not adequately capture social learning principles and strategies.

You may also be interested to learn that Rod Webb and I have published a monograph on our work entitled Making a Difference: Teachers' Sense of Efficacy and Student Achievement, now in paperback from Longman Publishers. It should be available in your university library.

I wish you success with your research, and I hope you will share your results with me when they are available. Your program seems very promising as a model for teacher training.

Sincerely,

Pat Ashton
Professor
Educational Psychology

November 26, 1987
Appendix L

Social Skill Training Program
(1) What are social skills?

USE OVERHEAD FOR DEFINITION

"Social skills are those components of behavior that are important for a person to be successful in their interactions, in a manner which does not cause physical or psychological harm to others". (Ask students what this statement means to them.) In other words, these are specific interpersonal and pro-social behaviors which help a person to get along successfully in their interactions with others. (Make sure they understand that pro-social means positive social behaviors.)

Knowledge and use of social skills is not just specific to kids, it is generic to all ages and groups of people, but it is an area which has particular relevance for the handicapped population. (Ask students to explain why.)

(1) Exactly what is social skill skill training?

(a) Social skill training is a supplemental approach to classroom management and is being highly promoted for use with handicapped kids. In a broad sense, social skill training with handicapped children is a systematic approach to teaching kids ways to behave appropriately. It is based on recognition that handicapped children lack the skill to build relationships, handle interpersonal conflicts, and manage their own emotions in constructive ways.

(b) This is particularly a concern because mainstreaming is becoming common policy in the schools. Students who have been in special education programs and are entering mainstream settings have a major adjustment to make: they must learn to interact with a new peer group.

(c) Social skill training involves teaching kids a variety of skills, for example: asking a question, apologizing, listening to others, giving a compliment, dealing with criticism, problem-solving, etc. There are curricula which teachers typically use which identify a range of skills to be taught, just as if you were teaching reading or some other subject area.

Check for understanding: What other kinds of skills, like the ones just mentioned, would it be important for kids to know? Why? (Divide students up into small groups to consider skills kids should know. When asked, have them role-play them so that others can guess what is being demonstrated.)

Answers desired: 1) giving negative feedback to another student, 2) resisting peer pressure, 3) initiating or joining activities, 4) greeting others, 5) making requests, dealing with embarrassment.

(d) When this activity is complete, show students the list of skills which the Structured Learning curriculum addresses to provide awareness of the range of skills which may be addressed. (HANDOUT)
(2) How is social skill training different from what teachers normally do in classrooms?

(a) Think about what teachers do to manage the behavior of their kids in the classroom. Good teachers generally develop a systematic way of dealing with behavior. For example, they have a system which spells out rules, and the ways kids can be rewarded for good behavior (through points or checks or some feedback measure), and the consequences of inappropriate behavior. Teachers make it clear what is expected of students in the classroom.

Check for understanding: What have you seen good teachers do to manage the behavior of students in the classroom? (solicit specific activities or procedures)

What was the purpose of these efforts? (to maintain an orderly environment, to allow learning to occur, to help kids understand there are rules, etc.)

(3) What kind of outcomes does social skill training have that are different from what teachers normally get from a behavior management system?

From what has been described, you should be able to think out some of the distinctions yourselves. (solicit answers from students)

Check for understanding: (USE OVERHEAD) 1) Kids are taught to be their own behavior managers, it isn't just a matter of "keeping the lid on"; 2) hopefully kids are provided skills they can use in other situations which will help them get along better with others; 3) at the least, kids are taught skills which will help them succeed in the classroom—a primary environment in which they will spend many years of their life; 4) special ed. kids have trouble getting along with others and knowing the right thing to do—this helps them develop more appropriate behaviors and skills.

Summary: What is unique about the social skill approach? (OVERHEAD)

1. Can result in greater social acceptance for the child.
2. Child-centered
3. A systematic instructional approach, actually teaches a variety of skills
4. Supplemental to behavior management systems
5. Should be generalizable to other situations
6. Recognizes an important need of handicapped kids
Hour #2: Examination of the Skills

(1) More specifically, what kinds of skills are taught?

The kinds of skills taught in social skills curricula generally fall into two categories: a) interpersonal skills, and b) problem-solving skills. Try to figure out what the distinctions might be and what kinds of skills are involved in each area? (Address each area individually to identify the following information - encourage respondents to consider their own behaviors as a source of reference in these areas)

INTERPERSONAL SKILLS - (OVERHEAD) The kinds of skills that require one person to engage with another or others in such a way that positive effects are produced for the individual and other involved parties in a given situation, e.g., greeting, seeking information, listening, giving and accepting positive and negative feedback, conversing, sharing or cooperating with others, complimenting others, joining peer activities, making eye contact.

