

# DOCUMENT RESUME

ED 277 199

EC 191 706

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 TITLE Intrinsic Motivation and Learning Strategies: A Combined Approach to Educating Learning Disabled Adolescents.  
 INSTITUTION North Carolina Univ., Chapel Hill. Frank Porter Graham Center.  
 SPONS AGENCY Special Education Programs (ED/OSERS), Washington, DC.  
 PUB DATE Jun 85  
 GRANT G008430001  
 NOTE 177p.; Ph.D. Dissertation, University of North Carolina at Chapel Hill. Appendix D: TARGETS also available separately; see EC 191 707.  
 PUB TYPE Guides - Classroom Use - Guides (For Teachers) (052) -- Reports - Research/Technical (143) -- Dissertations/Theses - Doctoral Dissertations (041)  
 EDRS PRICE MF01 Plus Postage. PC Not Available from EDRS.  
 DESCRIPTORS Academic Achievement; Achievement Gains; Adolescents; \*Learning Disabilities; \*Learning Motivation; Secondary Education; \*Teaching Methods; Writing Processes; Writing Skills; \*Written Language

## ABSTRACT

The study investigated the effects of intrinsic motivation training and/or written language training on the written language achievement and motivation of 55 learning disabled adolescents (grades 10-12). Interventions included Alley and Deshler's "Learning Strategies" approach (writing strand) and "TARGETS," a systematic instructional strategy designed to enhance intrinsic motivation of learning disabled adolescents. Students were assigned to one of four treatment groups. Group 1 received a combination of the Strategies/TARGETS interventions. Group 2 received Strategies alone, Group 3 TARGETS alone (along with a traditional writing program), and Group 4 (the contrast group) received only the traditional writing program. Treatments were administered 3 days per week for 7 weeks. Pretests, posttests, and 2-month follow-up tests consisted of two measures of written achievement and two motivation measures. Analysis of variance on ranked data indicated that gains made by the contrast group (Group 4) were significantly better than those of the other three treatment groups. Posttest performance was maintained for all four groups at follow-up testing. Results are discussed in terms of teacher effectiveness, potency of interventions, and the role of classroom climate variables. Substantial appendices include the teaching guide and lessons that comprise the TARGETS instructional strategy. (JW)

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Intrinsic Motivation and Learning Strategies: A Combined  
Approach to Educating Learning Disabled Adolescents

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June 25, 1985

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INTRINSIC MOTIVATION AND LEARNING STRATEGIES:  
A COMBINED APPROACH TO EDUCATING LEARNING DISABLED ADOLESCENTS

by

Deborah Memorial Harris Fewell

A dissertation submitted to the faculty of The  
University of North Carolina at Chapel Hill in  
partial fulfillment of the requirements for the  
degree of Doctor of Philosophy in the Department  
of Special Education.

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DEBORAH H. FEWELL. Intrinsic motivation and learning strategies: A combined approach to educating learning disabled adolescents (Under the direction of LYNNE FEAGANS, PH.D.).

The general purpose of this investigation was to study intrinsic motivation in a sample of learning disabled adolescents. The perspective of this study was that interventions, whose primary focus is on improving academic performance, may prove less effective if motivational variables are not also included in the intervention. Two measures of written achievement and two motivational related measures were administered to 55 learning disabled adolescents. Each student was administered these measures on a pretest, posttest and 2 month follow-up test basis.

The 55 subjects were assigned to four treatment groups according to the demands of their school schedule. Four treatment facilitators were randomly assigned to the treatment interventions. Treatment was given three days per week over a seven-week period.

Comparability of the four groups was determined by performing analysis of variance on ranked data. A rank transformation procedure was used because the raw data violated assumptions that are the basis of analysis of variance.

Two procedures were employed to monitor the implementation of four treatments by the treatment facilitators.

Analysis of variance on ranked data showed significant posttest differences among the groups. The hypotheses of this investigation

was not supported by the findings. Gains made by the contrast group on the Woodcock-Johnson written language cluster were significantly better than those of the other three treatment groups. Analysis of 2 month follow-up scores on the dependent measures showed that post-test performance was maintained for all four groups at the time of follow-up testing.

The results are discussed in terms of teacher effectiveness, potency of interventions and the role of classroom climate variables.

## ACKNOWLEDGMENTS

TO GOD BE THE GLORY, GREAT THINGS HE HATH DONE!

I am greatly indebted to so many for their love, support and prayers throughout my graduate school experience. Much gratitude to:

My family - Eugene Sr., Fred, Larry, Bertie, Mitchell, Pam, Michael, Pat, Mabel, Greg, Dyfieri, Kay, Freda, Ruthie and the Fewells.

My friends - Pastor and Sis. Brown, the Kimballs, the Thorpes, Betty Ames, Mr. Garrison, Carrie Gilchrist, Renee Dobbins, Anita Buie, Elaine Fields, Judy Carter, Daphne Thomas, KU staff, FPG staff, and the Prestons.

My funding source - The U.S. Office of Education, Grant No. 023BH40038.

The School Systems - Greensboro City Schools, Fayetteville City Schools, and East Market Street SDA Academy.

The assisting personnel - Benny Higgins, Cathy Sloan, Bobbi Gaddy, Bob Clendenin, Jack McGinley, Vernon Norman, Calvin Preston, Joanne Hall, Dan Watkins, Shelby Lawary, Harry Morford, Jane Hunt, Yvonne Lee, and FPG Data Management Staff.

My data analysis experts - Marjie Martin and Tarlough Wiggins.

My KU advisers - Donald Deshler and Jean Schumaker.

A special thanks to all my committee members for their guidance, patience and support: Marv Wyne, Jenny Dickens, Gary Mesibov and Rune

Simeonsson. The editing expertise provided by Marv Wyne is especially appreciated.

To my dissertation advisor, Lynne Feagans, thanks so very much for your expert guidance in developing my research skills. You have really gone beyond the call of duty to see me through this task. You are a superb mentor and good friend.

To my chairman, Jim Paul, your belief in me is all I needed and your warm compassion helped bring me through. You are indeed a friend I will always cherish and respect. Thanks!

To my parents, Fred and Ruth Harris, thanks for my upbringing and for teaching me the power of prayer, determination, stick-to-itiveness and endurance. Above all, thanks for the foundation in Christ you instilled in me. I am convinced it is the greatest gift a parent can give to a child. It is the only thing that will bring you through the storms of life.

Finally, but certainly not the least, I want to thank my children, Eugene and Tonya. For an eight- and four-year-old, you have been wonderful. The patience, understanding, flexibility, versatility, adaptability, love, tenderness and support you gave me throughout this ordeal brings me to tears as I reminisce in order to write this acknowledgment to you. I could not have done it without you. You have been a major source of inspiration for me and have added to my intrinsic motivation for this task. Thanks!

So often it was said that this too shall pass and in closing, let it be known that by the grace of God this too has passed!



## TABLE OF CONTENTS

	<u>page</u>
ACKNOWLEDGMENTS . . . . .	iv
LIST OF FIGURES . . . . .	vi
LIST OF TABLES . . . . .	vii
 CHAPTER	
1 REVIEW OF THE LITERATURE . . . . .	1
Introduction . . . . .	1
Conceptual Framework . . . . .	2
Intrinsic Motivation and Learning . . . . .	7
Intrinsic Motivation and Learning Disabilities . . . . .	9
Implications for Educational Planning . . . . .	12
Importance of Developing Interventions . . . . .	13
Incorporation and Usage of the Written	
Language Intervention . . . . .	17
Research Objectives . . . . .	20
Hypotheses . . . . .	21
 2 METHOD . . . . .	 22
Study Design . . . . .	22
Subjects . . . . .	24
Selection of Treatment Facilitators . . . . .	28
Description of Treatments . . . . .	28
Measures . . . . .	32
"A Scale of Intrinsic versus Extrinsic Orientation	
in the Classroom" . . . . .	32
Goal-Setting Scale . . . . .	33
Learning Strategies Writing Theme Development . . . . .	34
Woodcock-Johnson Psychoeducational Battery . . . . .	35
Carolina Teaching Performance Assessment	
System (CTPAS) . . . . .	35
Task Administration . . . . .	37
Procedure . . . . .	37
Data Analysis . . . . .	39
Stage 1 - Descriptive Analysis . . . . .	40
Stage 2 - Selection of Variables and	
Analysis Procedure . . . . .	40
Stage 3 - Testing the Hypotheses . . . . .	41

# TABLE OF CONTENTS (continued)

CHAPTER		page
3	RESULTS . . . . .	43
	Descriptive Analyses . . . . .	43
	Demographic Variables . . . . .	43
	Selection of Variables . . . . .	46
	Analysis Procedure . . . . .	48
	Comparability of Groups at Pretest Level . . . . .	49
	Testing the Hypotheses . . . . .	49
4	DISCUSSION . . . . .	59
	Summary of Results . . . . .	59
	Treatment Effects (Immediate Differences) . . . . .	60
	Nonsignificant Variables . . . . .	64
	Follow-up Differences . . . . .	67
	Summary of Differences . . . . .	67
	Implications . . . . .	68
	REFERENCES . . . . .	71
	APPENDIXES . . . . .	81

## LIST OF FIGURES

<u>Figure</u>		<u>Page</u>
1	Cognitive Model of Motivated Behavior . . . . .	8
2	Expanded Cognitive Model of Motivated Behavior . . . . .	16
3	Research Design . . . . .	23
4	TARGETS (Schematic Representation) . . . . .	31
5	Mean Rank Differences on Woodcock-Johnson . . . . .	52

## LIST OF TABLES

<u>Table</u>	<u>Page</u>
1 Summary of Group Characteristics . . . . .	27
2 Attendance and Participation Rates . . . . .	38
3 Summary of Ratings for Treatment Facilitators . . . . .	45
4 Intercorrelations of Woodcock-Johnson Variables . . . . .	47
5 Group Comparability at Pretest Level . . . . .	50
6 Woodcock-Johnson Results-Written Language Cluster . . . . .	53
7 Harter Scale Results-Preference for Challenge Subscale . . . . .	54
8 Harter Scale Results-Curiosity/Interest Subscale . . . . .	55
9 Writing Strategies Theme Results - Percent of Complicated Sentences . . . . .	56
10 Goal Setting Scale Results-Summed Score . . . . .	57

## CHAPTER 1

### Review of the Literature

Adolescents identified as having a learning disability commonly exhibit a lack of motivation for performing school tasks. It seems logical to assume that years of school failure and inadequate instruction contribute to the magnitude of these concerns. Research on motivation in learning disabled adolescents has been primarily descriptive and has not generated remedial solutions to the problem. The general purpose of this investigation was to study intrinsic motivation in a sample of learning disabled adolescents.

### Introduction

Intrinsically motivated behaviors are behaviors which a person engages in to feel competent and self-determining (Deci, 1975). Although there is a significant body of psychological literature on intrinsic motivation (Adelman, 1978), interest in the influence of intrinsic motivation on the achievement of learning disabled students has been extremely low. This lack of interest can perhaps be attributed to the dominance of developmental and behaviorist perspectives (Adelman & Taylor, 1982), in the learning disabilities field. Whatever the cause of the paucity of LD research on intrinsic motivation, focus on this important topic must no longer be disregarded (Adelman, 1978).

It is the author's contention that research in this area should examine the best way to combine intrinsic motivation training with instruction in specific academic strategies. This conclusion evolves out of a considerable body of research suggesting that poor performance of LD students is the result of lack of motivation and their failure to employ playful, organized strategies that are well within their academic level (Adelman, 1983; Licht, 1984; Wong, 1980).

In the following sections, pertinent research literature will be reviewed to develop a rationale for this investigation. The first section presents the conceptual framework of this study. The next several sections present educational implications and the final section sets forth the research objectives for this investigation.

### Conceptual Framework

As early as 1918, Woodworth set the stage for work in the area of intrinsic motivation by postulating that an activity provides its own drive. He stated that: "A person who dances well may be motivated by general motives such as self-assertion, but the direction in which energy from these motives is directed would be due to good mechanisms for dancing" (p. 50). In other words the personal satisfaction gained from dancing will keep the individual motivated to continue dancing.

Nearly 30 years passed and very little attention was given to Woodworth's notion in relation to motivation. Several animal studies (Nissen, 1930; Berlyne, 1950; Montgomery, 1950; Butler, 1953), were later conducted that primarily led to the development of motivation theories. These studies were only suggestive of human functioning, but served to identify intrinsically motivated behaviors such as

exploratory drive. These behaviors were later reported to also be characteristic of humans (Bekton, Heron & Scott, 1954; Heron, Doane & Scott, 1956) and the findings from these studies contributed further to the elaboration of motivation theories.

The drive theory of motivation postulated by Hull (1943) is credited with being the beginning of motivation theory, but it did not consider internal processes which are now believed to be essential to the concept of intrinsic motivation. Koch (1956) was one of the first to emphasize the need to revamp motivational theory and stress intrinsic motivation as a separate entity. From Hunt's (1955) theory of optimal incongruity to Kagan's (1978) theory of the reduction of uncertainty, the basic underlying theme of theories explaining intrinsically motivated behaviors seems to be that humans will strive to decrease or avoid discrepancy between inputs or cognitions (i.e., information received from external or internal sources). For example, fear of the dark ceases to be an incongruent cognition when the individual explores the dark to find there is no basis for his fear (i.e., reduces incongruity). Leavitt (1962) supported this example by pointing out that a person will cease to explore novel stimuli or a puzzling situation when he understands the situation because it is no longer incongruent. Therefore, intrinsically motivated behaviors are presumed to be behaviors which are motivated by the need to reduce cognitions or inputs that are not congruent. The reduction of this incongruity by conquering challenges one encounters or creates, directs a person to feelings of competence and self-determination (Deci, 1975). Deci (1975) considered the needs for competence and self-determination as the major components of intrinsic motivation. Extracted from

implications of past theories, this perspective subsumes other theories and advances the concept of intrinsic motivation to the point of reference in this investigation.

This perspective also emphasizes the need and capacity of humans to deal effectively with their environment. Deci (1975) and White (1959) referred to competence as the ability to deal effectively with one's surroundings. Used synonymously with effectance motivation, White proposed that competence or effectance motivation is what directs intrinsically motivated behaviors.

Always available for the organism to draw upon, intrinsic motivation is not as intense and immediate as hunger and thirst. A person by choice, then, is intrinsically motivated by effectance motivation to engage in behaviors that allow him to feel competent. Deci (1980) expanded on this by stating that intrinsically motivated behaviors are based on individuals' needs to be competent and self-determining in relation to their environments.

Angyal (1941) and White (1959) affixed considerable importance to interactions with environment by emphasizing that organisms develop independence through acquired competence in dealing with their environment. If a person does not deal competently with his environment at home or school, low intrinsic motivation can result. A case in point is the learning disabled adolescent who usually does not deal competently with his school environment.

Deci (1975) defined intrinsically motivated behaviors as behaviors in which a person engages to feel competent and self-determining. Intrinsically motivated behaviors are of two general types: the seeking of stimulation and the conquering of challenges or reducing



incongruity/dissonance. They include the psychological concepts of curiosity, pursuing a positive affect such as happiness and avoiding negative affect, such as anxiety.

Deci (1975) asserted that intrinsic motivation is innate and that all humans are born with the basic need for feeling competent and self-determining. This postulated basic need is said to differentiate into specific motives as the person interacts with the environment. Of particular interest in the present study is the intrinsic motive of need for achievement. The concept of intrinsic motivation as it applies to academic achievement in general, and more specifically to learning disabilities, grew out of the broad construct of achievement by more recent cognitive theory and research on choice behavior.

The achievement motivation theory proposed by Atkinson (1957, 1964) holds that the tendency to approach or avoid an achievement-related situation is the result of one's history of success and failure. A person's behavior in an achievement-related situation is a function of his/her motive for success, the probability of success and the incentive value associated with success. Atkinson postulated that motive for success, i.e., intrinsic motivation (Deci, 1975), will become evident in one's behavior when a person feels responsible for the outcome, when there is feedback of results and when there is some risk of failing. The probability of success is defined as one's expectancy of achieving a goal (Deci, 1975). Based on past experiences with similar situations, the individual determines his probability of success (Atkinson, 1964) and behaves according to his expectations. The final theoretical variable that influences motive for success is the incentive value of one's potential reward. The pride a person

feels in achieving a goal determines the incentive value of that goal (Deci, 1975). This value is considered a function of the probability of success and varies according to the difficulty of the goal.

Conversely, Atkinson's theory argues that the avoidance of failure is also determined by three factors: motive to avoid failure, one's expectancy about failure and incentive value of failure. Motive to avoid failure increases desire to avoid situations that cause shame, e.g., academic failure. Probability of failure is related to one's expectations about failure based on past history, and the incentive value of failure reflects the consequences of not achieving a goal (Deci, 1975). In essence, these three variables act together to influence the person's tendency not to perform the activity so failure can be avoided (Deci, 1975).

Atkinson's theory emphasizes the intrinsic satisfaction of achieving and is especially important when one considers the role achievement, success and failure play in the learning process. Deci (1975) considers achievement motivation a significant factor leading to feelings of competence and self-determination, but notes Atkinson's lack of consideration for the role extrinsic rewards play in motivating behavior. Although an extrinsic component is not included in Atkinson's theory, it does set a precedent for the development of a motivation theory concerned with both intrinsic and extrinsic motivation. An integration of cognitive theory and achievement motivation theory would provide a more comprehensive perspective for viewing intrinsic motivation in relation to school learning.

According to Deci (1975), the primary concern of the cognitive approach is choice behavior. The cognitive approach is based on the

assumption that people make choices about what to do by processing information from the environment, memory or "personal knowledge" (i.e., internal sources, e.g., people's attitudes, feelings). This processing of information which is received from the environment becomes what Deci (1975) referred to as cognitive expectations or an awareness of potential satisfaction. These cognitive expectations then serve as the energy source for behavior. For example, expectations of failure can motivate behaviors (such as lack of effort) that would lead to the reduction of failure (i.e., avoiding failure by not trying or not participating at all). After considering the potential of the situation (e.g., an academic task) for satisfaction, the individual establishes goals that will lead him to his expected satisfaction. Next, the person will engage in behavior intended to achieve the goal. Finally, achieving the goal (if the person's expectations were accurate) will lead to rewards and satisfaction (Deci, 1975). Figure 1 schematically depicts the cognitive model of motivation.