PROBLEM-SOLVING SKILLS - (OVERHEAD). The kinds of skills required to produce some decision. The kinds of skills involved include: a) identifying a difficult situation, b) identifying a range of alternatives, c) making predictions regarding the alternatives, d) selecting a response, e) carrying out the response, and f) checking to see if it worked.

(2) In the context of the classroom, what other distinctions can we make between these two areas of skills?

(a) Divide the class into several small groups of four or five. Identify half the groups as Interpersonal Skills (IPS) and the other half as Problem-solving (PS). From their different perspectives: (OVERHEAD)

-Identify situations in which kids must use the IPS or PS skills

-Identify ways in which kids who are deficient in social skills typically respond when put in these situations

-Identify the advantages to be gained from use of more appropriate behavior

(b) Have each group report back to the full group. Discuss these areas relative to each group's perception. (Instructor provides corrective or reinforcing feedback relative to the perceptions)

Summary: What is involved in social skill training? (OVERHEAD)

1. An interpersonal and/or problem-solving focus
2. Awareness of the numerous situations in which students must use interpersonal or problem-solving skills
3. Awareness of the inappropriate response repertoires students may demonstrate
4. The advantages to be gained from demonstrations of social skill, social acceptance, possible self-controlled behavior, improved self-image.

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(1) **How is social skill training carried out?**

As was initially noted, social skill training is usually carried out through an instructional approach, like reading. Curricula are available which identify a teaching plan relative to interpersonal skills and/or problem-solving skills. An examination of the key elements of several training packages will provide a better understanding of the way these curricula are organized.

(HANDOUT) Utilizing the chart handout, examine the following criteria for evaluating commercial packages available for adolescent and mildly handicapped students.

1) **target population** - Information regarding age of the targeted learners, and the disability area addressed (for example, behavior disordered, learning disabled, educably mentally impaired.)

2) **physical description** - Information regarding the contents of the instructional package, what is included for the teacher to use (for example, teachers manual, workbooks, videotapes/films, games, duplicating masters)

3) **ability and/or motivational components** -
   
   (c.1.) The ability aspect is stressed if students are taught specific social skill sequences or if the behavioral components of social skills are specified.

   (c.2.) Motivation is stressed through providing students with rationales and reinforcement for appropriate behavior.

4) **learning characteristics addressed** - The extent to which reading is emphasized and writing is required; the emphasis on right or wrong answers, cues or stimuli used.

5) **skills or topics covered** - The specific skills or subject areas addressed in the program.

6) **approach (skills or situation)** -
   
   (f.1.) **Skills** approach: specific behavioral steps are given for each skill including verbal and nonverbal behaviors. Each skill is practiced to criterion in various situations.

   (f.2.) **Situation** approach: There is an emphasis on situations in which specific skills are used.
7) **teaching methodology** - There is 1) an awareness phase, 2) a practice phase (including both verbal rehearsal and behavioral rehearsal combined with feedback), and 3) an application phase (to naturally occurring situations outside the classroom both at school and outside of school).

Divide up into four groups and ask groups to report on the above components of the following programs. Pass out the sample materials which are available for:

1. (Instructor) Show *Thresholds to Adult Living* (only one chapter)
2. Skillstreaming the Elementary School Child; Skillstreaming the Adolescent
3. Transitions
4. The Promise/The Big Hassle/The Put-Down Pro/The Choice
5. Person to Person (not on the chart)

**Check for understanding:** What are the implications, for the teacher, of not having an element clearly specified? (HANDOUT: a sample description of two social skill programs as they would appear in a catalogue.)

**Summary:** What are the elements of curricula, which may or may not be present in training packages? (OVERHEAD)

1. Target population.
2. Physical description
3. Ability and/or motivational components
4. Learning characteristics addressed
5. Skills or topics covered
6. Approach (skills or situations)
7. Teaching methodology
What are the methods and/or strategies that teachers use to implement social skill training?

As noted by a review of the 10 curricula, there are several steps which are recommended for use in social skill training. Basically these are: awareness, practice, and application.

Awareness - Whether working with individuals or groups, this phase involves making the student aware of the skill (either through lecture-discussion or through written/visual materials). The following strategies may be employed:

(a) describe the skill
(b) give rationales for using the skill
(c) describe the general characteristics of situations involving the skill
(d) provide example situations in which the skill can be used
(e) specify the behavioral components of the skill
(f) present a model of the skill to the student

Practice - This involves the chance to actually do the skill. Usually two types of practice are used: (again, use the skill "saying thank you" to illustrate verbal rehearsal and behavioral rehearsal; ask students in the class to role-play given a situation)

verbal rehearsal - basically this is memorizing the steps of the skill so that the student can do it "cold". Kids need to be able to instruct themselves on what to do next. Typically they practice in groups of two.

behavioral rehearsal - most successful social skills training programs include a behavioral rehearsal component in which the students practice the skill in role-play situations. They role play in front of the entire group.

(a) mastery criterion is advised (being able to do the skill to some specified level)
(b) feedback is necessary to let the learner know how he/she is doing. Both positive comments and corrective comments and suggestions are advised

Application - This is not emphasized in all training packages as we discovered in our examination of the 10 curricula, but it is an important area for focus. In this phase the students are encouraged to use the skills outside the training situation in naturally occurring situations, evaluate how they did, and reward themselves for carrying through appropriately. Strategies which may be used include: (discuss the use of each strategy relative to "saying thank you"; also consider other ways to help generalize learning).

(a) games
(b) home assignments
(c) goal sheets
(d) contingency contracts
(e) use of confederates
Check for understanding: How do these teaching procedures compare to the instructional methods a teacher might use when introducing a reading lesson? (Responses should include: not very different, or they reflect good standard practice)

Summary: What steps are suggested for implementing social skill training and what strategies best carry out each step? (OVERHEAD)

1. Awareness, practice and application phases
2. Steps related to each phase:
   - Awareness
     - discussion
     - modeling
   - Practice
     - Rehearsal
     - Roleplay
     - Corrective feedback
   - Application
3. Steps are used that teachers would typically apply when introducing new material.
(1) What about social skill curricula that don't seem to "work" with your students?

It is acknowledged in the literature that few social skills curricula have been designed specifically for mildly handicapped persons. Also, according to sources in the literature, of all the youngsters identified as handicapped, 80 to 90% of them are mildly handicapped. For teachers in these areas, EI-LD-ENI, there is probably going to be need for the teacher to be prepared to adapt the curriculum to the specific needs of the individuals in his or her classroom. This isn't unlike the situation the teacher faces with other instructional materials which must also be adapted for the specific group or individual with whom the teacher is working.

(2) If adaptation is necessary, what does that mean?

Adapting standard or published curricula means changing the materials somehow to get the message across to youngsters in ways they will understand and within their abilities to respond. If material is too difficult (either academically or conceptually), or delivered at too quick a pace, then the opportunities for learning are reduced. The skilled teacher recognizes this problem and alters the material accordingly, sometimes for the whole group or for particular individuals.

Check for understanding: You have probably seen or experienced the results of curricula that didn't fit. What happens for the learner? How does that person feel?

(3) What cues are there from youngsters to signal that there may not be a fit between the student and the material?

a) Not paying attention (talking, daydreaming, squirming)
b) Repeated incorrect responses
c) Challenges

(4) What can you specifically do to adapt material?

Adapting material actually requires a problem-solving effort on the part of the teacher. For some reason the material is "not working" and that problem must be processed by the teacher and alternative strategies considered and implemented. Specifically, what can be done? Consider the following with the group: (BOARD)

a) Identify cues which signal there is a problem.
   -observed behaviors of both students and teacher
   -nonverbal behaviors

b) Specifically identify the problem.
   -get it to a manageable stage
c) Generate some possible solutions.
   - is there a need for more group management skill?
   - is there a need for improved behavior management?
   - is it necessary to draw from several curricula to develop the most appropriate curriculum?

d) Decide which is the best solution.
   - what is within your capability to do?
   - what is possible, reasonable, manageable?

e) Try out a solution and evaluate it.
   - did it work?
   - how do you know?

f. If it doesn't work, start the process again.
   - how do you know it didn't work?
   - WHAT can you try next?