### Intrinsic Motivation and Learning

Accepting the cognitive model to explain motivated behavior yields multidimensional implications, for job performance, decision making, peer relations and learning. In the learning process, as it is manifested in the classroom, a person is called upon to actively process information received (i.e., stimulus inputs), cognitively determine the potential for satisfaction, establish goals, direct behavior to achieve intended goals, and then evaluate one's reward or satisfaction. If an individual has a deficit in the beginning phases of the cognitive

Figure 1

Cognitive Model of Motivated Behavior

(Deci, 1975, p. 98)



model, learning experiences can be hampered, and as a result, depress intrinsic motivation. "Repeated failure to satisfy an intrinsic motive can weaken one's intrinsic motivation for the activity and one's general sense of competence and self-determination" (Deci, 1980, p. 71). Individuals also store these experiences internally and cognitively apply them to future experiences which leads to decreased perceptions of success, an essential element in helping an individual feel competent and self-determining (i.e., intrinsically motivated). The preceding interpretation is considered a major implication for learning in general, but is magnified when applied to the learning disabled adolescent population.

#### Intrinsic Motivation and Learning Disabilities

The relationship between intrinsic motivation and learning disabilities is perhaps most evident in viewing the characteristic lack of motivation exhibited by LD adolescents. This lack of motivation is logically assumed to be the result of a history of failure and feelings of incompetence. Deshler (1978) stated that there is a high probability that learning disabled adolescents will experience indirect effects of a learning handicap and these effects will be manifested by poor self-perception, lowered self-concept or reduced motivation. Link (1980) reported that the teachers in his study identified lack of student motivation as a key factor in explaining unsatisfactory performance among learning disabled and other low-achieving adolescents (cited in Deshler, 1982). Henker, Whalen and Hinshaw (1980) as well as Wong (1980) have emphasized the importance of low motivation as a contributing factor to school failure of learning disabled students.

Viewing intrinsic motivation as a need to reduce discrepant cognitions connotes further the marked relationship between learning disabilities and intrinsic motivation. Discrepant cognitions are differences between an individual's current level and incoming stimuli (Hunt, 1955; Kagan, 1978; Leavitt, 1962). A child is considered to have discrepant cognitions, educationally, when his level of development and the demands of a school setting are not congruent. If this discrepancy exists for long periods of time, interference in intrinsic motivation can occur, causing delayed or disrupted growth in learning or current performance (Adelman, 1978). From this perspective, Adelman (1978) stated that a child's level of intrinsic motivation with regard to school learning is viewed as an important determinant of learning and performance. If a child has a low level of intrinsic motivation, it is unlikely the child will instigate, energize and direct behavior toward performing academic tasks. If a child cannot perceive an activity as meeting the need to feel competent and self-determining, then the level of intrinsic motivation would perhaps be low for the particular activity.

Finally the cognitive approach to motivation described earlier, also underlines the importance of intrinsic motivation in relation to the learning disabled adolescent. The cognitive model of motivated behavior (Deci, 1975) begins with stimulus inputs that must be processed in order to determine or become aware of potential satisfaction. If processing information is a problem, then the learner experiences a breakdown early in the model and the likelihood of failure is increased. Consequently, the need for achievement and success appears to diminish and poor performance results. Information processing

deficits have been well established as problems for learning disabled students (Hall, 1980; Torgesen & Licht, in press; Bauer, 1979; Dallago & Moely, 1980; Adelman, 1983; Wong, 1980; Torgesen, 1980; Tarver et al., 1976; Cermak & Drake, 1980). Unless appropriately directed, information processing deficits may contribute to the learning disabled adolescents' deficient feelings of competence and self-determination. The awareness or perception of potential satisfaction further present special problems for the learning disabled adolescent in that perceptual difficulties have also been established as a common deficit in learning disabled adolescents (Alley & Deshler, 1979; Adelman, 1983; Blank, Berlin & Rose, in press; Amerikaner & Summerlin, 1982). As with information processing, the LD adolescent is once again required to perform a task using an internal processing skill that is perhaps deficient.

Perhaps attributable to a breakdown at the stimulus input and awareness of potential satisfaction steps of the cognitive model, the learning disabled adolescent also experiences difficulties in goal establishment and goal-directed behavior. Several studies document these difficulties and demonstrate the significance of goal-setting strategies on academic performance with learning disabled adolescents (Robbins & Herway, 1977; Gardner & Gardner, 1978; Deshler et al., 1980; Tolefson et al., 1981, 1982). Gardner and Gardner based their study on Rotter's social learning theory which states that, the occurrence of a behavior of a person is determined not only by the nature of importance of goals or reinforcements but also by the person's anticipation, i.e., expectations that these goals will occur. Theoretically, Gardner and Gardner viewed expectations as major determinants of

behavior and saw goal-setting persons as having stronger expectations. These expectations of goal attainment caused the goal-setter's behavior to differ significantly from persons not setting goals. Their study demonstrated the potential value of applying goal-setting procedures in the resource room in order to facilitate learning. Students, in this study, reported that they studied harder in order to meet their goals.

#### Implications for Educational Planning

In reviewing the cognitive model of intrinsic motivation proposed by Deci (1975), the information processing component (comprised of stimulus inputs and awareness of potential satisfaction) appears to be the most appropriate starting point for developing strategies to enhance intrinsic motivation.

The cognitive psychology approach to enhancing information processing deficits via techniques such as imagery mnemonics is promising for augmenting the encoding processing skills of LD students (Meichenbaum, 1977; Ellis & Hunt, 1983). These procedures can improve the information processing skills of LD students. However, it has not been determined that this approach alone can directly enhance intrinsic motivation. The third component of the cognitive model of motivation must be considered in order to determine the efficacy of the model as it relates to enhancing intrinsic motivation.

Intrinsic motivation can be significantly enhanced with relatively unobtrusive goal-setting procedures (Gardner & Gardner, 1978) and/or brief strategies (Adelman & Chaney, 1982). Procedure facilitators from both studies revealed that procedures used were easy to understand and implement. Intervention to enhance intrinsic motivation should



begin at the goal-establishment stage, and, as an indirect result, it is predicted that awareness of potential satisfaction would also improve. If learning disabled adolescents were taught to establish goals and engage in appropriate behavior to achieve those goals, then repeated positive satisfaction should lead to greater awareness of potential satisfaction for subsequent task. Theoretically, this would further lead to better school performance, which would evolve from feelings of competence and self-determination. Tollefson et al., 1981, reported that research on the effects of goal setting on performance suggests that teaching LD students to set realistic academic goals could increase their motivation and interest in school. Therefore, it seems essential that educational planning for the learning disabled adolescent be restructured to include the enhancement of intrinsic motivation as an educational goal. As Csikszentmihalyi and Larson (1978) stated "restructuring education in terms of intrinsic motivation would accomplish the goal of teaching youth how to enjoy learning and life constructively." Therefore, the importance of developing interventions that enhance intrinsic motivation must be determined.

#### Importance of Developing Interventions

Teachers and parents have often expressed the belief that students could do much better if they only wanted to. Adelman (1983) recognized that there is no way to know what people are capable of doing unless they are motivated to do well. A motivated person can do much more than anyone would think possible, but, if he is not motivated, his performance may not be an accurate indication of his ability. Therefore, interventions that focus primarily on improving performance may

prove less effective than interventions that also include an emphasis on the motivation deficit (Adelman, 1978). "Efforts to facilitate intrinsic motivation need to focus on ways for stimulus inputs around important areas for learning to be perceived by the child as indicating a strong possibility that feelings of competence and self-determination can be increased and negative feelings already associated with the area can be reduced" (Adelman & Taylor, 1983). Increased feelings of competence and self-determination should prove effective in producing significant change in behavior.

Extrinsic rewards are also accepted as being able to increase desired behavior, but a number of studies have questioned the use of extrinsic rewards. Adelman (1978) recognized that extrinsic rewards have their place and can in some instances, such as rote learning, become a tool for success. However, caution must be taken to prevent negative consequences. If the extrinsic reward is perceived as a controlling agent or changes attributions of causality from the person to the reward, then consequences of extrinsic rewards may become negative. A number of studies (Cohen, 1962; Deci, 1972; DeCharms, 1968; Herder, 1958) demonstrating this notion were cited in Deci (1975). Adelman (1983) stated that practitioners should be concerned with increasing motivation as well as avoiding practices that decrease motivation, and the use of extrinsic rewards do not appear to enhance intrinsic motivation, but, indeed, appear to diminish it (Deci, 1975; Levine & Farnacht, 1974; Adelman, 1978; Hunter, 1978). Considering the possible consequence of enhancing extrinsic motivation, it seems a big risk to take just to get a child to perform a current task.

Memorizing vocabulary words for a grade is not the same as developing appreciation for reading.

Several factors are noted that can contribute to the enhancement of intrinsic motivation. These factors should be considered when planning intervention to enhance intrinsic motivation.

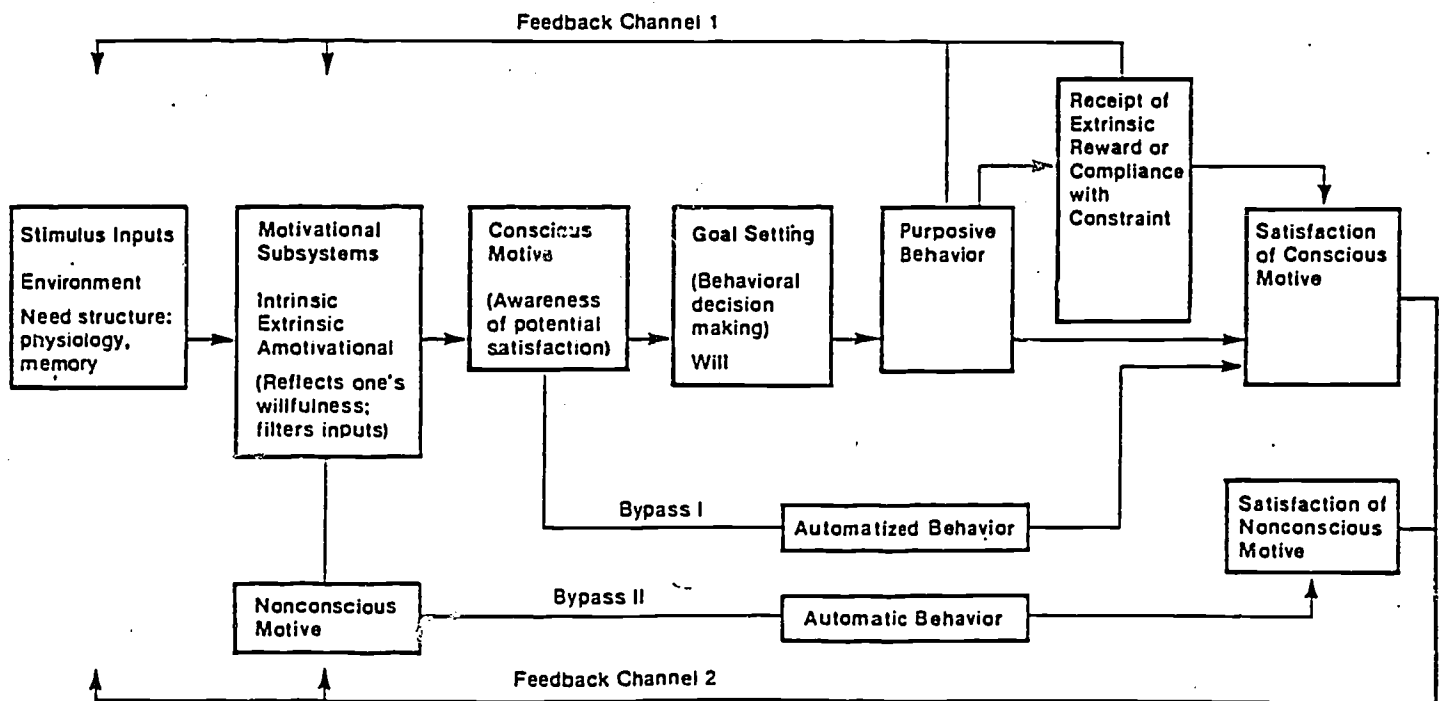
1. Minimal use of extrinsic rewards.
2. A person needs to feel personally responsible for a consequence. Perlmuer and Montz (1977) found that even the mere illusion of control can facilitate performance of learning disabled children.
3. Providing school learning opportunities which can be valued internally by the student and allow expectations of success.
4. Providing stimulating environments that will allow students choices of new learning experiences.
5. Providing information about learning and performance (e.g., feedback about success and failure). Deci (1980) reflects on this component in the expansion of the cognitive approach to motivated behavior presented earlier. See Figure 2. In essence the expanded model includes the feedback component because positive information about one's competence and self-determination strengthens one's willfulness to approach future challenges and negative information erodes it (Deci, 1980).
6. Procedure should be designed to affect the learners' thoughts, feelings and decisions.

The above points are the basis of the intervention developed for this investigation.

Figure 2

Expanded Cognitive Model of Motivated Behavior

(Deci, 1980, p. 70)



In summary of the importance in developing interventions to enhance intrinsic motivation, it is essential to note that the will to learn is an intrinsic motive, one that finds both its source and its reward in its own exercise (Adelman & Taylor, 1983; Deci, 1975). In striving for optimum efficacy, it must be remembered that the efficacy of any strategy for increasing performance by enhancing motivation is directly related to both the potency of the strategy and the initial level of motivation to perform (Adelman & Chaney, 1982).

#### Incorporation and Usage of the Written Language Intervention

The most robust intervention strategy for enhancing intrinsic motivation should provide competence skill training strategies that will enable a student to experience academic success. Adelman (1983) noted that in an educational setting, if a child has low intrinsic motivation and poor basic academic skills, it would prove fruitless to attempt to enhance intrinsic motivation because the skills he needs to conquer challenges and therefore feel competent are not there. He suggests remediation of basic skills as an initial step. In support of this opinion and in consideration of the special needs of learning disabled adolescents, Alley and Deshler's (1979) learning strategies seem especially appropriate to the process of enhancing intrinsic motivation.

The learning strategies approach developed by Alley and Deshler (1979) is an intervention method which has substantial support based on research conducted by the authors. Alley and Deshler (1979) have defined learning strategies as "techniques, principles, or rules that will facilitate the acquisition, manipulation, integration, storage and retrieval of information across situations and settings" (p. 13).

The learning strategies are specifically designed to teach the learning disabled adolescent "how to learn." This strategy does not concentrate on teaching specific content but provides the learning disabled adolescent with the skills he needs to be successful.

The curriculum integrates the concepts of task analysis, mastery learning, imagery and other significant approaches to learning. It provides step-by-step procedures for teachers to follow and all of the instruction is sequenced according to skill levels. The specific steps to follow are categorized in procedures that determine the entry level, describe the strategy, model the strategy, verbally rehearse the strategy, practice the strategy and receive feedback. The curriculum also provides instruction in teaching students how to generalize skills learned and provides a technique to facilitate the maintenance of skills attained.

The writing strand of the learning strategies approach is designed to develop skills in: structuring paragraphs and themes, developing vocabulary, building sentences, writing questions, notetaking, summarizing and monitoring written expression. Using a mastery learning approach, these skills are further divided into smaller steps for a task analytic approach to instruction.

This specific strategy was selected for the present investigation because of its well-defined, teachable, and easily monitored skills (Alley & Deshler, 1979). In addition, Deshler denoted that high student motivation is the key consideration in enhancing the written expression of students, which gives additional support to this study's underlying basis of a combined approach to educating LD adolescents.

The importance of significantly improving the written expression of LD students is especially evident at the secondary level, because of the high demands of written expression. Written expression deficits can be particularly devastating for the LD adolescent at the secondary level (Alley & Deshler, 1979).

Moran (1981) compared the formal features of written language of learning disabled, low achieving and normally achieving secondary students and found that there was a serious discrepancy between the demands of the setting and the abilities of learning disabled students in performing writing tasks when compared to low achieving and achieving students. Moran and DeLoach (1982) took this study a step further by determining the effect poor writing skills have on high school teachers' ratings of a student. These results indicated that spelling is the strongest writing demand of core teachers at the secondary level and that LD students can be singled out based on their writing skills. These studies serve to underline the need for improving the written expression of LD students at the secondary level.

A number of studies have been completed by the Alley & Deshler research group demonstrating the effectiveness of learning strategies intervention in specific skill areas. It is reported that of 57 students who received instruction under the specified procedures, only 1 has been unable to learn either of the two strategies on which he received instruction. Another student learned the strategies but was unable to perform the strategy in grade level material. Also, although two students made marked gains on their note taking skills after training, they did not reach the criterion on the note taking. The remaining students have been able to learn strategies and generalize

to grade level material (Deshler et al., 1982). Deshler also noted that a change in student behavior occurred in all students immediately after the intervention. Given the results, with a number of replications for reliability, it was concluded that the learning strategies intervention technique produces the desired changes (Alley & Deshler, 1979). It is the thesis of the present study that when the Alley & Deshler learning strategies approach is combined with the enhancement of intrinsic motivation, significant gains in the academic achievement of learning disabled adolescents will result.

For this investigation, it is hypothesized that learning strategies in combination with an intervention to enhance intrinsic motivation will produce significant gains in the written language achievement of learning disabled adolescents. These gains will be significantly greater than the gains made with either of the interventions administered independently.

### Research Objectives

Based on the related literature, two research objectives were established. The first objective of this investigation was to determine the immediate effect of intrinsic motivation training and/or written language training on the written language achievement and motivation of learning disabled adolescents. Lack of motivation is a critical educational issue in the LD field that is often cited but has not been addressed specifically. The elusiveness of the concept of intrinsic motivation coupled with the difficulty of working with learning disabled adolescents in the secondary schools, has contributed to the lack of research in this area.



The second objective of this study was to determine if the effects of intrinsic motivation training on the written language and motivation of learning disabled adolescents are maintained. Deshler and Schumaker (1982) stated that the maintenance of skills by learning disabled adolescents appears to be a function of their motivation.

### Hypotheses

The hypotheses for this investigation are:

Immediate Difference. The most effective intervention for all outcome measures is the conjunction of competence training (Learning Strategies) and intrinsic motivation (TARGETS). Learning strategies alone and motivation training alone will have greater outcomes than the contrast group outcome.

2 Month Follow-up. At the delayed posttesting, the combined treatment group will maintain its gain in performance in comparison to the other three groups.

## CHAPTER 2

### Method

#### Study Design

The purpose of this study is to test the effectiveness of two types of intervention and the combination of these interventions. Therefore, this study is a two-by-two design as can be seen in Figure 3.

Subjects in this study were assigned to treatment conditions based on schedule availability. Treatment was given by four treatment facilitators who were blind to each other's assignment. They were randomly assigned to the treatment conditions. Each student progressed at his own rate as in an individualized program. Treatment was given three days a week for one class period over seven weeks. Additional time was not needed for the combination strategy because after the initial steps, the motivation component was taught in conjunction with the strategies.

Each of the four treatments were given at both schools and each treatment was given in the morning and the afternoon. These two steps were taken in order to control for possible school effects as well as time of day effects.

Although randomization of subjects was not possible, varying levels of writing skills, as measured by the Woodcock-Johnson and the Writing Strategies Theme, were represented in each of the treatment

Figure 3

Research Design

## Two-way Factorial

## Motivational Enhancement

(TARGETS)

		Treatment	Contrast
Learning Strategies	Treatment	TT N = 16	TC N = 14
	Contrast	CT N = 16	CC N = 9

First Subscript = Learning Strategies

Second Subscript - Motivational Enhancement

groups. The unit of analysis was the treatment group rather than the class as a whole, since each child was given his own program of each specific intervention. The specific treatments are described in a later section.

Pretesting began in mid-September and treatment began in mid-October. Posttesting commenced on November 16, 1984, and follow-up testing was conducted two months later at the end of January, 1985.

### Subjects

The subjects for this study were selected from 10th through 12th grade resource classrooms in an urban school district located in the southeastern United States. The learning disabled (LD) adolescents were identified by school personnel as needing special education service according to federal and state criteria. Specifically, state identification criteria required a 15- to 20-month grade discrepancy between current and expected achievement in at least one academic area for learning disability placement at the secondary level. Calculation of expected academic level was based on the results of an intelligence test. All of the subjects were receiving LD services and were members of regular education classes.

Smith et al. (1984) have stated that researchers and practitioners are often hampered in replicating, extending or applying research findings because of the vagueness and inconsistency of subject descriptions. In an effort to establish more universal standards in this area the Council for Learning Disabilities' (CLD) Research Committee proposed a set of guidelines to be used for subject descriptions in LD research reports. According to these guidelines, the following infor-

mation should be included: students' motivation, students' educational background (number of years receiving special services), type placement and description of teachers involved in the research. In addition, a sample subject table was provided for summarizing subject characteristics. These guidelines should bring us closer to achieving the precision necessary to more fully interpret and integrate research and, ultimately, to develop better practices in applied settings (Smith et al., 1984).

In keeping with the guidelines described above, the following selection criteria were developed for this study:

- (a) Verbal, performance or full scale IQ of 85 or above (this information was obtained from school records). The Weschler Intelligence Scale for Children (WISC-R) is commonly used in the assessment of children with learning disabilities (Kavale & Nye, 1981) and has sound psychometric properties (Salvia & Ysseldyke, 1978).
- (b) Above third-grade reading level. (This criterion is necessary to benefit from the learning strategies intervention.) To determine the reading level, end-of-the-year achievement scores were used. These achievement scores were obtained from the Wide Range Achievement Test administered by the resource classroom teachers.
- (c) Written expression discrepancy of at least one standard deviation below the mean for grade.
- (d) Moderate social economic status (SES) of family. Moderate SES is referred to as highest education of parents being high school or greater. As a control for background factors, low SES families

were excluded. Low SES is referred to as highest education of parents being less than a high school education.

- (e) Receiving LD services.
- (f) Enrollment in mainstreamed English or other classes that require regular written assignments.
- (g) Student and parent permission.

A total of 98 permission letters were sent to the parents of LD students in the two schools where the study was conducted. The schools were selected on the basis of principal approval and the number of resource students enrolled. A return rate of 73% was obtained. From an initial pool of 72 subjects, 55 met the selection criteria. Six were eliminated because the students decided not to participate; four could not be scheduled with a treatment group; one was eliminated because his current level of written expression demonstrated mastery of the types of sentences being taught in this study; one student transferred to another school; and two were dropped because of a number of absences that prevented the collection of pretest data. During the course of the study two students refused to continue and were therefore dropped because of uncooperativeness.

Table 1 summarizes the demographic characteristics of the subjects by group, in accordance with the guidelines described earlier, as suggested by Smith et al. (1984). Table 5 in Chapter 4 reports the status of the dependent variables at the pretest level.

Table 1

Summary of Group Characteristics

Variable	Group 1 (Targets/ Strategies)	Group 2 (Strategy Alone)	Group 3 (Targets Alone)	Group 4 (Contrast)
Sex (%)				
F	5(31.2)	3(21.4)	3(18.7)	4(40.00)
M	11(68.7)	11(81.2)	13(81.2)	5(60.00)
Race (%)				
Black	8(50)	3(21.4)	5(31.2)	4(40.00)
White	8(50)	11(78.5)	11(68.7)	5(60.00)
Grade (%)				
10th	5(31.2)	5(35.7)	5(31.2)	6(66.67)
11th	7(43.7)	3(21.4)	6(37.5)	1(11.11)
12th	4(25.0)	6(42.8)	5(31.2)	3(22.22)
Age       m	16.97	17.02	17.30	16.84
SES (Parents' Education)				
Jr. H.S.	6.25	0.00	0.00	11.11
Sr. H.S.	62.50	64.29	60.00	44.44
College	31.25	35.71	33.33	44.44
Graduate	0.00	0.00	6.67	0.00
Years with LD Service				
1-3 years	16.67	45.45	54.55	25.00
4-6 years	33.33	45.45	0.00	55.00
6 years	50.00	9.09	45.45	25.00
School				
Page	50.00	14.29	68.75	44.44
Smith	50.00	85.71	31.25	55.56
*WISC-R				
Verbal				
Median	88.75	87.69	90.00	85.22
SD	13.51	13.75	12.02	8.40
Performance				
Median	94.56	94.76	96.31	95.33
SD	9.15	8.65	12.50	10.77
Full Scale				
Median	90.68	89.84	91.06	88.77
SD	10.66	11.08	10.49	8.71

\*Weschler Intelligence Scale for Children - Revised

### Selection of Treatment Facilitators

Four graduate students with North Carolina teacher certification and extensive practicum teaching experience were selected to carry out the four treatment strategies. All of the facilitators had some special education experience.

Treatment facilitators began training approximately 6 weeks before the treatment implementation commenced. The facilitators were randomly assigned to treatments and were trained without knowledge of the hypothesis. The facilitators were trained by the present investigator to use the strategy for their group. Each facilitator demonstrated competence in implementing their strategy by presenting several lessons to pilot subjects while being observed by the training investigator. This practice training was conducted for 3 weeks in a private school with seventh- and eighth-grade students. Each facilitator taught three students and had the opportunity to discuss sessions immediately after instruction ended.

### Description of Treatments

The following treatments alone and in combination constitute the four groups in this study. Group 1 is referred to as the Targets/Strategy combination. Group 2 is the Strategies Alone group. Group 3 is referred to as Targets Alone and Group 4 is the contrast group.

Learning Strategies Writing Strand (Sentence Structure). This treatment was used in combination and alone to comprise Group 1 (Targets/Strategy) and Group 2 (Strategies Alone). A general description of this intervention model was presented in Chapter 1. Specifically,



the writing strand teaches sentence structure, paragraph organization, and error monitoring. These elements represent the general stages of instruction, and a number of instructional objectives are included in each stage. Within the writing strand are several strategies that comprise the writing strand. This investigation employed the sentence structure strategy because of the entering skills level of the subjects. Each subject began at the simple sentence structure level and progressed to other levels when mastery was obtained. Mastery was measured at the end of each level by the student generating a paragraph, reflecting skills learned at that level. This strand is designed to increase academic competence and if the subject masters the skills taught, he should be able to apply them intentionally and strategically in order to meet the demands of written expression at the high school level.

TARGETS. This treatment was used in combination and alone to comprise Group 1 (Targets/Strategy) and Group 3 (Targets Alone). This intervention was developed by the investigator. (See Appendix D.)

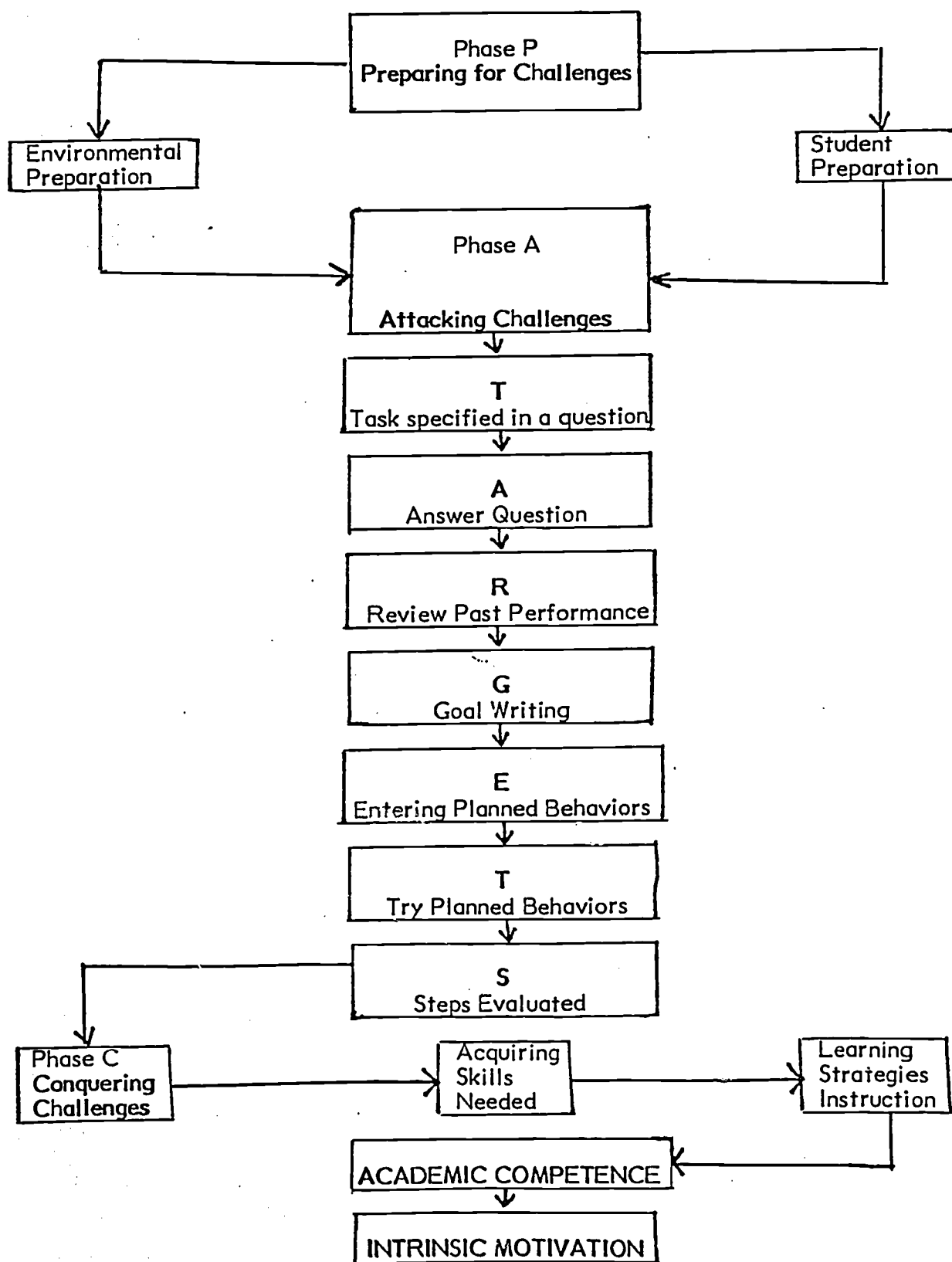
TARGETS is a systematic instructional strategy designed to enhance the intrinsic motivation of learning disabled adolescents. The complete strategy encompasses three major phases. Phase "P" prepares the environment, teacher, student and parent for a harmonious interaction that will serve to facilitate and maintain the educational benefits gained from this strategy. Phase "A" teaches the LD adolescent how to organize himself in order to "attack" challenges that he may confront in school first and then in other environments. Phase "C" equips the student with learning strategies that will allow a student to be competent and enable him to conquer challenges which will lead to feelings

of self-determination. As a result of developing feelings of competence and self-determination within the student, his intrinsic motivation will be enhanced (Deci, 1975). For the purposes of this research only, Phase "A" was included. It was not used in its entirety in order to control for all possible contributing variables (Phase "C," which is the learning strategies, is being used because it provides the competence skill training component necessary for enhancing intrinsic motivation). Figure 4 summarizes the major components of TARGETS in chart format.

Sections of this intervention have been demonstrated in the classroom as effective methods for improving performance. The intervention demonstrated effectiveness in a pilot study during the spring of 1984 and the intervention was investigated in its entirety during the summer of 1984 as a part of a specially arranged internship with Deshler at the University of Kansas. This experience also assisted in the development of specific lesson plans to be used with each step.

Traditional Writing Program. This treatment was used to comprise the writing instruction for Group 3 in combination with Targets and for Group 4 alone. This treatment was the school system's current writing curriculum. The facilitator for this treatment, however, was unaware that it was the present curriculum. The text for this curriculum is Basic Skills in English, McDougal-Little, Publisher, 1980, levels 4-6. Daily lesson plans were drawn from the text and presented in packet form to the facilitator during training.

Figure 4

TARGETS (Schematic Representation)

### Measures

#### "A Scale of Intrinsic versus Extrinsic Orientation in the Classroom"

Instrument. This instrument was developed by Susan Harter (1981). (See Appendix A.) The structure of the scale includes five dimensions defined by an intrinsic and extrinsic pole. The five dimensions are: preference for challenge versus preference for easy work, curiosity/interest versus teacher approval, independent mastery attempts versus dependence on the teacher, independent judgment versus reliance on the teacher's judgment and internal versus external criteria for success/failure (Harter, 1981). Each of the subscales listed above contains six items that reflect extrinsic or intrinsic orientation. The reliability and factorial validity have been adequately demonstrated and are reported in Harter (1981). Reliability and validity data were collected on a population of third- through ninth-grade students. However, it is indicated that reliability and validity should be maintained in usage with students in grades 10-12. This notion was examined and supported in a pilot study during the spring of 1984. Reliability coefficients ranging from .64 to .76 were obtained on the motivational subscales of this instrument. The specific motivation subscales are Preference for Challenge and Curiosity/Interest.

Procedures. Subjects were tested individually and each of the 30 items was read to the subjects by the examiner. Each subject was told that there was no right or wrong answer since the responses depended on what is right for each individual. After the instructions were read, the subject was asked to demonstrate understanding by completing the examples provided.

The subject's response required that he choose whether or not the item described what he was like. The subject then decided if the item was "really" like him or "sort of" like him. The subject received a score of one, two, three or four, depending on the checked response. One represented most extrinsic orientation; two, less extrinsic; three, less intrinsic; and four, most intrinsic. Each score was summed within subscales and a mean score was obtained to determine level of orientation.

This scale can be group administered but individual administration was chosen so the examiner could be sure subjects were following the procedure for marking responses.

Measures. The Harter measures the motivational orientation of students. It distinguishes between extrinsic and intrinsic orientation toward school-related activities. Harter (1981) also reported that the subscales are highly predictive of perceived competence and control, precisely the information needed for this study.

#### Goal-Setting Scale

Instrument. Goal setting is the major component involved in the intervention to enhance intrinsic motivation. Therefore a measure of the subjects' goal-setting and implementation skills was administered. The "Goal-Setting Scale" was used for these purposes. The scale was developed by the investigator for this study.

The "Goal-Setting Scale" is a 12-item Likert Scale that required the student to indicate how often he performed the task described in each item. A pilot study was conducted to determine the statistical reliability of this instrument. An LD adolescent population ( $N = 26$ ), independent of the subjects in this study was administered the scale

and a measure of internal consistency was obtained. The Kuder-Richardson formula was used as the measure of internal consistency and a reliability coefficient of .80 was obtained.

Procedure. This scale was administered in a group format during resource classtime. The items were read aloud by the examiners and the subjects responded by circling the extent to which the item best described them.

Measures. This scale measured the subjects' task approaching strategies as it relates to setting goals, planning behaviors to reach those goals and evaluating progress. Each of the items was associated with school tasks and reflects in-school behavior.

#### Learning Strategies Writing Theme Development

Instrument. The writing strand incorporates the writing of themes as a pre/post measure of skill attainment. Each student was provided with notebook paper, pencil, and a suggested-topics list.

Procedure. Each subject was asked to write a five-paragraph theme on a topic of their choice. A suggested list of topics was provided but subjects did not have to select from that list. The subjects were allowed 30 minutes to complete this task after they had selected a topic. The teacher was allowed to assist in topic selection if the subject appeared to have great difficulty in selecting a topic.

Measures. The themes were evaluated for types of sentences, number of sentences, percentage of complete sentences and percentage of complicated sentences. This provided a skill level for beginning instruction. Interscorer reliability was necessary to establish because of the differing opinions as to what constitutes a complete or complicated sentence. Interscorer reliability for this investigation

ranged from .85 to .93 ( $N = 5$ ). The interscorer reliability was obtained after each of the examiners received instruction on types of sentences. Then examiners were given sample writing themes to score and results were discussed. Reliability was obtained from the independent scoring of another sample theme. The examiners were the treatment facilitators in the present investigation.

#### Woodcock-Johnson Psychoeducational Battery

Instrument. The Woodcock-Johnson is a wide-range comprehensive set of tests for measuring cognitive ability, achievement and interest (Woodcock-Johnson, 1977). Detailed validity and reliability information is available in Woodcock (1978). Norms for this battery range from preschool to geriatric levels.

Only the writing cluster was administered for purposes of this research. This test was administered individually in accordance with administration procedures.

Measures. The writing cluster served as a pre/post measure of written language achievement and performance. The writing cluster assesses the subject's ability to respond in writing to a variety of questions requiring knowledge of punctuation, capitalization, spelling and usage. Further, it assesses the subject's ability to identify errors in text (i.e., error monitoring) and correct them (Woodcock-Johnson, 1977).

#### Carolina Teaching Performance Assessment System (CTPAS)

Instrument. This system was developed to ensure the collection of accurate, reliable information about the extent to which teachers are using management and instructional practices that are related to

student achievement (Wyne et al., 1984). The system has been classified into five teaching functions: management of instructional time, management of student behavior, instructional presentation, instructional monitoring and instructional feedback. These five functions are comprised of 25 teaching practices that have been found to be consistently related to student achievement. Observers were trained to use the observation guide and rating form. (See Appendix C.)

Procedures. Observers used the guide and rating forms while observing a teacher in the classroom. The first observation was announced and subsequent ones, unannounced. After each observation, the ratings on each of the five teaching functions were discussed with the teacher and specific practices were noted for improvement. Each teacher was observed for the entire class period. This investigation used two observers in the class at the same time. This was done in order to have two independent observations and to establish rater reliability. A checklist of expected behaviors related to implementing specific treatments was developed by the investigator and presented to the facilitators in training. The checklist was comprised of specific elements considered essential to the appropriate implementation of the particular treatments. The checklist evaluated the facilitators' level of implementation with regard to assigned treatment.

Measures. For each major function in the CTPAS, teachers were rated on a scale from one to five. One indicated that this teacher's performance ranked in the 10th percentile; two in the 30th percentile; three, 50th percentile; four, 70th percentile; and five, 90th percentile. In addition, summary comments were listed indicating strengths and teaching practices in need of improvement. Performance indicators



guide the observers' ability to determine whether or not practices are performed appropriately.