Check for understanding:

In small groups, ask the participants to consider potential problems related to social skill training in the classroom. Consider each phase of the problem-solving model against several of the problems described. (OVERHEAD)

Summary — What can the teacher do in the event adaptation of the material is necessary? (OVERHEAD)

1. TRY to minimize emotion and actively seek a solution.
2. Be familiar with cues that signal a problem exists.
3. Follow through on steps of the problem-solving model.
(1) **Why should one go about assessing social skill training needs?**

It is not unusual for teachers to deliver social skill training to everyone at the same time, just as they would a science lesson or some similar content area. But, as in other areas of special education, it is important that social skill training is aimed at the individual—and that the seriousness of a presenting problem is determined for that person. In this way, social skill training is more likely to have the greatest value and address the pressing needs of that person.

(2) **How does one go about assessing social skill training needs?**

The three most commonly used methods of assessing social skill training needs are: a) teacher ratings, b) sociometric assessment, and c) naturalistic observations.

a) **Teacher ratings** - These include a wide variety of techniques:

Commercial instruments such as The Behavior Evaluation Scale, and The Behavior Rating Profile (show examples of these instruments).

Teacher-developed informal checklists. The teacher decides on the important skills to be included in the checklist, and then uses a "yes-no", or a scale format (never, sometimes, etc.) (show example).

b) **Sociometric assessment** - Students are asked to name two or three other students in the class with whom they would like to eat, go out, spend time on the break, work on a project, etc. The answers are recorded on a written form by each student, in confidence. The teacher can then record all responses on a tally sheet or on a sociogram (show example) to see what kind of patterns emerge. Such a visual representation may have implications for remediation if it shows up that a particular youngster(s) is not selected by anyone but is selecting others. (Also show the rating scale down by students.

c) **Naturalistic observation** - Direct observation of the student(s) in a setting (classroom, playground, special activity, etc.). This method requires the teacher to be able to identify problem behaviors as: (OVERHEAD)

- **Specific/observable/measurable** - for example, instead of reporting that a youngster is aggressive, describe the behavior(s) of the youngster—"hit", "kicked", "struck". (Translate "lazy" and "immature" into more behavioral terms)

- **The conditions under which the behavior occurs** - in other words, when and where

- **The frequency of the behaviors** - how often does it occur

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Intensity and magnitude - what extent of redirection did it take?

To document the results of observations, the teacher may use a long, narrative form, a tally sheet to indicate how often the target behavior occurs or a form which incorporates the behavior, duration, situation, etc. (ask two students to role play a problem in the classroom—a teacher working with an "unmotivated" student--; request all the observers to describe the problem in behavioral terms).

Check for understanding: Why would you guess that naturalistic observation is becoming a popular form of assessing social skill need? (OVERHEAD)

a) It occurs right in the classroom or other natural environment (although can be time-consuming)
b) Student specific
c) Is measurable and objective, and provides intervention direction

Summary: Why is assessment a critical part of the process? (OVERHEAD)

1. Provides direction for the social skill training effort through the compilation of meaningful information about a student.

2. Provides specific techniques which the teacher can use to problem-solve the difficulties a student may be having.
(1) What are the kinds of obstacles or sources of resistance which a teacher may face when attempting to implement social skill training?

Implementing social skill training can be made difficult on two levels: a) situational variables, and b) student responses.

**Situational variables** - These are obstacles provided in the school setting. They can take several forms: (WRITE ON BOARD)

(a) Social skill training may not be seen as a legitimate course offering, in comparison to the academic areas of reading, math, science, social studies, etc. **WHEN DO YOU FIT IT IN?** This may be a particular problem at the secondary level where graduation may be a confounding factor. With the emphasis in today's schools on excellence, social skill training may not be seen as a legitimate achievement area. Thus, teachers, particularly new ones, will feel guilty that they are not conforming to what is expected and will not feel confident enough to proceed with social skill training when there isn't obvious support.

(b) Depending on the value placed on social skill programming, the district may or may not have appropriate materials for the new teacher to use. As we noted back when we looked at curriculum, for the most part, materials in this area have not been developed specifically for the mildly handicapped. In fact, teachers of the mildly handicapped at the middle school or secondary level most frequently mention social skills materials as their highest curricular need. This means two things—1) materials may not already be available in the classroom, or 2) the materials which exist will either need to be replaced or adapted.

**Check for understanding:** What are the implications for you, as new teachers, if you don't feel encouraged or supported to implement social skills training in your new classrooms, either because it is not accepted as a valid curricular area or there are few or no materials? (Responses should indicate that 1) implementing social skill training will be difficult, or 2) likely to not occur at all)

**Check for understanding:** What other kinds of situational variables may exist to obstruct the implementation of social skill training? (Responses may include):

a) Having to learn all the other materials related to academics
b) Age of the staff
c) Administrative support
d) Number of special education personnel
e) Size of class
f) Extent of disciplinary control
g) Personal (sometimes unexpected) situations

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Student Responses - (OVERHEAD) The response of your students to the material you present, and the way you present it, is a second, highly critical variable.