#### Task Administration

The Woodcock-Johnson Writing Cluster and Harter Scale were individually administered to subjects in quiet testing rooms provided in the schools. These testing sessions lasted approximately 30-40 minutes.

The Writing Themes and Goal-Setting Scales were administered to the class as a whole within their assigned treatment groups on the first and last day of treatment. These sessions required the entire class period (50 minutes).

Four examiners, three female and one male, administered all the tasks. Each person was a graduate student in education and had some experience in testing children. Before the persons tested subjects, they were trained by the investigator to administer the measures used in this study and demonstrated proficiency in practice sessions with practice subjects.

#### Procedure

All participants were given the "Scale of Intrinsic versus Extrinsic Orientation in the Classroom," Woodcock-Johnson Written Language Cluster, "Goal-Setting Scale," and the Writing Theme at the pretest time period.

Treatment began approximately 6 weeks after the beginning of the school year. Facilitators followed the interventions as prescribed, 3 days per week for 7 weeks. Instruction was for 1 hour per day. All subjects were allotted the same amount of time for treatment. Attendance records were kept and are reported in Table 2.

Table 2

Attendance and Participation Rates

Total Lessons 17

	Group 1 (Targets/ Strategies)	Group 2 (Strategy Alone)	Group 3 (Targets Alone)	Group 4 (Contrast)
Days Present				
m	13	14	14	15
Days Participated				
m	12	12	14	15
Present/Participated Ratio	.93	.88	1	1

Detailed lesson plans were presented for each of the four treatment conditions. The lesson plans were used in the training of the facilitators.

Throughout treatment two observations (one announced, one unannounced) using the CTPAS were made in order to control for possible teacher effects. The observations were primarily concerned with amount of time spent in instruction and level of implementation of the intervention as prescribed. These observations were made by the investigator and another graduate student in Special Education who had received comparable training to use the assessment tool described in the measures section. The CTPAS observers were not experimentally blind, but bias was controlled for by equal participation in training of facilitators in order to ensure conformity of expectations and by obtaining a combined mean score of the individual ratings.

Immediately following treatment, posttest assessment on all dependent measures was made. Each of the facilitators assisted in this data collection but did not assess their treatment subjects or have knowledge of the subjects' treatment group.

Two months after post assessment, follow-up measures were taken. The purpose of the follow-up assessment was to determine the stability of observed changes over time.

#### Data Analysis

A three-stage analysis plan was devised for examination of the data. First, descriptive statistics were completed. Also in the first stage, group difference analyses were computed to ascertain group comparability on demographic variables. Secondly, correlations were

performed to determine which variables would be selected for analysis. Procedures were also conducted to determine the type of analysis to be used. In this stage, group comparability at the pre level was ascertained by performing appropriate analyses. The final stage consisted of analyses performed to test the hypotheses of the study. Each of the Stages is described below.

#### Stage 1 - Descriptive Analysis

Frequencies were computed by group for each of the categorical demographic variables. Chi Square analysis was performed to determine if there was a significant relationship between the categorical variables.

Analysis of Variance (ANOVA) was performed on the continuous demographic variables as a statistical test of group comparability. Tukey's multiple comparison test was performed for individual group comparisons.

#### Stage 2 - Selection of Variables and Analysis Procedure

Correlation coefficients were generated for the variables within each domain of measurement. The correlations were obtained so that specific variables could be selected for further analysis. Variable selection was necessary because of the large number of variables within each domain. The correlations indicated measurement overlap of many of the variables within each domain. That is, a high correlation coefficient would indicate that the two variables were measuring the same constructs, therefore only one variable would need to be used for analysis.

Descriptive analysis indicated the need for an alternative analysis procedure. Analysis of variance on ranked data and analysis of variance on the raw data was performed on selected pretest variables to determine the suitability of each for this investigation.

Ranking the data before performing analysis of variance is a statistical procedure referred to as rank transformation. ~~It replaces~~ all of the data with ranks and then employs the usual parametric methods such as analysis of variance (Conover, 1976). The ANOVA is then performed on the ranked transformation of the data. Rank transformation is employed when the original observations violate assumptions which are the basis of a particular statistical procedure. The data of the present investigation violated the assumptions of normality and homogeneity of variance. If the assumptions have been violated, a rank transformation procedure would transfer the data into numbers that would more nearly meet the parametric assumptions. This process was followed in this investigation as a follow-up from the descriptive analysis which indicated a possible violation of assumptions. The side-by-side analysis on the ranked data and the actual data revealed that the analysis of variance on ranked data would bring our data more in line with the assumptions of normality and of homogeneity of variance. Therefore, the rank transformation procedure is used to analyze the data for this investigation. Because analysis of variance on ranks is being used, the median is the most preferred measure of central tendency. The mean ranks may not be comparable to the mean scores in the actual data. The median of each dependent variable will be reported as well as the range and standard deviation.

### Stage 3 - Testing the Hypotheses

Immediate Differences. The following hypothesis will be tested at this stage: The most effective intervention for all outcome measures is the combination of competence training (Learning Strategies) and intrinsic motivation (TARGETS). The outcome measures for learning strategies alone and intrinsic motivation training alone will show greater gain than the contrast group. To determine the immediate effects, the mean difference scores between pretest and posttest were used as dependent variables. A two-factor ANOVA on the ranked differences was performed to test the immediate treatment effects.

Follow-up Differences. To determine the follow-up differences, the difference scores between post and follow-up were used as dependent variables and a two-factor ANOVA on the ranked differences was performed. The identical procedure described in the immediate differences section was followed.

## CHAPTER 3

### Results

As outlined in Chapter 2, data analysis was conducted in three stages: descriptive analysis, selection of analysis procedure, and analyses testing the hypotheses of this investigation. The results of each stage of analysis are presented in this chapter.

#### Descriptive Analyses

##### Demographic Variables

Chi Square analysis performed on the categorical demographic variables to determine if there was a significant relationship between the variables, was found to be an invalid statistical test for these data. This decision was made after the analyses were run and insufficient cell frequencies were noted. Although Chi Square results were invalid, the column percents given in the two-way tables that were generated show that there did not appear to be a problem with group comparability. The percentages reported in Table 1 in the Methods Section represent the percentages of all children in a group (i.e., what percentage fell in the specified category). There appears to be some significant difference between the groups on the distribution of grade of students (11th grade), distribution of students between schools and years of receiving LD service. Although these differences warrant some discussion, they are not considered crucial to the

outcomes of this investigation because the population characteristics of the two schools were comparable.

For the continuous variables (demographic) univariate descriptive statistics were computed for each treatment group and measures of location and dispersion are shown in Table 1 of Chapter 2. To ascertain group comparability ANOVA was performed on IQ and no significant differences were found for each of the three variables: full scale IQ ( $F(3,50) = .11, p > .05$ ), verbal IQ ( $F(3,50) = .30, p > .05$ ), and performance IQ ( $F(3,50) = .09, p > .05$ ). These results suggested that the IQ means of the four groups did not differ significantly.

Although groups were comparable, there was a noted difference in the effectiveness of the treatment facilitators. Table 3 summarizes the ratings of the treatment facilitators for this investigation. The facilitator for Targets/Strategy was rated as the least effective teacher in this study. The facilitator for the Strategy Alone group received a mean CTPAS rating of 4. The CTPAS ratings of the facilitator for Targets Alone and for the Contrast group were highly similar, but clinical impressions of the two teachers indicated a significant difference between the two in terms of student/teacher rapport.

The facilitator for the Contrast group was considered to have an excellent rapport with the students, and this rapport was not as evident with any of the other three groups.



Table 3

Summary of Ratings for Treatment Facilitators

	Facilitator Targets/ Strategy	Facilitator Strategy Alone	Facilitator Targets Alone	Facilitator Contrast
<b>Management of Instructional Time</b>				
Observation #1 M	4	4	4	3
Observation #2 M	3	5	5	5
<b>Management of Student Behavior</b>				
Observation #1 M	3	4	3	4
Observation #2 M	2	4	5	5
<b>Instructional Presentation</b>				
Observation #1 M	3	3	4	3
Observation #2 M	3	4	5	5
<b>Instructional Monitoring</b>				
Observation #1 M	2	3	3	3
Observation #2 M	2	5	5	5
<b>Instructional Feedback</b>				
Observation #1 M	2	3	3	4
Observation #2 M	3	4	5	5

**Rating Scale:**

Rating	Percentile
5	90
4	70
3	50
2	30
1	10

### Selection of Variables

Each of the measures yielded scores on several variables. In order to determine which variables would be used for analysis, correlations were computed for each of the scales.

Woodcock-Johnson Written Language Cluster. The correlations of the dictation raw score, proofing raw score, cluster grade score, cluster age score, cluster percentile grade score and cluster percentile age score were performed and the matrix of correlation coefficients revealed significant correlations among all of the variables. The grade score variable was selected for analysis because grade scores are more frequently used at the high school level when interpreting scores. Therefore, interpretation of this data by using grade scores should be more conceptually meaningful for generalizers. Table 4 presents the correlation coefficients obtained.

Harter Scale. The subscales of Preference for Challenge and Curiosity/Interest were used for analysis because they are the subscales that have been found to reflect motivational orientation (Harter, 1980). The total scores from each of the subscales were used for analysis. The correlation of the summed scores, preference for challenge and curiosity/interest, was generated and a correlation coefficient of .62 was obtained. Both of the subscales, however, were used for analysis because they were considered essential to assessing motivational orientation.

Writing strategies theme. Correlation coefficients were obtained for percentage of complete sentences and percentage of complicated sentences. While the correlation of these variables was only (.49), percentage of complicated sentences was selected for analysis because

Table 4

Intercorrelations of Woodcock-Johnson Variables

	DICTRS	PRFRAW	GRDSCR	AGESCR	PERCGRD	PERCAG
DICTRS Dictation Raw Score	1.00					
PRFRAW Performance Raw Score	.57	1.00				
GRDSCR Grade Score	.78	.86	1.00			
AGESCR Age Score	.77	.85	.99	1.00		
PERCGRD Percentile Rank-Grade	.69	.78	.96	.95	1.00	
PERCAGE Percentile Rank-Age	.73	.82	.97	.96	.97	1.00

a number of subjects reached ceiling at the pretest level on percentage of complete sentences. Given that the subjects had reached ceiling on complete sentences at the pretest level, posttest scores would be of little value. The percentage of complicated sentences, however, was not affected by ceiling scores and would therefore serve as an adequate dependent variable.

Goal-Setting Scale. In order to obtain an overall goal-setting score that was considered a stable measure of goal-setting skills, a summed score was generated from the twelve items of this scale.

#### Analysis Procedure

As described in Methods under Data Analysis, analysis of variance on the raw data and analysis of variance on transformed data was performed side by side to determine the suitability of each of the procedures for examining the data in this investigation. Statistical tests performed in the univariate analysis tested the assumptions of normality and of homogeneity of variance. The residuals were analyzed to determine if assumptions of normality and homogeneity of variance were met. Results showed that the raw data violated the assumptions of normality and homogeneity of variance. Both of these assumptions are the basis of analysis of variance so an alternative to analysis of variance on the raw data was deemed necessary. The rank transformation procedure, which was discussed in the Methods Section, was used and ANOVA was performed on the ranked data. Examination of this procedure and the statistical test of normality and homogeneity of variance produced data that more nearly met the assumptions of normality and homogeneity of variance.

### Comparability of Groups at Pretest Level

To ascertain group comparability at the pretest level, analysis of variance on the ranked pretest scores was performed. The results showed there were no significant differences among groups at the pretest level on the dependent measures; Woodcock-Johnson ( $F(3,49) = .80, p > .05$ ), preference for challenge ( $F(3,48) = 1.03, p > .05$ ), curiosity/interest ( $F(3,48) = .65, p > .05$ ), percentage of complicated sentences ( $F(3,44) = .85, p > .05$ ), and goal setting ( $F(3,46) = .34, p > .05$ ). Table 5 reports the median, range and standard deviation as measures of central tendency and dispersion. This table provides a visual reference for ascertaining group comparability and all of the results suggest that the groups were comparable at the pretest level. Given the comparability of the groups on the demographic variables and on the pretest variables, it can be concluded that the groups in this investigation were comparable at the outset of this investigation.

### Testing the Hypotheses

Testing intervention effects (immediate differences). Analysis of variance on the ranked difference scores was performed to determine if immediate effects were different among groups.

Woodcock-Johnson Written Language. The pre/post difference on the Woodcock-Johnson Written Language Cluster yielded significant group differences ( $F(3,48) = 5.06, p < .05$ ). Further examination via apriori planned contrast showed that the contrast group scored significantly higher than the Targets/Strategies group, Targets Alone group and the Strategies Alone group. The Targets/Strategies group scored significantly higher than Targets Alone and Strategies Alone.

Table 5

Group Comparability at Pretest Level

Variable	Group 1 (Targets/ Strategies)	Group 2 (Strategy Alone)	Group 3 (Targets Alone)	Group 4 (Contrast)
<b>Woodcock-Johnson</b>				
Grade Score				
Median	4.65	5.7	5.3	4.8
SD	2.10	2.15	1.79	1.06
Range	2.7/11.4	2.9/9.5	2.8/9.5	3.6/6.2
<b>Harter Scale</b>				
Pref. for Challenge				
Median	2.66	2.66	2.58	2.5
SD	0.62	0.68	0.42	0.78
Range	2/4	1.66/4	1.66/3	1.16/3.5
<b>Curiosity/Inter.</b>				
Median	2.66	2.6	2.5	2.41
SD	0.69	0.35	0.53	0.54
Range	1.5/3.8	2/3.3	1.83/3.83	1.66/3.33
<b>Writing Strategies Theme</b>				
Percent Complicated				
Median	26.5	37	13	30.0
SD	17.13	15.2	21.20	17.09
Range	0/55	0/55	0/71	0/52
<b>Goal Setting</b>				
Median	3.08	2.91	2.79	3.08
SD	0.49	0.46	0.49	0.35
Range	2.25/3.75	2.41/3.83	2.16/4	2.25/3.25

Figure 5

Mean Rank Differences on Woodcock-Johnson

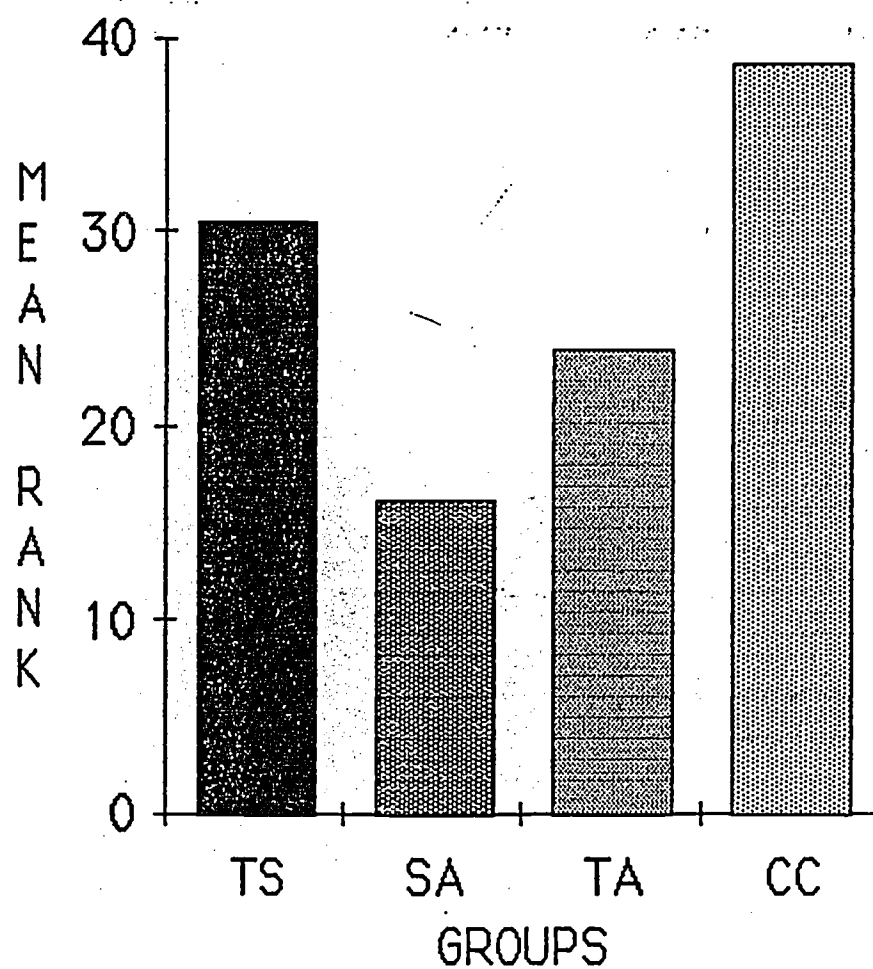


Table 6

Woodcock-Johnson Results  
Written Language Cluster

	Pretest MED(SD)	Posttest MED(SD)	Immediate Difference * MED(SD)
Group 1 Targets/Strategy	4.65(2.10)	5.3(2.84)	.09(1.31)
Group 2 Strategies Alone	5.7(2.15)	5.1(2.53)	-0.95(1.51)
Group 3 Targets Alone	5.3(1.79)	5.85(2.14)	0.45(2.01)
Group 4 Contrast	4.8(1.06)	6.0(1.55)	1.7(1.15)

\*p < .05



Table 7

Harter Scale Results  
Preference for Challenge Subscale

	Pre- test MED(SD)	Post- test MED(SD)	Follow-up MED(SD)	*Immediate Difference MED(SD)	*Follow-up Difference MED(SD)
Group 1 Targets/ Strategy	2.66(.62)	3(.54)	2.81(.47)	.16(.45)	-.33(.54)
Group 2 Strategies Alone	2.66(.68)	3(.48)	2.66(.65)	.08(.67)	0(.77)
Group 3 Targets Alone	2.58(.42)	2.58(.40)	2.5(.53)	0(.49)	0(.45)
Group 4 Contrast	2.5(.78)	2.66(.36)	3(.52)	.5(.65)	.08(.24)

\*p > .05

Table 8

Harter Scale Results  
Curiosity/Interest Subscale

	Pre- test MED(SD)	Post- test MED(SD)	Follow-up MED(SD)	*Immediate Difference MED(SD)	*Follow-up Difference MED(SD)
Group 1 Targets/ Strategy	2.66(.69)	3.16(.71)	2.75(.47)	.16(.75)	0(.49)
Group 2 Strategies Alone	2.6(.35)	2.66(.30)	2.66(.42)	.16(.43)	0(.39)
Group 3 Targets Alone	2.5(.53)	2.5(.32)	2.5(.55)	0(.57)	0(.38)
Group 4 Contrast	2.41(.54)	2.5(.64)	2.66(.50)	0(.70)	-.08(.48)

\*p > .05

Table 9

**Writing Strategies Theme Results**  
**Percent of Complicated Sentences**

	Pre- test MED(SD)	Post- test MED(SD)	Follow-up MED(SD)	*Immediate Difference MED(SD)	*Follow-up Difference MED(SD)
Group 1 Targets/ Strategy	26.5(17.1)	34.5(17.9)	33(26.7)	10(29.4)	1(22.7)
Group 2 Strategies Alone	37(15.2)	2.7(22.3)	40(18.0)	-20(22.8)	-5.5(28.0)
Group 3 Targets Alone	13(21.2)	30(32.0)	23(14.6)	6(34.5)	-7(33.4)
Group 4 Contrast	30.0(17.1)	30(21.0)	32(16.1)	13(19.1)	-4(9.12)

\*p > .05

Table 10

Goal Setting Scale Results  
Summed Score

	Pre- test MED(SD)	Post- test MED(SD)	Follow-up MED(SD)	*Immediate Difference MED(SD)	*Follow-up Difference MED(SD)
Group 1 Targets/ Strategy	3.08(.49)	2.79(.46)	2.75(.46)	-.08(.35)	0(.28)
Group 2 Strategies Alone	2.91(.46)	2.58(.59)	2.83(.37)	-.16(.33)	.12(.33)
Group 3 Targets Alone	2.79(.49)	2.70(.50)	2.75(.33)	-.12(.39)	0(.58)
Group 4 Contrast	3.08(.35)	2.75(.41)	2.83(.29)	-.16(.45)	.04(.42)

\*p > .05

The Targets Alone group scored higher than the Strategies Alone. The following mean ranks were obtained: Contrast group = 38.68, Targets/Strategy group = 30.52, Targets Alone group = 24.09, and Strategies group = 16.21. Figure 5 graphically depicts these differences.