What kinds of resistance can youngsters present?

a) active refusal to participate (whining, challenging the teacher, refusing, being a bully)

b) passive refusal to participate (just sitting there, doing nothing, or simply parroting what others have said)

c) inappropriate participation (laughing, deliberately misresponding to get a laugh)

d) unexcused absence

e) tardiness

Youngsters may demonstrate resistance to any academic area; however, why might they be even more inclined to offer resistance to programming dealing with behavior?

a) With EI youngsters, behavior is the gist of the problem; this is the area where they need the most help; they may be embarrassed when simple skills like "greeting" or "asking a question appropriately" are presented, they often do not perceive their own problems.

b) EI, LD, and EMI youngsters typically have below average intellectual ability; they simply may not understand what is being presented and lose interest as a result. Often curricula must be broken down into very small, sequenced, and structured units to be effective.

c) Teachers frequently work with students in groups when teaching social skills. Mildly handicapped students frequently have trouble dealing with their peers in just this kind of situation.

d) These youngsters are often impulsive and poor problem-solvers, thus not giving careful thought to feedback. This can become frustrating for the teacher.

e) Mildly handicapped youngsters often expect to fail, and they may give up easily.

Check for understanding: Again, what are the implications for you, as new teachers, to meet resistance from students when presenting social skill training?

a) A teacher may give up, particularly if social skill training is voluntarily provided

b) Time will have to be spent to revise and adapt curricula and/or identify resource help

c) Greater disciplinary control may have to be established through a more systematic and effective behavior management system

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Summary: Given the best of intentions on the part of new teachers, how can situational variable and student responses act as obstacles to the implementation of social skill training?

(OVERHEAD)

a) Undermine the confidence of the teacher
b) Create more work for the teacher who is already attempting to learn other materials
c) Put the teacher in situations which require considerable group management skill
d) Put more control in the hands of the youngsters

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(1) What teacher behaviors are important for social skill training to have a chance for success in new teachers' classrooms?

It is said in the literature, "Even the most well-designed and all-inclusive training program may be rendered ineffective if it is conducted in an overly didactic (lecture-style), mechanical, and uninviting manner". It is also said, "The instructor-child relationship may well influence every aspect of the training process".

For new teachers what does this mean? It means that the teacher needs skill on two levels, interpersonally and managerially.

**Interpersonal skill**

a) A teacher needs to have good relationships with students that are:
   - Caring
   - Mutually respectful
   - Clear-cut in terms of roles
   - Helpful to the student in the maintenance of his dignity/self-respect

b) The teacher must be a good model of the behaviors presented in a social skill curriculum (otherwise an incredibly valuable resource is lost, and the credibility of the teaching is diminished)
   - Demonstrating interpersonal skill
   - Demonstrating problem-solving skill

**Managerial skill**

a) The teacher needs to know and be able to use the principles of behavior modification
   - Discussion
   - Modeling new learning
   - Roleplaying
   - Guided practice
   - Corrective feedback and reinforcement
   - "Successive approximations" through shaping

b) The teacher needs good classroom management skills
   - Organization of an orderly environment
   - Time management
   - Ability to pace assignments
   - Structure and delivery of curriculum
   - Evaluation skills to monitor student progress

*Check for understanding:* As new teachers, how do the factors identified—interpersonal and managerial—have implications for you as a social skills trainer?

Responses may include:

a) will weaken my confidence
b) will make me realize how much I have to learn
c) will strengthen my resolve to work harder
Summary: What teacher behaviors are necessary for preservice teachers to be more effective implementors of social skill programming? (OVERHEAD)

a) Interpersonal skills
b) Managerial skills
d) Recognition that the teacher is the key figure in the classroom who sets the mood, structure, expectations, and general environment in such a way that it is conducive to risk-taking and learning on the part of students.
Appendix M

Areas for Evaluation of Social Skill Curricula
Appendix N

Letter to Teachers Reviewing the Social Skill Training Program
October 26, 1987

Tom Noble,
142A Gull Road
Kalamazoo, MI 49008

Dear Mr. Noble,

My name is Linda Miller and I am a doctoral student at Western Michigan University in the special education curriculum. I am writing to request your help with a specific component of my dissertation research project. The topic area of my project is social skills, with emphasis on the teacher training aspect.