The statistical procedure tested the mean ranked differences between groups, therefore the mean ranks are reported, but the mean ranks are not comparable to the means on the raw data. Examination of the medians in Table 6 reveal group differences on raw data. The median is reported as the measure of location since the mean is not as appropriate to use when performing analysis of variance on ranks.

Harter Scale. The subscales for the Harter Scale were analyzed. No significant differences were found among the four groups for the Preference for Challenge subscale ( $F(3,47) = 1.23, p > .05$ ). Results also showed that no significant difference was found among the four groups for the Curiosity/Interest subscale ( $F(3,47) = .41, p > .05$ ). These results are summarized in Tables 7 and 8.

Writing Theme. The percentage of complicated sentences in the writing strategies theme resulted in no significant group differences ( $F(3,44) = 1.22, p > .05$ ). Table 9 reports the results of the analyses on this variable.

Goal-Setting Scale. No significant group differences were found for the summed goal-setting score ( $F(3,45) = .072, p > .05$ ). Results for this variable are shown in Table 10.

The results from the analysis of this investigation suggest that the Contrast groups' written achievement showed more significant gains as measured by the Woodcock-Johnson above and beyond the other three

groups. The intervention used by the Targets/Strategy combination group produced significant gains in the students' written achievement as measured by the Woodcock-Johnson above and beyond Targets Alone and Strategies Alone.

Testing follow-up effects. The hypothesis being tested here is: at the 2 month follow-up, the combined treatment group will maintain its gain in performance in comparison to the other three groups. The difference scores between posttest and follow-up test were used as the dependent variable in determining long-term stability of differences obtained at the posttest level. The purpose of this analysis is to determine the maintenance of gain over time (2 months).

The scores were ranked and analysis of variance was performed on the ranked scores. Results showed no group differences on the Harter subscale, preference for challenge ( $F(3,38) = 1.009, p > .05$ ), and curiosity/interest ( $F(3,38) = .17, p > .05$ ). No significant differences were found for the writing strategies theme ( $F(3,38) = 1.25, p > .05$ ) and goal setting ( $F(3,38) = 1.16, p > .05$ ). Tables 7-10 also report the results of the follow-up analyses. Furthermore, results presented in Table 7 show that the groups did not differ in long-term effect and since the median is close to 0, the groups showed no difference between posttesting and follow-up testing. That is, any gains or losses on the posttest were maintained at the 2-month follow-up.

## CHAPTER 4

### Discussion

The purposes of this investigation were to determine the effects (immediate and follow-up), of an intrinsic motivation strategy combined with a writing competence training strategy on the written language achievement and motivation of learning disabled adolescents. The assumption of this study was that interventions that focus primarily on improving academic performance may prove less effective than placing emphasis on the motivation deficit. Two measures of written achievement and two motivation-related measures were administered to assess the students at pretesting, posttesting, and follow-up testing. These assessments were the basis of this investigation's analyses.

The results of this investigation will be discussed in terms of teacher effectiveness, potency of intervention, overlap (i.e., a measure of what's taught versus what's tested), classroom climate and class size.

### Summary of Results

The major findings of this study were that the contrast group made gains in written achievement as measured by the Woodcock-Johnson, that were significantly higher than those made by the other three treatment groups. In addition, the Target/Strategy group made gains in written language achievement as measured by the Woodcock-Johnson,

that were significantly higher than those made by Targets Alone and Strategies Alone. No significant differences among the groups were found on written achievement as measured by the writing strategies theme. No significant differences among the groups were found on the motivational related scales (Harter and Goal-Setting).

#### Treatment Effects (Immediate Differences)

Woodcock-Johnson written language cluster. The gains on the written language cluster made by the Contrast group, compared with the performance of the other groups, is considered the most striking result from this study. A variety of reasons are discussed as possible factors contributing to this unexpected finding.

Teacher effectiveness. Research-based effective teaching practices have been shown to contribute significantly to students' academic performance (Wyne, 1985 personal communication). Englert (1983) noted the significance of effective teachers in special education. This investigation suggests that the effectiveness of the teacher is a significant influence on student performance. The treatment facilitator for the Contrast group was rated the overall most effective teacher by the Carolina Teaching Performance Assessment System described in Chapter 2. Although the facilitator in the Targets Alone group was comparable with regard to effectiveness, clinical impressions of teacher/student rapport suggested a difference between the two. The postwriting samples of the students also served as an indicator of teacher rapport. The students in the Contrast group wrote a number of positive comments about the facilitator for that group. None of the other groups generated such comments. In fact, a number of negative comments were expressed about the other facilitators. Rapport was



considered to be a significant differentiating factor in this investigation because of problems with student cooperation. In essence, the Contrast facilitator was able to get more cooperation from the students because of the excellent rapport he had with them. This is a variable that should be included in future studies.

Potency of intervention. Although the hypotheses of this investigation were not confirmed, the results of this study do not necessarily discredit the potency of the Targets/Strategy combination approach. This investigation is not an adequate test of the Targets/Strategy approach to educating LD adolescents, because of a number of confounding variables that may have affected the results of this investigation. Teacher effectiveness, fewer students for the contrast group, unequal representation of males and females within the groups, gender of the treatment facilitator and the effects of classroom climate may have acted as confounding variables, which prevented an adequate test of the intervention's potency. Future studies should systematically control for these variables before an adequate test of the intervention's efficacy can be obtained.

Overlap (what's taught vs. what's tested). Overlap is the incorporation of a measure of the relationship between what has been tested and what has been taught (Leinhardt & Seewald, 1980). In essence, it is a procedure to determine the degree to which the teacher has covered the content included on a specific test.

The treatment facilitators at the end of the investigation were instructed to indicate for each item in each of the measures, whether or not they taught the content that item was testing. Results of these overlap measures indicated that punctuation and capitalization were

areas on the Woodcock-Johnson that were taught specifically by the two groups that employed the traditional writing program. Although these areas were mentioned in the learning strategies approach, they were not as heavily emphasized.

The learning strategies writing strand has four components called strategies, and the error-monitoring strategy emphatically stresses punctuation and capitalization. However, the error-monitoring strategy was not used in this investigation. The sentence-writing strategy, which was employed in this investigation, stresses the development of types of sentences. The development of types of sentences is not measured by the Woodcock-Johnson written language cluster. However, as the results indicated, when students improve in writing types of sentences, their punctuation, capitalization and spelling errors often decrease. This speculation seems to have been supported in this study in that the Targets/Strategies group made significant gains in written achievement above and beyond the Targets Alone group, which like the contrast group stressed punctuation and capitalization. It would be expected that the Targets Alone group would have done better than the Targets/Strategy group if the direct teaching of these components was the sole factor contributing to the gains made. However, given the fact that the Contrast group did significantly better, suggests that the direct teaching of these components may have made a difference, as assessed by the Woodcock-Johnson measure.

Classroom climate. Classroom climate in this investigation refers to the general tone of the class as it relates to student cooperation, student and teacher attitudes toward learning and motivational orientation. The role of classroom climate is the focus of many

investigations with handicapping populations (George, 1982; Conoley, 1981; Adelman & Taylor, 1983). Adelman & Taylor (1983) stressed the importance of an environment that would accommodate a wide range of interests, desires, and expectations as well as provide opportunities for a wide range of satisfactions. A positive environment would also systematically account for the importance of intrinsic and extrinsic motivation. A significant relationship exists between motivation, environment and educational program as it relates to enhancing the performance of LD students via intrinsic motivation strategies (Adelman & Taylor, 1983). If dissonance exists within this relationship, efforts to produce academic gain in LD students will be minimized.

The schools in this investigation were comparable with regard to population characteristics, however, clinical impressions of the classroom environments indicated two markedly different atmospheres. Students at one of the schools were very uncooperative which created a less positive environment for the purposes of this investigation. Uncooperative is referred to as students refusing to participate but being present and students whose absences were numerous. The less positive environment was also set up on a very extrinsically oriented system and this system conflicted with the intrinsic orientation of this study. This conflict may have also contributed to the lack of student cooperation.

The fact that 86 percent of the students in the Strategies Alone group came from the less positive environment may partially account for the lack of gain in achievement for students in that group. The facilitator for this group was rated as an average teacher and her

rapport with the students appeared lacking. In addition, the intervention used by this group did not specifically address lack of cooperation, which derives from motivation deficits, so efforts to gain cooperation were fruitless. The lack of cooperation that was present at the onset of this investigation persisted and gains in achievement were minimal.

Class size. Class size, the final point of discussion, may have been a confounding variable that contributed to the significant gains of the contrast group above the others. The N of 9 in the contrast group produced a lessening of power for the statistical test. The small number of students may have also facilitated more individualized instruction. Targets/Strategy, Targets Alone, and Strategy Alone had N's of 16, 16 and 14 respectively.

#### Nonsignificant Variables

The remaining results suggest that none of the four interventions produced significant differences on the variables of motivation (preference for challenge, curiosity/interest), percentage of complicated sentences and goal-setting skills. Tables 7-10 report the posttest medians and when compared to the pretest medians some differences are noted among the groups for the Harter Scale, Writing Theme and Goal-Setting. However, these differences are not statistically significant, therefore, intervention differences on these variables cannot be inferred from these data.

The group comparison results from each of these variables are discussed in the following sections.

Harter Scale. Intrinsic motivation is an elusive concept that often falls prey to semantics. Intrinsic motivation is often defined relative to standards of a particular discipline. Therefore, one must be careful not to say unconditionally, that intrinsic motivation was or was not changed without initially establishing a point of reference. The point of reference for this investigation was described in Chapter 1 as the need to feel competent and self-determining. However, whether or not the instrument chosen to assess motivation can adequately measure the concept as defined, becomes another issue of concern. This is not to say that the Harter Scale failed to assess motivation as referred to in this investigation, however, significant differences may not be apparent, when using the Harter Scale. This scale generated a number of negative comments from students concerning its "childish" oriented items. If this scale were more adolescent oriented, perhaps significant differences would be apparent.

Writing strategies theme. Scores on this dependent measure did not yield significant group differences but some improved changes in written achievement were apparent. Pretesting revealed that a number of students consistently produced incomplete sentences. After intervention many students improved to writing more complete sentences. The complete sentence variable could not be used for analysis, however, because a number of students reached ceiling at the pretest level. For those who did not reach ceiling at the pretest level, many reached it at the posttest level. The writing of the majority of the subjects was improved and an interocular analysis of the writing samples showed several trends. Those students who wrote very long themes with few complete sentences on the pretest wrote fewer sentences on the posttest

that were all complete and more complicated. Those who wrote mostly simple sentences on the pretest wrote fewer simple sentences and more complicated sentences on the posttest. Finally those students who generated very few, if any, sentences at the pretest level, generated at least six at the posttest level. The first score obtained from this measure comes from the first six sentences, therefore more writing themes were scorable at the posttest level.

Goal-Setting Scale. The results of the analysis on the goal-setting variable revealed non-significant differences among the four treatment groups. Closer examination of the medians presented on Table 10 in Results revealed that all of the groups decreased in skills attained, as measured by the Goal-Setting Scale.

The Goal-Setting Scale, developed for this investigation, may not have been a valid measure of goal-setting skills. The scale is a self-reported assessment of skill attainment which may not have adequately reflected the gains made by the students. Tollefson (1981) used a similar scale in her investigation of goal-setting skills of LD adolescents. An analysis of scores from that scale also yielded non-significant results and the pretest and posttest mean scores did not change for either the experimental or control group. Given the outcomes of both of these investigations, future studies should consider developing a system to assess the application of goal-setting skills in the classroom.

### Follow-up Differences

The statistical analysis revealed that the difference between posttesting and follow-up testing did not differ across all groups for all variables. Furthermore, an inspection of the medians showed that this consistent difference was 0 and therefore the level at posttesting was maintained at follow-up testing.

It is not enough to increase student performance for the moment. Maintenance of skills over time is an essential element in determining the efficacy of a strategy. Deshler and Schumaker (1984) consider this element essential to students' generalizing skills taught in the resource room setting.

### Summary of Differences

It appears that a number of factors contributed to the results of this study and these results did not lead to a confirmation of the investigation hypotheses. The Contrast group had the most effective teacher, fewer students and a greater measure of overlap (i.e., what's taught and what's tested). Furthermore, the gender of the treatment facilitator in relation to the equal representation of gender within groups may have influenced the results. Each of these variables, independently or jointly, may have confounded the results of this investigation. In future studies, these confounding sources of variability should be adequately controlled.

### Implications

This investigation has implications for the field of learning disabilities. Because of the extreme difficulties of implementation, researchers often ignore the need for intervention research within the "real life" resource room setting. However, to respond to the needs of practitioners and LD students, researchers must continue to accept this challenge. To determine the effectiveness of an intervention, while making adjustments to the daily expected and unexpected problems of LD high school students, gives practitioners a more realistic expectation of interventions designed by researchers for the LD population in the resource classroom. Single subject design studies are essential to this process but, at some point, the idealism of working one-on-one in very controlled circumstances is of secondary importance to what really happens in the resource room on a daily basis. The role of classroom environment, for example, in the achievement of LD adolescents may be difficult to examine in single subject design research.

In the opinion of the investigator, classroom environments appeared to have played a significant role in the cooperation of the students in this study. The resource classes from the two schools were very different with respect to motivational focus. The less positive environment was very extrinsically oriented. Classroom management was maintained via extrinsic rewards such as points for grades. When these points were removed, for the purposes of this study, student cooperation/participation was reduced to a minimum. This conflict of orientations caused numerous problems that may have affected the results.



The author contends that the uncooperativeness of the students after extrinsic rewards were removed, supports the importance of carefully examining extrinsically controlled environments for LD students. These environments may produce very dependent LD adolescents who could have difficulty succeeding as productive members of society. The "undermining" effect of extrinsic rewards appears to be a robust and a powerful phenomenon (Adelman & Taylor, 1983, p. 175), and the implications for teachers in the classroom are tremendous.

The need for more emphasis on training effective teachers appears to be another implication for this study. Although the Contrast group had the best teacher and made significant gains above the other groups, this study did not confirm that teacher effectiveness was the factor that made the difference. The N of 9 for the Contrast group may have confounded the results. However, teacher effectiveness may have influenced the outcome. The teachers in this study represented the "real world" as it relates to the varied levels of effectiveness. The results indicated a support of the role teachers can play in facilitating academic achievement gains. Given these results, which are also supported in the teacher effectiveness literature (Medley, 1979), training effective teachers is essential to improving the educational programs for LD adolescents. Deshler (1985, personal communication) indicated that regardless of how effective an intervention strategy is, the overall efficacy of that intervention is dependent upon the effectiveness of the teacher and that underlines the need for institutions of higher learning to produce well-qualified and effective teachers.

There exists a need for interventions that enhance the academic performance of LD adolescents by placing an emphasis on intrinsic motivation deficits. The focus of this study was to test an intervention developed specifically to enhance academic performance via a combined approach of competence skill training and intrinsic motivation enhancement. Given the presence of confounding variables, an adequate test of this intervention approach could not be made. However, this study does represent an initial attempt to examine strategies which may be useful for motivating LD adolescents. Further research is needed to provide a more adequate test of the Targets/Strategy combination approach.

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## APPENDIXES

# APPENDIX A

## In the Classroom Pupil's Form

Name \_\_\_\_\_ Age \_\_\_\_\_

Grade \_\_\_\_\_ Sex \_\_\_\_\_ F \_\_\_\_\_ M Birthdate \_\_\_\_\_  
mo - day - year

### Sample Questions

	Really True for Me	Sort of True for Me				Sort of True for Me	Really True for Me
a)	_____	_____	Some students would rather go outdoors in their spare time	BUT	Other students would rather watch TV.	_____	_____
b)	_____	_____	Some students like hamburgers better than hot dogs	BUT	Other students like hot dogs better than hamburgers.	_____	_____
1)	_____	_____	Some students like hard work because it is a challenge	BUT	Other students prefer work that they are sure they can do.	_____	_____
2)	_____	_____	When some students don't understand something right away they want the teacher to tell them the answer	BUT	Other students rather try and figure it out by themselves.	_____	_____
3)	_____	_____	Some students work on problems to learn how to solve them	BUT	Other students work on problems because you're supposed to.	_____	_____
4)	_____	_____	Some students almost always think that what the teacher says is OK	BUT	Other students some- times think their own ideas are better.	_____	_____

5)	_____	_____	Some students know when they've made mistakes without checking with the teacher	BUT	Other students need to check with the teacher to know if they've made a mistake.	_____	_____
6)	_____	_____	Some students like difficult problems because they enjoy trying to figure them out	BUT	Other students don't like to figure out difficult problems.	_____	_____
7)	_____	_____	Some students do their schoolwork because the teacher tells them to	BUT	Other students do their schoolwork to find out about a lot of things they've been wanting to know.	_____	_____
8)	_____	_____	When some students make a mistake they would rather figure out the right answer by themselves	BUT	Other students would rather ask the teacher how to get the right answer.	_____	_____
9)	_____	_____	Some students know whether or not they are doing well in school without grades	BUT	Other students need to have grades to know how well they are doing in school.	_____	_____
10)	_____	_____	Some students agree with the teacher because they think the teacher is right about most things	BUT	Other students don't agree with the teacher sometimes and stick to their own opinion.	_____	_____
11)	_____	_____	Some students would rather just learn what they have to in school	BUT	Other students would rather learn about as much as they can.	_____	_____
12)	_____	_____	Some students like to learn things on their own that interest them	BUT	Other students think it's better to do things that the teacher thinks they should be learning.	_____	_____
13)	_____	_____	Some students read things because they are interested in the subject	BUT	Other students read things because the teacher wants them to.	_____	_____
14)	_____	_____	Some students need to get their report cards to tell how they are doing in school	BUT	Other students know for themselves how they are doing even before they get their report card.	_____	_____

15)	_____	_____	If some students get stuck on a problem they ask the teacher for help	BUT	Other students keep trying to figure out the problem on their own.	_____	_____
16)	_____	_____	Some students like to go on to new work that's at a more difficult level	BUT	Other students would rather stick to the assignments which are pretty easy to do.	_____	_____
17)	_____	_____	Some students think that what the teacher thinks of their work is the most important thing	BUT	For other students what <u>they</u> think of their work is the most important thing.	_____	_____
18)	_____	_____	Some students ask questions in class because they want to learn new things	BUT	Other students ask questions because they want the teacher to notice them.	_____	_____
19)	_____	_____	Some students aren't really sure if they've done well on a test until they get their papers back with a mark on it	BUT	Other students pretty much know how well they did even before they get their paper back.	_____	_____
20)	_____	_____	Some students like the teacher to help them plan what to do next	BUT	Other students like to make their own plans for what to do next.	_____	_____
21)	_____	_____	Some students think they should have a say in what work they do in school	BUT	Other students think that the teacher should decide what work they should do.	_____	_____
22)	_____	_____	Some students like school subjects where it's pretty easy to just learn the answers	BUT	Other students like those school subjects that make them think pretty hard and figure things out.	_____	_____
23)	_____	_____	Some students aren't sure if their work is really good or not until the teacher tells them	BUT	Other students know if it's good or not before the teacher tells them.	_____	_____
24)	_____	_____	Some students like to try to figure out how to do school assignments on their own	BUT	Other students would rather ask the teacher how it should be done.	_____	_____



25)	_____	_____	Some students do extra projects so they can get better grades	BUT	Other students do extra projects because they can learn about things that interest them.	_____	_____
26)	_____	_____	Some students think it's best if they decide when to work on each school subject	BUT	Other students think that the teacher is the best one to decide when to work on things.	_____	_____
27)	_____	_____	Some students know they didn't do their best on an assignment when they turn it in	BUT	Other students have to wait til the teacher grades it to know that they didn't do as well as they could have.	_____	_____
28)	_____	_____	Some students don't like difficult schoolwork because they have to work too hard	BUT	Other students like difficult schoolwork because they find it more interesting.	_____	_____
29)	_____	_____	Some students like to do their schoolwork without help	BUT	Other students like to have the teacher help them do their schoolwork.	_____	_____
30)	_____	_____	Some students work really hard to get good grades	BUT	Other students work hard because they really like to learn things.	_____	_____

## APPENDIX B

Directions: Circle the number that best describes what you do in school.

1 = I never do what this statement says.

2 = I sometimes do what this statement says.

3 = I do what this statement says a lot of the time.

4 = I always do what this statement says.

---

1. When I have something to do, I set a goal.	1	2	3	4
2. I ask myself what I have to do, before I begin my work.	1	2	3	4
3. After I complete my school work, I look over what I have done to be sure I did everything I said I needed to do.	1	2	3	4
4. I try to complete as many assignments as I can because the more I complete the better grades I will get.	1	2	3	4
5. I control how well I do in school.	1	2	3	4
6. When I have something to do, I plan how I will go about getting it done.	1	2	3	4
7. I complete my schoolwork because it makes me feel successful.	1	2	3	4
8. I think about how I have done my work in the past before I begin working on something new.	1	2	3	4
9. If I do not do well on my work, I go over what I did and try to find out what I did wrong.	1	2	3	4
10. I complete my school work because I have to in order to pass.	1	2	3	4
11. I set aside a time to work on my school work.	1	2	3	4
12. I try to make sure my work is done correctly because that will improve my grades.	1	2	3	4

---

## APPENDIX C

### CAROLINA TEACHING PERFORMANCE ASSESSMENT SYSTEM OBSERVATION GUIDE

#### 1. MANAGEMENT OF INSTRUCTIONAL TIME

- 1.1 Materials Ready
- 1.2 Class Started Quickly
- 1.3 Gets Students On-Task
- 1.4 Maintains High Time-On-Task

#### 2. MANAGEMENT OF STUDENT BEHAVIOR

- 2.1 Rules--Administrative Matters
- 2.2 Rules--Verbal Participation/Talk
- 2.3 Rules--Movement
- 2.4 Frequently Surveys Visually
- 2.5 Stops Inappropriate Behavior

#### 3. INSTRUCTIONAL PRESENTATION

- 3.1 High Rate Of Success
- 3.2 Begins With Review
- 3.3 Introduces Lesson
- 3.4 Summarizes Main Point(s)
- 3.5 Lesson Understandable
- 3.6 Assignment Clear
- 3.7 Provides Relevant Examples
- 3.8 Speaks Fluently, Precisely
- 3.9 Transitions Between, Within
- 3.10 Brisk Pace

#### 4. INSTRUCTIONAL MONITORING

- 4.1 Assesses Performance--All
- 4.2 Checks During Independent Work
- 4.3 Maintains Deadlines, Standards

#### 5. INSTRUCTIONAL FEEDBACK

- 5.1 Feedback--In-Class
- 5.2 Affirms Correct Answer Quickly
- 5.3 Sustaining Feedback

group for the study of

APPENDIX C

effective teaching

The School of Education  
The University of North Carolina at Chapel Hill  
Peabody Hall 037A  
Chapel Hill, North Carolina 27514

RATING SCALE:

RATING	PERCENTILE
5	90
4	70
3	50
2	30
1	10

CAROLINA TEACHING ASSESSMENT SYSTEM  
SUMMATIVE RATING FORM

TEACHER	SCHOOL	SUBJECT	GRADE	DATE	OBSERVER

Circle the appropriate rating for each function and write any additional comments or clarifications in the space provided under each function.

1. MANAGEMENT OF INSTRUCTIONAL TIME

1 2 3 4 5

2. MANAGEMENT OF STUDENT BEHAVIOR

1 2 3 4 5

3. INSTRUCTIONAL PRESENTATION

1 2 3 4 5

4. INSTRUCTIONAL MONITORING

1 2 3 4 5

5. INSTRUCTIONAL FEEDBACK

1 2 3 4 5

OBSERVER'S SIGNATURE \_\_\_\_\_ DATE \_\_\_\_\_

TEACHER'S SIGNATURE \_\_\_\_\_ DATE \_\_\_\_\_

Appendix D

**TARGETS**

A SYSTEMATIC INSTRUCTIONAL STRATEGY

DESIGNED TO ENHANCE INTRINSIC MOTIVATION

Deborah Harris Fewell

University of North Carolina at Chapel Hill

November, 1984

## TARGETS

Teachers and parents often express that students can do much better if they only wanted to. Adelman, (1983), recognizes that there is no way to know what people are capable of unless they are motivated to do well. A motivated person can do much more than anyone would think possible, and if he is not motivated, his performance may not be an indication of his ability. Therefore interventions that focus primarily on improving performance may prove less effective than placing emphasis on the motivational deficit (Adelman, 1978).

TARGETS is a systematic instructional strategy designed to enhance the intrinsic motivation of learning disabled adolescents. The complete strategy encompasses three major phases. Phase "P" prepares the environment, teacher, student and parent for an harmonious interaction that will serve to facilitate and maintain the educational benefits gained from this strategy. Phase "A" teaches the LD adolescent how to organize himself in order to "attack" challenges that he may confront in school first and then in other environments. Phase "C" equips the student with learning strategies that will allow a student to be competent and enable him to conquer challenges which will lead to feelings of self determination. As a result of developing these feelings of competence and self determination within the student, his intrinsic motivation will be enhanced (Deci, 1975).

### Special Note:

For the purpose of this research, only Phase "A" will be examined in its entirety. Although parts of Phase "P" will be included, it will not be used in its entirety in order to control for all possible contributing variables. Phase "C" is also being used but not for the purposes of examining its efficacy. This is because Phase "C" is Alley, Deshler & Schumakers learning strategies which have already been validated for its effectiveness. Phase "A", however is hypothesized to be a significant contribution to the learning strategies and is therefore being examined to establish support for this hypothesis.

### General Description:

Phase A teaches goal setting skills that will allow the student to direct his behavior, control what happens, make some choices about what happens and feel some

personal causality for what happens. Each of these behavioral outcomes are essential to enhancing intrinsic motivation in students (Adelman, 1983; Deci, 1975; deCharms 1976). Goal setting skills will be taught in three main parts that have been grouped to represent the letters in the word TARGETS. This mnemonic was designed to assist students and teachers in recalling the procedures for goal setting.

Given the documentation of goal setting difficulties in LD adolescents and the demonstrations of significant gains in academic performance of LD adolescents when goal setting strategies are applied, it appears that goal setting strategies are the key to enhancing intrinsic motivation in LD adolescents (Robbins & Herway, 1977; Gardner & Gardner, 1978; Deshler et. al., 1980; Tollefson et. al., 1981, 1982; Seabaugh & Schumaker 1983).

The format for Phase A will provide instructions at each step in response to the following:

1. What your goal is.
2. What you need.
3. How to prepare.
4. How much time to allow.
5. What is criteria for mastery.
6. What to do.

The format in Phase "P" presents a rationale, and a guiding question. It is more general since actual instruction does not take place. The format for Phase "C" is similar to Phase A and is provided by Alley, Deshler & Schumaker's learning strategies package.

The major portion of this strategy is designed for group presentation during lesson instruction. However, activities must receive individual attention in order to ensure tasks are mastered. The ultimate goal of this strategy is to produce habitual and independent goal setters who plan appropriate behaviors and follows through on those behaviors in order to attain their goal.

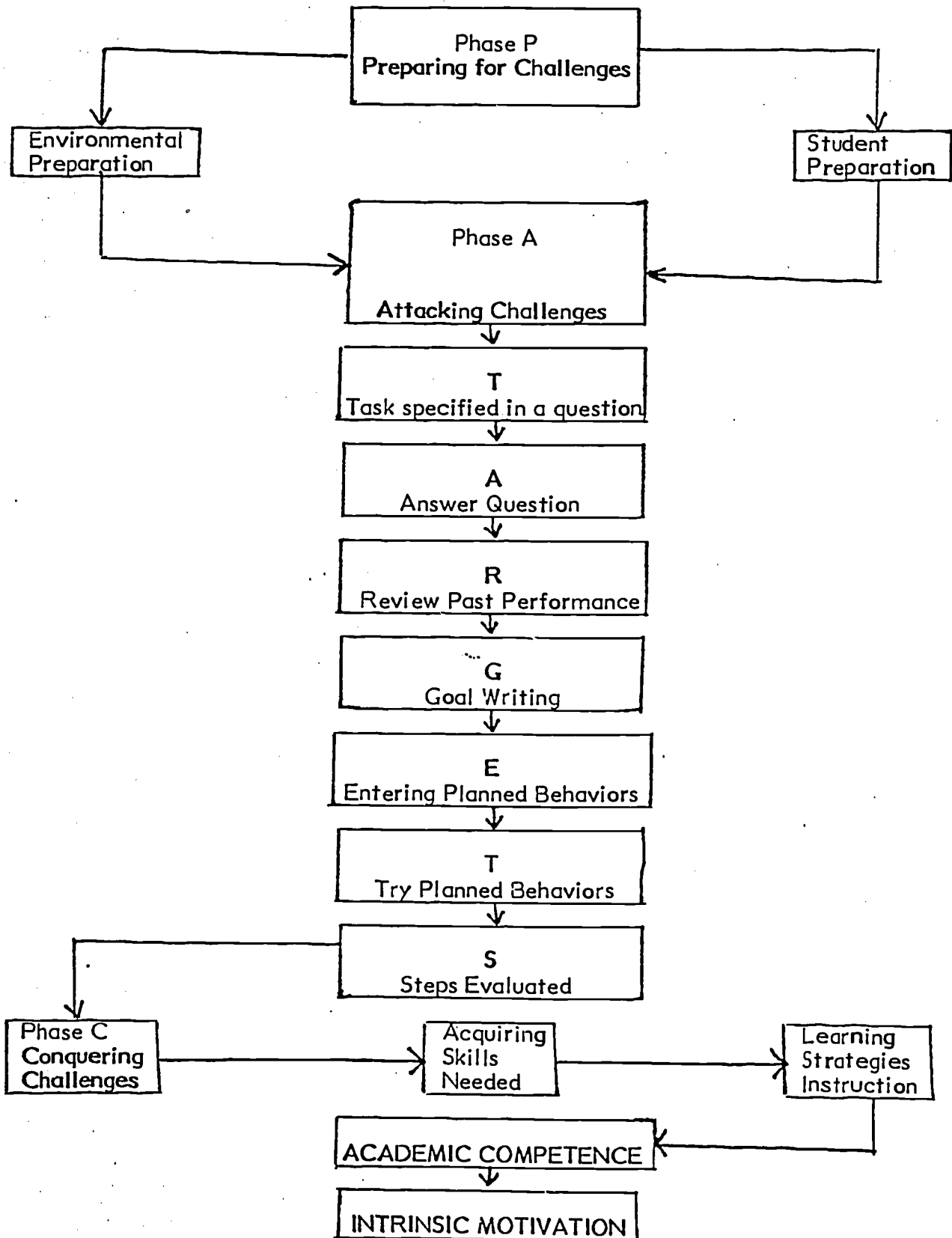
In summary, it is important to note that the will to learn is an intrinsic motive, one that finds both its source and its reward in its own exercise (Adelman & Taylor 1983; Deci, 1975). In striving for optimum efficacy, it must be remembered that the efficacy of any strategy for increasing performance by enhancing motivation is directly related to both the potency of the strategy and the initial level of motivation to perform (Adelman & Chaney, 1982). It is believed that this strategy will prove valid and reliable in enhancing intrinsic motivation in LD adolescents and improving academic performance.

Table 1 schematically depicts TARGETS.



Table 1

TARGETS (Schematic Representation)



TARGETS

105

Phase "P"  
Preparing for Challenges

**Step 1**  
**Environmental Preparation**

**Rationale**

Adelman, (1983) asserts that the learning environment should be designed in order to accommodate a wide range of motivational and developmental differences. Learning is often stimulated by environmental cues. If the environment does not offer an appropriate match for the learners interest, the students may not feel he has a choice of new learning experiences. In addition, the absence of choice may cause the individual to feel he must do what has been externally directed and he therefore feels no personal causality for the experience. Personal causality is an essential element in intrinsic motivation (Deci, 1975, Adelman, 1983; de Charms, 1976). Therefore, the environment should present new options for direction that can be chosen by the student. The environment should also be a daily model of harmony and organization. The environment sets the stage for what follows. Therefore, the classroom environment must be ready to teach.

**Guiding Question:** Is the classroom ready to teach?

**Procedures:**

1. Arrange room to convey harmony and organization
  - a. Display calendar of events
  - b. Materials in centers should be prepared in advance and directions displayed.  
Reflect organization
  - c. Prepare bulletin boards with "I Can" messages and boards that reflect goal setting strategies
2. Individual study cubicles should be available
3. Establish challenging centers that will encourage exploration and offers opportunity for choice of challenging and interesting activities. (Example: computer center, sports reading center)
4. Express warmth in arranging furniture (Example: teacher's desk near the students, using plants etc.)

**Step 2**  
**Student Preparation**

**Rationale**

Deci, 1980 emphasizes that in order for a person to feel competent and self determining, he needs to have an understanding of why he is doing something. For the LD student, this is an essential step that should be taken at diagnosis and placement but is often overlooked. It is amazing to talk with LD students who have an extremely vague idea of why they are placed or what having a disability means. It is no wonder many LD students become complacent with no apparent direction. They have not been given any and have not had a say in what should take place in their educational experiences. Deci, 1975, states that when people have some say about what they will do and how they will do it, they become ego involved and committed to doing it. Therefore, the purpose of any program, should be clearly expressed before beginning instruction. This would serve to allow a person to choose whether or not he wants to participate and will also aide in perceiving appropriate end states. He will know what to work toward if he should choose to participate.

(Note: This step is only to ensure student understands his resource placement. Explanations for instructional programs will be given prior to commencing in order to obtain a commitment from the student)

**Guiding Question:** Does the student know why he receives services and the purpose of the resource class.

**Procedure:**

Conduct a "heart-to-heart" session with the students

1. Define learning disabilities
2. Give notable examples e.g. Rockefeller
3. Discuss their feelings about the program and share some experiences
  - a. Role playing activities may help to express their concerns
  - b. Open ended examples may also help
4. Discuss differences in people in general, noting that we all must adjust according to our individual differences
5. Discuss controlling our disabilities instead of being controlled, emphasizing the power in controlling what can't be changed.

Discuss goals and purposes of program

1. Express teacher expectations (class, behavior)
2. Explain resource teacher's role as a facilitator, liaison, guide, support person assisting the student in performing to his potential.

Phase "A"  
Attacking Challenges

Lesson 1

What your goal is:

To provide students with a description of the following:

- a. rationales for learning TARGETS.
- b. definitions of terms.
- c. benefits they can expect from TARGETS.
- d. commitment needed.

What you need:

- a. writing surface (e.g. chalkboard, posterboard, easel pad, blank transparencies, paper).
- b. writing implement appropriate for chosen writing surface (e.g. chalk, colored pens).
- c. overhead projector and screen (if using transparencies).
- d. transparency/charts #1-7.
- e. student commitment sheets (page 1 in Lesson Activity).
- f. class activity materials.

How to prepare:

- a. Make a copy of Trans/charts. If you are using overhead copies of the Trans/Charts, make them prior to instruction. Otherwise, use paper copy which you can easily use for reference as you present the information to the students.
- b. Gather the other listed materials.
- c. Familiarize yourself with necessary information. Read lesson instructions provided in the "What to do" step. Pay close attention to the NOTES enclosed in parenthesis.

How much time to allow:

Approximately 15-20 minutes

What is the criteria for mastery:

Signed Student Commitment

What to do:

NOTE: (We are presenting an instructional package to these students that will enhance their intrinsic motivation and will consequently produce significant gains in their academic performance (specifically, written language achievement in this study). Before instructing the students there are some basic steps you must follow in order to ensure the student will "buy" the package and commit himself to it. There are five basic steps in lesson one. Step 1 is to gain the attention of the student. Step 2 is to arouse interest in the student. Convincing the student of the programs personal benefits,

producing a desire to invest in the program, and finalizing the "deal", represents steps 3, 4, and 5 respectively (Whiting, 1978).