Social skill training is an approach to behavior management which is growing in use, particularly in special education classrooms. However, there is some concern that teachers are not being properly trained to conduct this type of instruction. My research project attempts to look at this issue. The study I will conduct compares three approaches to training undergraduate students in the area of social skills. Ultimately, I wish to see which of these approaches establishes a stronger belief and commitment base to social skill training. Briefly, these approaches are:

1. Classroom management - Instruction in classroom management, with emphasis on establishing a system of specific rules and concrete ways of reinforcing and consequing behavior. This approach represents the standard method typically used in university training programs.

2. Social skill training - Instruction in the specific area of social skills, with major emphasis on procedures, curricula, and other associated student and classroom variables.

3. Self-efficacy training - Instruction directed at examining and strengthening the belief system underlying a preservice teacher's willingness and motivation to deliver social skill training in the classroom.

As part of approach number two, social skill training (SST), I have developed a 12-hour instructional program to be delivered to a group of undergraduate majors in special education. The training is based on a review of current social skill literature and accordingly is comprised of topical information in this area, i.e., training procedures, curricula used with students in special education classrooms, situational variables, etc. To further strengthen the rigor of my study, however, and more adequately ensure that the SST program is reliable and valid, I need your help. Specifically, your assistance is requested to review the enclosed social skill training program and provide feedback regarding its (1) content and (2) arrangement and delivery of units. Of necessity, these aspects must be stringently evaluated or the value of the information gained from the training program is diminished.
In particular, I am requesting your assistance as a reviewer to bring a practitioner's point of view to this training component. Without such a perspective, the reliability and validity of this information for future application in the field is seriously reduced.

Your assistance, then, is required for one specific task: to review the enclosed training program. This involves reading each instructional unit and making any corrections or suggestions directly on the copy which relate to:

(1) Content - Does the information have potential usefulness for teachers in training? Does it cover important areas?

(2) Arrangement of the units and teaching strategies - Do the units proceed in a logical order? Are there appropriate teaching strategies employed for delivering the information?

If possible, I am hoping to implement this study the first week in December, 1987. Thus, your response is needed as soon as possible so that revisions can be made to the original program. To facilitate a speedy return, I have enclosed a self-addressed, stamped, large-size envelope. Outside of a few items of demographic information, I am not requesting personally identifiable information. The SST program is coded, but that is largely so I can monitor the return of responses.

I truly appreciate your consideration of my request. While there are no direct benefits to you from participation, hopefully it can be recognized you may be part of developing improved training for special education practitioners in the future.

If you have further questions, please do not hesitate to contact me. My address and telephone numbers are:

Linda Miller
3509 Sangren Hall
Western Michigan University
Kalamazoo, Michigan 49008
WMU: 616-383-1680
Home: 616-388-3882

Sincerely yours,

Linda Miller
Appendix O

Definition of Social Skill Training Domain and Social Skill Training Subset Areas

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The Content Domain: Social Skill Training

Definition

SOCIAL SKILL TRAINING is a behaviorally-oriented, instructional approach to teaching individuals interpersonal, coping, and planning behaviors; training is based on the assumption that social behavior is learned and can be taught using structured teaching methods (Goldstein, Sprarkin, Gershaw, & Klein, 1983; Spence, 1983). "The goal is typically to train individuals in more appropriate interpersonal skills in order to develop more adaptive interaction patterns with others" (Osberg, 1982, p. 58). The teaching of interpersonal skills can also be supplemented by teaching specific steps which help an individual to mentally examine the consequences of choices before they are performed (Harris, 1984).

Implementation of Social Skill Training

Social skill training for children and adolescents is an instructional process which requires many skills and information on the part of the teacher or trainer. The following categories indicate several recommended areas:

Knowledge of social skills - Knowledge of the rationale for, and diversity and sequence of social skills found in commercially packaged curricula (Schumaker, Pederson, Hazel, & Heyen, 1983). (Questions 1, 2, 7, 10, 14)

Knowledge of training procedures and approaches - Knowledge of behavior modification methodology, e.g., modeling, role-play, performance feedback, transfer of learning, and task analysis (DeLuke & Knoblock, 1987), and the skill vs. problem-solving approach (Spencer, 1983). (Questions 3, 4, 16)