Human relation skills should be stressed and practiced throughout this instruction. That is, the teacher must be genuinely interested in the student's interests and needs. Some other human relation skills to maintain are:

- a. The teacher should maintain eye to eye contact.
- b. The teacher should use students names often.
- c. The teacher should be positive about the program.
- d. The teacher should maintain a voice level that is exciting and enthusiastic.
- e. The teacher should always employ the "Feel, Felt and Found Method" in response to an objection. That is if an objection is expressed, teacher should respond in a manner such as: "I can appreciate the way you feel. Many have felt that same way. After trying this procedure many have found it to be very useful (Whiting, 1978).

### 1. Gain Students Attention

Say - I have something that you may be interested in because it will help you do better in school or will help you to accomplish many of the things you want to in life.

### 2. Arouse Interest

Note: (In this section you want to be sure to ask three types of questions; a personal question, a problem question and a payout question. Always begin with a personal question).

Say - What are your feelings about school. What does school mean for you. (The point is to ask a personal question that you can tie into a problem question in order to establish a need).

Class Activity - Before asking the problem question, prepare to use the following format on the board or easel so that you can write the students responses down.

Big Problems  
in School

Suggested Ways  
To Solve Problems

Differences  
It will Make

Benefits

### Problem Question

Say - What do you see as being a big problem for some students in school? (Write down.)

Say - Can you suggest ways to solve these problems. (Allow this to be brainstorming responses from the group.)

### Payout Question

Say – What differences do you think solving this problem would make? How would it benefit a person to solve these problems? (These responses should also be group brainstorming.)

NOTE: (When discussing some problems student's may have, be sure to offer writing as a problem that plagues many, if no one mentions it. This will help set the stage for later.)

### 3. Convince Student

Say - You have told me that student's have problems (Name a few) and it would be beneficial to improve in those areas. I have a program that will improve your (List a problem) Johnnie and your (Name a problem) Michael ... if you are serious about wanting to make a change. This program is called TARGETS.

The main component in the program is teaching students how to set goals and plan behaviors to reach those goals. We will talk about why that's important a little later. But right now, let me show you some facts about how TARGETS has benefitted some LD students I know just like yourself. These are not made up examples. They are very real and true. We gave a group of ten students an English writing assignment to study for one week.

(Show Trans/Chart #1)

Say - Five of the students were taught to use TARGETS or set goals and plan behaviors to reach those goals. The other five just studied as they normally would. At the end of the week, all of the students were given the same test.

(Show Trans/Chart #2)

Say - All of the students using TARGETS reached mastery on the test. The other five did not. Mastery was 80 % or above.

(Show Trans/Chart #3)

Say - The amazing thing about these results however was that those students the teacher felt would not do well reached mastery if they used TARGETS.

(Show Trans/Chart #4)

Say - Those students the teacher considered the best students did not reach mastery if they did not use TARGETS.

(Show Trans/Chart #5)

Say - This chart shows you the actual results of the students. TARGETS can help you be at the top of the charts too. I have another example of a student who was being taught to write sentences correctly so he could improve his writing. When he began, he felt he could not do the work no matter what. I'm sure some of you feel that way at times also. Anyway he was not reaching mastery on the first trials and did not ever get 100 % mastery until he started using TARGETS. Let me point out that there were times he did not reach 100 % mastery after he began using TARGETS but when he evaluated his behaviors, he was able to see exactly what he didn't do and was able to make a change in order to reach 100 % on the next lesson. TARGETS allowed this student to see how he can make a difference in improving his work. For the rest of his lessons, the student stopped saying, "I can't do it" and he reached mastery on everything he did.

(Show Trans/Chart #6)

Say - This is a record of his progress. Note the differences.

Class Activity - Ask - Why do you think **TARGETS** or setting goals helped these students and how can it help you? (Write and display responses).

(Show Trans/Chart #7)

Say - These are some other points brought out by students who have used **TARGETS** (Read from Trans/Chart)

After Activity say

The whole point is that **TARGETS** or goal setting will teach you how to be in control of what goes on with you and be in control of the situation. It gives you a say in what happens and when you have something to say about what happens with you, you learn more and feel better about what you have done because you are committed.

Let me ask you a question: How does it make you feel when someone tells you what to do? Does that make you want to do it? (Wait for responses). When you decide to do something on your own, how do you feel about doing it. Right, you feel more like doing it. Why do you think you feel more like doing something when you decide what it is as oppose to someone else deciding what to do? The main reason is because you have had a say in what happens to you and how it happens.

Having something to say about what happens commits you to a task and gives you control over the situation or the outcome. However, if you lose that control you can't have a say in what happens to you and how they happen. For example, if you choose to improve your grades in English, then take the appropriate steps to do so e.g. studying more, asking for help if you need it, completing assignments and etc., you will more than likely improve your grades because of what you have done. You stayed in control. But if you decide not to improve your grades regardless of the need and don't take the appropriate steps to do so, someone else like the teacher or your parent will begin trying to make you improve your grades. They don't want to see you fail, so they tell you when to study, how to study, what steps to take and other such things to help you improve. You may then begin to feel like everyone is telling you what to do as if you are not smart enough to do it on your own. A lot of times, students then begin to reject what the teacher or parent is saying and refuses to do the work. This then causes them to fail and makes them even more frustrated.

These feelings and many others result from a person not being in control of what happens with him. You can be assured if you don't take control, someone else will. However, it is much more beneficial and less troublesome if you are the one in control. Being in control commits you to your task because you have decided the task based on your needs. You then begin to be successful because of what you do and not what others tell you to do. **TARGETS** will show you that regardless of your disability, if you set goals and plan behaviors to reach those goals, you will be successful because you will be in control.



Say - Based on what we have said, what do you think about TARGETS. (Allow time for responses and if a discussion develops, follow through.)

Say - Do you think TARGETS is worth your committing yourself to learning how to use it. (If there is an objection, be sure to use the feel, felt, found method to responding.) (If positive signs of commitment are given then proceed)

Say

I will teach you all about TARGETS beginning with our next session but until then, let me leave you with something to think about.

#### 4. Desire Establishment

Say - I want you to picture with me for a moment three months in the future. I see confident young people who have improved tremendously in school. Johnnie has said he wants to improve in (Name one) because it will benefit him (Name one). Michael has ... and so on. If you decide to invest in this program, I can see you three months from now, confident that your assignments are well done and complete which will therefore improve your grades.

Based on what you decide in the next few minutes will decide whether or not you will be in this picture. Before you decide however, remember that there are many reasons a person may hesitate to make such a commitment. Some reasons students give are: 1. I am not used to doing things this way. 2. That takes too much time. 3. It's more work.

On the other hand what makes a number of students decide in favor of TARGETS are the benefits involved e.g. the ones you have listed for yourself. (Name a few). Now I am asking you, which means the most for you. (Pause). I am going to pass out some commitment sheets while you are thinking about what we have said. If you have decided that TARGETS will benefit you, I want you to sign your name on the line. Your signature will be saying you are convinced that TARGETS is worthwhile so you are committing yourself to learn to use it and will give it your best effort.

#### 5. Close the Deal

Say - I know you have made a very wise decision, one that will pay off for you the rest of your life. Just remember, starting off may be a little awkward and unusual but the more you use TARGETS, the more it will become a part of you and before you know it, TARGETS will be a habit that will allow you (or call students name) to be in control of what happens to you. I Guarantee It!

NOTE: (It is important to remember that Step 1 may have to be integrated throughout in the form of "pep talks" in order to keep students' interest aroused).

## Thinking Stage

### Lesson 2

#### What your goal is:

To instruct students in:

- a. task specification for goal setting.
- b. answering the specifications with "I need to" statements.
- c. reviewing past performances as guideline to setting goals.

#### What you need:

- a. writing surface.
- b. writing implement.
- c. overhead projector and screen (if using transparencies).
- d. Transparency/Charts #8-10.
- e. Lesson Activities (Page 2 in Lesson Activity).

#### How to prepare:

- a. Make a copy of Trans/Charts.
- b. Gather other listed materials.
- c. Familiarize yourself with necessary information.

#### How much time to allow:

Approximately 50 minutes on 1 class session.

#### What is criteria for mastery:

Mastery on each lesson activity, Teacher judgement.

#### What to do:

NOTE: (Please realize that this is new for a lot of students and patience is imperative. That is, what may seem simple to us may be extremely difficult for the LD adolescent. It is also important that you always serve as a model of what you teach. For example, in preparing for class, make your goal setting obvious.

##### 1. Review Commitment

Say - Each of you have made a commitment to learn TARGETS. That decision will benefit you for the rest of your life. TARGETS will teach you how to be in control. Today, we are going to start preparing you so that you can begin reaping some of the benefits we have discussed. TARGETS will be taught in three parts and each of the letters in the word TARGETS stands for a step you will need to learn.

##### 2. Present General Idea

Before getting into the lesson, let's do an ice breaker activity. Say - Everyone usually starts the day with a million things to do. I want you to write down everything you need to do today. Try to write at least five things, but do not

write more than ten. When you are finished, put your pencil down. (After all have finished say) Now I want you to number those things in order of importance. That is, what needs to be done first and etc.

(After that is completed share some with the class and say.) Whether you realize it or not you have just written 5-10 goals for today and it really did not take you very long. This was done to give you an idea of what we are going to be doing. Although TARGETS is more specific than just writing down what you have to do, the first basic steps are to decide what you need to do. As I stated in our first meeting, the main component in TARGETS is Goal Setting. Goal Setting is basically saying, what you going to do. Goal Setting can be used in all you do but now we are going to concentrate on educational uses.. After you see how well it works, you will use it in all you do. It will become a habit.

### 3. Present overview of TARGETS

(Show Trans/Chart #8) - Say - There are seven steps to TARGETS. They are:

T = Task specified with a question.

A = Answering question with "I need to" statement.

R = Review past performance.

G = Goal writing.

E = Entering planned behaviors (on goal sheet).

T = Trying planned behaviors.

S = Steps evaluated.

These seven steps are the key to you being in control. These seven steps will be taught in three stages. Stage one is the **thinking stage** and includes steps "T" "A" "R". Stage two is the **writing stage** and includes steps "G" "E". Stage three is the **applying stage** and includes Steps "T" "S". The three letter mnemonic TWA (as in the airlines) should help you remember the three stages. (Show Trans/Chart #9).

An important point to remember is that you will have to think, write or apply in all of the stages but where thinking, writing or applying is specified as the stage indicates that it is emphasized more during that particular or stage.

### 4. Describe Step T

Say T stands for task specified with a question. This simply means that you take a few minutes to think about what you have to do and ask yourself, what do I have to do? This is exactly what we did in our beginning activity. It doesn't take much time. Remembering to take the time to do it before you begin any task is very important. Remember (Show Trans/Chart #10) ask yourself what you need to do before starting a task.

There are several ways you can determine what you have to do, and then you must decide what you need to do.

1. Sometimes a teacher will tell the entire class what is expected. You then must decide what you need to do.
2. Sometimes you will be able to read what is expected for an activity.
3. Sometimes you can tell what is expected based on what your classmates are doing.
4. Sometimes you will know what is expected based on past experiences.

#### ASK:

1. What does "T" stand for?

2. When is it important to ask yourself what you have to do.
3. What are some ways you can determine what you need to do.

5. Describe Step A

Say - This step is connected to Step T because you are answering the question you have asked yourself in step T. In answering this question, it is always important to begin your response with "I need to" ... this is important because it helps you remember that your answer to the question is based on a need. At this step, it is important that you jot down these needs as you respond to the question so that they can better serve to help you recall your needs in order to write goals.

ASK:

1. You should begin your answer in step A with \_\_\_\_\_
2. Why is it important to jot down the needs you state in response to the question, what do you need to do.

6. Describe Step R

The last step in the thinking stage is "R" which stands for review past performance. Reviewing past performance means thinking about what you have done in past experiences that are similar to your current experiences. You may need to "jot" some of the things down that you feel helped you accomplish the past task or you may want to jot those things down that were obstacles to you accomplishing a past task. These notes will help you a lot when you begin writing goals in stage two.

Step R is a very important stage because it directs you to look at what you have done in the past before you try to determine what direction you should take in the future.

Ask: - Can you give some examples where this would be especially important? (One extreme example to break the ice would be: Lets say a man jumped into a pool because he was excited about getting a new job but he could not swim and almost drowned. The next time he got the urge to celebrate, he reviewed his past performance and chose another way to celebrate.

Another example, more educationally oriented would be: If you wanted to make a better test score in English this time, it would be important for you to look at what you did on the last test. You should think about how you studied and how you performed so that you can make some adjustments that would help you make a better grade. One adjustment might be to increase your study time.)

This stage may take a little extra time at first but the more you do it, the less time it will take. Remember you are trying to be in control of what happens to you. You can't have that control if you don't take time to think about past performances in order to choose future directions based on a review of the past.

Say - You have now learned steps T A R which make up the thinking stage in TARGETS.

ASK:

1. What does T represent?
  2. What does A represent?
  3. What does R represent?
  4. What does TWA represent?
  5. Give me an example using each of these steps.
7. Lesson Activities - Students should now complete and master activity sheets. Score after each sheet and provide feedback before proceeding.

## Writing Stage

### Lesson 3

#### What you goal is:

To instruct students in: ...

- a. Writing appropriate goals
- b. Planning and writing behaviors that will lead to accomplishing their goals.

#### What you need:

- a. Writing surface.
- b. Writing implement.
- c. Overhead projector (if using transparencies)
- d. Transparency charts #11-19.
- e. Lesson activities (pages 4-7 in Lesson Activity)
- f. 3 x 5 index cards w/prepared activity.
- g. Goal sheet worksheets.

#### How do you prepare:

- a. Make a copy of Trans/Charts.
- b. Gather other listed materials.
- c. Familiarize yourself with necessary information.

#### How much time to allow:

Approximately 50 minutes or one class session.

#### What is the criteria/ or mastery:

Mastery on each lesson activity and teacher judgement.

#### What to do:

Note: Before instruction, distribute goal sheets and tell students that you will explain the purpose of paper later.

#### 1. Describe Step G -

The first step in the writing stage is goal writing. You have specified your Task, answered your question and reviewed your past performance. You are now ready to write goals to accomplish the task you have specified, based on your needs and reflecting a review of past performances. First, however, we should consider some types of goals. Then we will discuss some guidelines we should follow when writing our goals.

#### 2. Discuss types of goals -

There are many different kinds of goal setting. For example just about everyone has a goal of what he wants to be in the future (when he grows up). That is called a long term goal and is so called because it often takes a long period of time to reach it. Before reaching a long term goal, many short term goals are often set and serve as stepping stones to the long term goal.

Short term goals are designed to be accomplished in a short period of time. TARGETS deals mainly with short term goals because short term goals lets you accomplish task in shorter periods of time and therefore acts as a motivation to keep you going. That is with each goal, you accomplish, you become motivated to accomplish more. If it takes too long for you to see you are successful or accomplishing goals, as it would with long term goals, you would soon loose interest.

We may set some long term goals e.g. "I will improve my English grade by one letter grade by the end of the semester" but before we can reach that goal, we will have to set many short term goals such as "I will improve my next test score by one letter grade." Remember: (Show Trans/Chart 11) TARGETS major emphasis is on setting short term goals that can be accomplished in a short period of time (1 or 2 days).

Say - Quantity goals and quality goals are other types of goals that need to be discussed. A quantity goal states how much or how many things you want to complete. A quality goal states how well you want to complete your assignment, how accurate and/or how thorough you want to be (show Trans/Chart #12). Sometimes a quantity goal and a quality goal can be used together e.g. "I will get 15 of 20 problems in math correct. Most of the time, however, a quality goal is the best goal to write because it directs you to concentrate on how well you do. Quantity goals sometimes make you forget to do well because they make you rush. (Show Trans/Chart #13).

Ask

1. What is a quantity goal.
  2. What is a quality goal.
  3. What is the best goal to write and why.
  4. Give me some examples of quality goals.
  5. Give me some examples of a quantity goal.
3. Discuss goal writing guidelines

Say - There are some guidelines one should follow when they are writing goals in order to ensure that their goals are appropriate. First, one should remember that a goal is not a wish. Wishing just states what one wants to do and does not lead to action. It is a dream. A goal however is a desire to be or do, that initiates action, and generates determination to persist until that goal is reached. Therefore, remember a goal causes action. (Show Trans/Chart #14).

Say - Another guideline is to set goals that are not too high or too low for your ability. This will also take some looking into the past to help determine at what level you have worked in the past. Setting a goal too high may keep you from reaching your goal and cause even more frustration. (Show Trans/Chart #15).



Setting goals too low may keep you from working to your potential and may keep you from feeling as successful as you could simply because you will know within yourself that you can or should have done more. (Show Trans/Chart #16).

It is also important to remember that setting too many goals may keep you from accomplishing the most important goal. You must consider a amount of time you have available for a task before setting your goal because time will determine how many goals you can accomplish. If time is not considered, too many goals could be set and not reached thus adding to failure (Show Trans/Chart #17).

All of the types of goals we have discussed and the guidelines are very important to remember. Lets put them to practice as a group.

**Class Activity:** (Use prepared activity cards in notebook pocket or prepare own. Task should be geared to various interest or some popular topics such as winning a special friend.)

**Say** I am going to give each of you a card. On the card is written a task you have been assigned. I want you to set a goal that should help you accomplish the task on the card. I am now going to give you a worksheet and I want you to write on it for this activity. I want you to tell me what kind of goal you have written (quality/quantity). Each goal you set should be set for a particular reason. I also want you to write down your reason so you will not only know what your goal is but why.

An example of a good reason would be: (Show Trans/Chart 18).

**Goal:** I will write 3 types of complete sentences in the paragraph I have for an assignment.

**Reason:** Because different types of sentences shows writing skills I have and makes my writing more interesting.

#### 4. **Discuss writing goals on paper.**

Say - Whenever you establish a goal for a particular activity, it is important to write the goal down. Some students don't like to do this because they feel it is unnecessary and they can remember without any help. Writing goals down, however it more than just helping to remember. It is very important and very helpful to write your goals down because (show Trans/chart #19) it reminds you of your goal, it keeps it before you when you have a lot of other things on your mind, it helps you keep a record and keeps you organized. A lot can come into your mind during the day that can cause you to lose the focus of your goal but writing you goal down will help keep the goal up front.

If you will take time to look at someone who is successful, you will see that person starting the day off with a list of what must be done. Those are abbreviated goals like we did when we started this lesson and the better you get at setting goals, the more you will be able to just jot down abbreviated goals. But until then let's remember to write down your goals everyday. That is extremely important and is a **MUST** for **TARGETS**.

Ask

1. What does "G" stand for.
2. What are the guidelines we should follow.
3. What problems can caused by not following these guidelines.
4. Why is it important to write goals down.

## Lesson 4

### What your goal is:

To instruct students in

- a. planning behaviors to accomplish goals.
- b. sequencing planned behaviors.