Knowledge of assessment - Knowledge of common methods of assessment and the applicability of obtained data to social skill training (Gresham, 1982). (Questions 8, 13, 19)

Knowledge of materials - Knowledge of the social skill training curricula available for use with special education students and the possible need for adaptation of materials (Schumaker et al., 1983). (Questions 5, 6, 11)

Knowledge of student responses - Knowledge of the kinds of resistance to social skill instruction students may demonstrate, e.g., unexcused absence, active or passive refusal to participate, and inappropriate participation (Goldstein et al., 1983). (Questions 18, 20)

Knowledge of situational variables - Knowledge of the obstacles and/or circumstances which may exist in a school setting to encourage or discourage the delivery of social skill training (Ladd & Asher, 1985). (Questions 12, 17)

Knowledge of teacher behaviors - Knowledge of the behaviors and styles of teaching most likely to enhance learning for students (Ladd & Mize, 1983). (Questions 9, 15)
Appendix P

Judge's Rating Sheet Used by Experts in Content Validation of the Social Skill Training Knowledge Inventory
Judge's Rating

Judge: ____________________________________________

1. Adequacy of the definition of the domain, social skill training.
   _____ adequate
   _____ not adequate

2. Adequacy of the category "situational variables".
   _____ adequate
   _____ not adequate

3. Adequacy of the following test items to measure the category "situational variables".
   Yes, adequate   No, inadequate   Recommendation

| Question #2 |   |   |   |
| ---         |   |   |   |
| #3          |   |   |   |
| #4          |   |   |   |
| #6          |   |   |   |
| #8          |   |   |   |
| #9          |   |   |   |
| #10         |   |   |   |
| #11         |   |   |   |
| #13         |   |   |   |
| #15         |   |   |   |
| #16         |   |   |   |
| #17         |   |   |   |
| #18         |   |   |   |

Note: Disregard items #1, 5, 7, 12, and 14
Appendix Q

Response Letter from Dr. Joanne Milburn: Content Validity of the Social Skill Training Knowledge Inventory

280
Linda Miller
3509 Sangran Hall
Kalamazoo, MI 49008

Dear Ms. Miller:

Thank you for giving me an opportunity to look at your instrument measuring the validity of social skills knowledge. I'm sorry to be so late in getting this back to you. I have been swamped. As you can see from my responses, I had difficulty with a number of the items. Good multiple-choice tests are extremely difficult to construct, as you know. Yours is a good beginning, but if this instrument is to have validity as a measure of social skills knowledge, you might want to look at some of the items more closely.

Many of the items seem to me to be debatable because the answer you seek seems to be based on an opinion rather than empirical data, and one could argue different ways. Items 9 and 13 are examples of this.

I assume that the training sessions and reading materials will provide the desired answers to all these questions, and you will be measuring the subjects' ability to listen, take notes, study, and take multiple-choice tests. Perhaps my problem is that I have not had the advantages of the training sessions, do not have time to review the reading material, and therefore do not know the "correct" answers.

If you get a positive consensus from other reviewers you should probably go with the items in the interest of time, but I did want you to know my reaction.

Best wishes with your endeavor.

Sincerely,

[Signature]

Johanne P. Millburn, Ph.D.
Director

301 Obetz Rd., Columbus, Ohio 43207-4092 (614) 491-5784
Appendix R

Letter to Preservice Teachers Requesting their Participation in the Study
Student Teachers in Winter, 1988:

This letter is an invitation, requesting your participation in a research project in the winter of 1988. The topic of this project is social skill training and involves the preparation of preservice special education teachers to conduct this type of programming. Currently, social skill training is not offered in university training programs as part of the standard curricula. However, it is an instructional component which is being highly promoted for use with handicapped students. Participation in this project would offer you the opportunity to gain formal training in the social skills area.

What would be required of you?

First, the training consists of 10 hours of instruction. Two components of training will be offered, one approach occurring on Saturday, January 23 and a second approach on Saturday, January 30. However, it would only be necessary for you to participate in one of these sessions to complete the program.

Second, it would be necessary for individuals to travel to a central meeting site. As each day of training will be provided to a mixed group of student teachers from Grand Valley State University and Western Michigan University, a location most convenient for both groups will be arranged. Travel reimbursement would be provided to those traveling 15 miles or more.

What benefits would you gain from participation in this project?

Most importantly, there will be the opportunity to gain formal training in the social skills area. As noted above, university training programs are not currently including this component in their standard preparation sequences. At the conclusion of training, you will receive a certificate of completion, acknowledging your participation. Participants will also be provided with a packet of materials related to social skill training. As a related benefit, participants gain the opportunity to support research in education and potentially add to existing practice in our field.

Please consider participating in this training. Included in this letter are a response form and a self-addressed stamped envelope. My name, address, and telephone number are also included if you have further questions. THANK YOU FOR YOUR CONSIDERATION OF THIS OPPORTUNITY.

Sincerely,

Linda Miller
Doctoral Student
Western Michigan University
SOCIAL SKILL TRAINING PARTICIPATION

Participation

____ I can participate on either January 23 or January 30
____ I can only participate on January 23
____ I can only participate on January 30

Site of training

____ I would be willing to drive to a central location
____ I can only participate if training is conducted in the Kalamazoo area
____ I can only participate if training is conducted in the Grand Valley area

Name_________________________________________ Date________________________
Address____________________________________________________________________
Telephone___________________________________________________________________
University___________________________________________________________________

If you are interested and able to participate in training, please use the enclosed self-addressed stamped envelope to return this completed form. If there are other questions or concerns, please contact me at either:

Linda Miller
3509 Sangren Hall
Department of Special Education
Western Michigan University
Kalamazoo, MI 49008
(W) 616-383-1680

Linda Miller
4110 Lake Forest Lane
Kalamazoo, MI 49008
(H) 616-388-3882

THANK YOU FOR YOUR SUPPORT!
Appendix S

Letter to Solicit Participants for the Comparison Group
January 26, 1988

Ms. Sarah Schoendorf  
2406 E. Pine Street  
Elsie, MI  48831

Dear Sarah,

On behalf of Linda Miller, a doctoral student in the Special Education Department at Western Michigan University, I am requesting your assistance with a component of her research project. Linda’s topic relates to the area of social skill training. Your participation would involve completion of three instruments (included in this package) and would require approximately 30-40 minutes of your time. Included in this packet is a stamped envelope for return of the materials to Linda. We also request that you include the information sheet which has your name, address, etc. Your response as soon as possible would be appreciated!

Thank you for considering this request. Linda and I both appreciate your assistance with research in this important area. I hope all is going well with you in your teaching assignment!

Sincerely,

Alonzo Hannaford Ed.D.  
Chairperson
January 26, 1988

Dear Student Teacher,

Thank you for agreeing to assist with this task. It is part of a research project I am conducting through Western Michigan University. The total time involved to respond to all three items should be approximately 30-40 minutes. When you have completed the instruments please return them to me, Linda Miller, in the stamped envelope. Also include this sheet which has your name, address, etc. Your response as soon as possible would be appreciated!

IT IS VERY IMPORTANT that you complete each instrument based solely on what you know or think. Please do not seek help from others or from written resources. Simply provide your best guess or most honest opinion.

I genuinely appreciate your assistance. If you have any questions, please contact me at the following addresses: (please call collect)

Linda Miller  
3509 Sangren Hall  
OR  
4110 Lake Forest Lane  
Kalamazoo, MI 49008  
Kalamazoo, MI 49008  
1-383-1680  
1-388-3882

Name: ______________________  Date: ______________________
Address: ____________________________________________________
University: _____________________  Phone: _____________________
Appendix T

Evaluation Form Completed by Subjects in Self-Efficacy Training and Social Skill Training Treatment Groups
SOCIAL SKILL TRAINING EVALUATION

Please circle the number which indicates your response to the question. On the scale, 1 = poor; 5 = excellent.

1. The instructor has a thorough knowledge of the content of this training.
   1   2   3   4   5

2. The presentation was well organized.
   1   2   3   4   5

3. The instructor provides clear explanations and interpretations of information and materials.
   1   2   3   4   5

4. The instructor provides answers or sources of answers to questions from participants.
   1   2   3   4   5

5. The instructor provides examples and illustrations.
   1   2   3   4   5

6. The instructor emphasizes key points in presentations.
   1   2   3   4   5

7. The instructor uses class time well.
   1   2   3   4   5

8. The instructor encourages participants to express ideas and ask questions.
   1   2   3   4   5

9. The instructor is attentive to and interested in the participants.
   1   2   3   4   5

10. The instructor provides feedback to students.
    1   2   3   4   5

Comments:
Appendix U

Social Skill Training Certificate
Social Skill Training

This is to certify that ___________ has completed eight (8) hours of inservice in the area of social skill instruction.

Date

Trainer


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