### What you need:

- a. writing surface
- b. writing implement
- c. overhead projector (if using transparencies)
- d. Transparency/Chart #20
- e. Lesson Activities (pages 8-15)
- f. Goal Sheet Worksheets

### How do you prepare:

- a. Make a copy of Trans/Charts
- b. Gather other listed materials
- c. Familiarize yourself with necessary information

### How much time to allow:

Approximately 50 minutes or one class session.

### What is the criteria for mastery:

Mastery on each lesson activity, teacher judgement

### What to do:

#### 1. Describe Step E -

**Say** - The second step in the writing stage is "E" which stands for entering planned behaviors on your goalsheet. Setting a goal is only half the battle to becoming a successful and self controlled person. The next step to great changes is planning behavior and sequencing those plans in an order that will lead you to accomplishing our goal. For example, if you were planning a trip to California, getting there would be your goal. However, the steps you take before getting to California represent planned behaviors. If you don't behave according to those plans, your trip to California may not turn out as well. This is true for any goal you set.

To plan behaviors to reach a goal one must keep his goal in mind and think of things he could do to help him reach his goal.

For example (Show Trans/Chart #20) if your goal is to get your drivers license some behaviors you would plan to do would be:

- a. Pass drivers ed.
- b. Study Drivers manual.
- c. Practice driving skills.

- d. Pass drivers test.
- e. Get a permit.

In planning those behaviors I thought of the requirements the law has and I also thought about what I could do to meet those requirements. Whether or not I get my license will depend on what I decided to do and how I decided to do it. I am in control and if I reach my goal, it will be because of what I did and if I don't it will be because of what I did.

**Class Activity** – Lets plan some behaviors for a goal. Someone please give me a goal. (Write on board then open floor for brainstorming responses. (Write responses to planned behaviors on board)

**After behaviors are written down Say –**

Five planned behaviors are usually enough for one goal, so lets go through our list and see which ones we can leave out. We may also see a need to add or adjust some others.

**After elimination occurs say –** The final step in entering our planned behaviors is to arrange our behaviors in an order that would show which behavior should be done 1st, 2nd and so on. This step is important so that we can direct our behaviors in meaningful steps toward our goal.

Let's look at an earlier example, (Show Trans/Chart #20). The behaviors listed are in no particular order and if we follow those steps as written we would be studying the drivers manual or practicing skills after passing Driver's Education which are steps we need to take in order to pass driver's education. Even though they are important after drivers education also, they are behaviors we should engage in so that we can pass the course. Let's now sequence the behaviors for the goal we have as a class.

**(Discuss)**

**Say** Entering Planned Behaviors is very important because these are the steps that lead us to reaching our goal. Therefore, you should always think about what you are going to do in order to reach your goal, order those behaviors and "go for it". This is the final step in Stage 2 – The Writing Stage.

**Ask:**

1. What does E stand for?
2. What are the steps in planning behaviors?
3. How many behaviors are usually enough?
4. Why is step E important?

**Lesson Activity** (Students should complete and master each sheet, score and provide feedback after each sheet before preceeding.)

## Applying Stage

### Lesson 5

#### What your goal is:

To instruct students in putting plans into action.

#### What you need:

- a. Writing surface.
- b. Writing implement.

#### How do you prepare:

- a. Gather listed materials
- b. Familiarize yourself with necessary information.

#### How much time to allow:

Approximately 10 minutes for instruction.

#### What is the criteria for mastery:

Mastery on lesson activity, teacher judgement

#### What to do:

##### 1. Describe Step "T" -

Say - The first step in the applying stage is trying the planned behaviors. You can set an absolutely wonderful goal, plan and order excellent behaviors and not achieve a thing unless you put them into action by trying what you have planned. **Remember goal setting causes action.** You are only wishing when you state a desire and do not take steps to fulfil that desire.

##### 2. Discuss importance of Persistence -

Say - When trying your plans, you may meet some obstacles that will cause you to think about quitting but do not give in to those . **A quitter never wins and a winner never quits.** You must be persistent with your efforts. Persistent trying will eventually be rewarded with success.

Ask - Can you think of anything you have persisted in and eventually were successful. (Allow several responses.) Say, when we were learning to walk, if we would have given up at the first fall, we would not be walking today. Instead we kept trying, after each fall until we were successful. That determination we had in learning to walk is the same determination we need in trying our planned behaviors. No matter how many times we fall, we just pick ourselves up, make any changes if needed and keep on pushing, until we reach our goal.

Say - Trying our plans may sometimes show us that adjustments need to be made in order to reach our goal. If this is necessary, then adjust as indicated and continue trying each of the behaviors listed on the Goal worksheet.

This leads into our final step which is step evaluation. Before we discuss step evaluation, however, let me ask:

Ask

1. What does T stand for?
2. What is the purpose of step T?
3. Why is persistence important?
4. A quitter never \_\_\_\_\_ A winner never \_\_\_\_\_

## Lesson 6

### What your goal is:

To instruct students in

- a. evaluation
- b. adjustments

### What you need:

- a. writing surface
- b. writing implement
- c. lesson activities (pages 16-22)

### How do you prepare:

- a. gather listed materials
- b. familiarize yourself with necessary information

### How much time to allow:

Approximately 15 minutes

### What is criteria for mastery:

Master Lesson Activities, Teacher judgement, Master completing entire goal sheet

### What to do:

NOTE: (In this step you must be careful not to offer advice if the student does not see the need to make an adjustment. If you cannot subtly convince him an adjustment is needed, student may need to see for himself via trial and error. Be sure to point this out.)

#### 1. Describe - Step "S".

Say - The final step to TARGETS is evaluation. Lets say you have set a very good and reasonable goal. You have planned your behavior and put it into action but things don't go just right. That means TARGETS doesn't work, right? Wrong! That means evaluate your goal and behaviors to see if you need to make some adjustments. Also look to see if you followed your planned behaviors step by step.

Evaluation is very important because it lets you know if you need to add or take away some behaviors. That is all under your control. You decide the adjustment needed and make it. It is important to evaluate daily because waiting may cause you to forget the little things that may have happened and make a difference. It also serves to refresh your memory of your goal and the behaviors you must follow. Daily evaluation helps you keep tabs on your progress and lack of progress as well. In essence, daily evaluation makes you look at yourself at the end of the day, decide whether you are satisfied and sets your direction for the next day. This aides in keeping you in control of what goes on with you.



There may be a lot of times when you will not have to make any adjustments, but it is still important to evaluate your steps daily just to be sure all is going as planned. Daily evaluations will also help make this step a habit.

To perform a steps evaluation, read over each goal and planned behavior you have written on your goal sheet. Then place a check on the coinciding line if you have followed that step or are satisfied with it as written. If not satisfied, make the adjustment at the bottom of page and on the back. You should not use another sheet however, because you will need to see the changes you have made in connection with the original form. A daily check doesn't have to take long if you have everything written down and in order. The more you do it, the less time it will take. Remember Daily Step Evaluation is a **MUST**.

### Class Activity -

**Say** - As a class let's discuss some things that would cause a person to make an adjustment in his goals or behaviors and make some suggestions for adjustments. (Write down reasons and adjustments. Arrange to have some of these adjustments displayed for future reference).

### Discuss

(Be sure the following points are brought out)

1. Need to adjust when goal is too high.
2. Need to adjust when goal is too low.
3. Need to adjust when you have a quantity goal is making your rush.
4. Need to adjust when a behavior is not helping you.
5. Need to adjust when a behavior restricts you.
6. Need to adjust when a behavior does not allow you to get immediate feedback.

### ASK

1. What does "S" stand for.
2. Why should evaluations be daily.
3. How do you evaluate.

### Lesson Activity Sheets (Complete to mastery before proceeding)

**Note:** (For the rest of the strategy your role for the first week is to cue students daily about setting goals, checking to see if they are done accurately and following through on daily evaluations. If student becomes frustrated because he is continually not reaching goals, "hold his hand" through a complete trial and be sure to point out steps followed. Point out importance of following through precisely as planned.

During class time, if you notice student wasting time for example, be sure to point out that he is not following a planned behavior. Some students may try to say, I'm not smart enough to do this. You can respond to that by saying, your IQ test scores don't support your opinion of yourself. (Students seem to feel more confident when a test score is provided.) You may also say, if I didn't think you were smart enough, you would not have been selected for this study or whatever. Above all, don't allow use of word can't. Make it a class rule.

Keep emphasizing that all that happens is a result of his planning and following through on his planning. Be sure to make a big thing out of following through and reaching a goal, no matter how small. Also give students pep talks as needed and encourage "self pep talks". Teach students to say often, "I know I am going to do this because I have done \_\_\_\_\_ before etc. Later you can show the student what he has accomplished since he began using TARGETS and encourage him to set goals in everything. Past experience should give him the faith he needs to make the sky his limit.)

NOTE: (You were instructed throughout to write student responses and display in class for future reference. This could be a very congested activity if not organized appropriately. Be creative!! You may transfer information to smaller sheets and have a special bulletin board for that purpose. You may string flags from the ceiling with the information displayed or any other idea that will reflect order and organization.)

You are now ready to integrate Phase "C", The Learning Strategies.

Phase "C"  
Conquering Challenges

Rationale

Many factors that cause an individual to feel competent and self determining while interacting with his environment have been discussed in Deci, 1975. Implicit in the discussion is the importance of seeking and conquering challenges in order to develop feelings of competence and self determination. However, one cannot conquer challenges if he does not possess the skills needed to conquer the challenges in order to develop feelings of competence and self determination. Adelman (1983) notes that in an educational setting, if a child has low intrinsic motivation and poor basic skills, it would prove fruitless to attempt to enhance intrinsic motivation because skills he needs to conquer challenges and therefore feel competent are not there. He therefore suggests, remediation of basic skills as an initial step. In support of this opinion and in consideration of the special needs of learning disabled adolescents, Alley and Deshler's learning strategies are considered the most appropriate and effective educational plan for equipping the LD adolescent with the tools he needs to conquer challenges. Learning strategies are defined as ... techniques, principles or rules that will facilitate the acquisition, manipulation, integration, storage and retrieval of information across situations and settings. The basic assumption of the strategies approach is that, in spite of moderate deficiencies related to academic skills, learning disabled students can experience success in a demanding, regular curriculum and gain useful information from that curriculum if they approach classroom tasks intentionally and strategically (Alley & Deshler, 1979). A number of studies have demonstrated the effectiveness of these strategies in producing desired changes in LD adolescents.

**Guiding Question:** Does the student have the tools needed to conquer a challenge?

What to do:

NOTE: (Before beginning with instruction, it is once again important to get the students commitment to participate. Review each pretest (writing sample) with the students individually. Have the student generate responses to why improved writing would be beneficial. Then based on his responses, get him to make a commitment to the program. Assure him that his decision was a wise one and it will take some work, but it will pay off.)

**1. Introduce Learning Strategies/TARGETS Combination**

(To introduce students to applying TARGETS with learning strategies, say) You may recall me stating that we were going to use TARGETS for educational purposes first, then we could apply it to other situations. I have decided, based on your writing samples, that one of the best ways I can show you how effective TARGETS is would be to improve your writing skills. This would in the long run improve your grades because you would be turning in better written assignments that would help the teacher understand what you are saying.

We are going to be using a writing curriculum called learning strategies to teach you how to write correctly. For this curriculum, we have found that setting quality goals (i.e. completing with accuracy) would be the best type goal to set.

An example of a quality goal for this strategy would be "I am going to complete the first worksheet with 90 % accuracy." Given that you have not done this before, you might want to set a lower percent accuracy until you get use to the strategy and see that it really makes a difference. Another quality goal would be, "I am going to write complete sentences in my English assignment today," or I will use TARGETS in my English class today.

Before you set a goal, it is important to know what you have to do, so each time we begin a new section in the writing strategy, I will give you an overview of what we will cover, number of worksheets, criteria for mastery and the benefits that section offers. With that information, you should be able to set reasonable goals that will make a difference in how well you do. You should set goals for each set of tasks. Goal #1 should be at instruction, Goal #2 should be at practice and Goal #3 at review. Once we begin the strategies I will give you an example of this so that it will be clearer for you.

Planning behavior is also important for the writing strategy. You have to make plans to reach your goal. Let's plan behaviors for one of the quality goals we discussed earlier as an example to be used with the strategies.

Example to be used: I am going to complete the first worksheet with 90% accuracy. (Lead discussion and encourage a response from each student.)

Say - Now that you have a basic idea of how to apply TARGETS to learning strategies, we will begin tomorrow with our strategy instruction and TARGETS. I want you to let all we have learned about TARGETS sink into your mind and be ready to put it to work tomorrow.

NOTE: (The remaining instruction will follow as specified in the learning strategies manual. Continue to integrate TARGETS throughout. Remember to begin each lesson with a complete overview. Be sure to let students know you are providing the overview.)

## 2. Give Example of TARGETS with Strategies

NOTE: (After distributing strategies materials discuss procedures to be followed, then give the following examples of setting goals at each task.

### Teacher Instruction

Goal 1. I will understand the lesson presented.  
Behaviors: Listen, Ask Question, Read Along

### Practice

Goal 2. I will master Lesson Activities on the First trial  
Behaviors: Take time, Check work, Ask Questions

### Review

Goal 3. I will master review sheets with 100 % accuracy.  
Behaviors: Study past Lessons, Read carefully, Ask myself questions.

(Now continue with strategies and remember to cue and allow students to set goals at each task stage. Eventually fade out cues. Encourage using TARGETS for everything.

### General Points to Remember

2. It is believed that the teacher must understand the strategies herself in order to be successful at this endeavor. Given this, please study each of the manuals carefully and ask questions if needed.
3. It is also important for the teacher to understand that LD students may not understand the simplest statement you make. Therefore, expect anything and by so doing your reactions may be minimized. Remember a lot of times LD students lose faith in themselves (i.e. abilities) because teachers react in shock when they respond suprisingly to the simplest directions.
4. Give concrete directions at all times.
5. High levels of intensity of instruction are imperative since so little time is available so make a conscious effort to make the most out of every minute.
6. If students have questions on worksheets, encourage them to be as specific as possible before responding. This will facilitate deeper thinking on their part.
7. You must move around all the time, monitoring progress, providing assistance and correcting inappropriate practicing. These packages are not designed as busy work so please do not make them such by giving an assignment and taking a seat.
8. Remind students of their commitments as the need arises.
9. BE POSITIVE. If a student becomes frustrated, explain that the road may be rough in the beginning but it will soon smooth out.
10. Plan and think ahead about what you need to do and ALWAYS be an example.

TRANS./CHART #1

FIVE STUDENTS USED TARGETS

FIVE STUDENTS DID NOT USE TARGETS

TRANS./CHART #2

RESULTS

FIVE STUDENTS WHO USED TARGETS MASTERED THE TEST.

MASTERY = 80 %

FIVE STUDENTS WHO DID NOT USE TARGETS DID NOT REACH MASTERY.

Lesson 1

COMMITTMENT

I AM CONVINCED THAT TARGETS WILL BENEFIT ME GREATLY IF I COMMIT MYSELF TO LEARN HOW TO USE THE STEPS IT TEACHES. I THEREFORE SIGN MY NAME TO SIGNIFY MY COMMITMENT AND WILLINGNESS TO PARTICIPATE.

SIGNATURE: \_\_\_\_\_

DATE: \_\_\_\_\_



Lesson 2 - Worksheet

Mastery: 17 out of 20 (85%)

1. Complete by writing what each letter represents.

T -

A -

R -

G -

E -

T -

S -

2. There are three stages in **TARGETS**. What does each letter represent.

T -

W -

A -

3. Which **TARGETS** steps or letters are learned in the "Thinking" stage?

4. Which **TARGETS** steps or letters are learned in the "Writing" stage?
5. Which **TARGETS** steps or letters are learned in the "Applying" stage?
6. You should begin step **T** with a \_\_\_\_\_.
7. You should answer the question with \_\_\_\_\_ in Step A.
8. Step "R" which is reviewing past performance is important because it will help in setting goals that are just right instead of too Low or too \_\_\_\_\_.

Lesson 3 - Worksheet

Mastery: 8 or 10 (80%)

1. Step G in TARGETS stands for \_\_\_\_\_.
2. Step E in TARGETS stands for \_\_\_\_\_.
3. Steps G and E are in which stage: T W A.
4. List 3 reasons goals and behaviors should be written down.
  - 1.
  - 2.
  - 3.
5. Writing the goal is only half the battle; you must then plan \_\_\_\_\_ to reach that goal.
6. The difference between wishing and setting goals is: \_\_\_\_\_.
7. List 2 guidelines one should follow in completing steps, "G" and "E".

## LESSON ACTIVITY

### Lesson 3

#### 1a

This activity is designed to give you practice in identifying quality goals and quantity goals. Beside each goal, write whether it is a quality goal or quantity goal. If both, write both.

Mastery - 80% or 8 out of the possible 10.

- \_\_\_\_\_ 1. I will complete 5 worksheets today.
- \_\_\_\_\_ 2. I will complete my assignments in one hour.
- \_\_\_\_\_ 3. I will reach mastery on this activity.
- \_\_\_\_\_ 4. I will get 20 problems correct in Math.
- \_\_\_\_\_ 5. I will write reasonable goals in English.
- \_\_\_\_\_ 6. I will write correct sentences in all of my classes.
- \_\_\_\_\_ 7. I will make a "C" in English this term.
- \_\_\_\_\_ 8. I will complete 2 worksheets in one hour with 100% accuracy.
- \_\_\_\_\_ 9. I will read Chapter 1 carefully.
- \_\_\_\_\_ 10. I will pass my spelling test.

## LESSON ACTIVITY

### Lesson 3

#### 1b

This activity is to be completed if mastery was not reached on 1a.

Mastery - Must be able to write three quality goals and 3 quantity goals.

Write three quality goals and three quantity goals and identify.

1.

2.

3.

4.

5.

6.

## LESSON ACTIVITY

### Lesson 3 1c

This activity is to be completed if mastery was not reached on 1b.

Mastery - 100%

Define a Quality Goal:

Define a Quantity Goal:

What is the major difference between quality and quantity goals?

Give an example of each type:

Quality -

Quantity -

## LESSON ACTIVITY

### Lesson 4 1a

Mastery - 8 out of the possible 10 or 80%

Listed below are some behaviors one might write to follow in order to reach a specified goal. If the behavior is too general or incorrect, place INC in the blank beside the number. If it is correct, place C beside the number.

**SPECIFIED GOAL:** I am going to pass the history test with 90% accuracy.

- \_\_\_\_\_ 1. Underline material when I read.
- \_\_\_\_\_ 2. Outline the chapters as I read.
- \_\_\_\_\_ 3. Glance at my friends notes before the test.
- \_\_\_\_\_ 4. Rely on what I have remembered from class.
- \_\_\_\_\_ 5. Define words I do not know.
- \_\_\_\_\_ 6. Do the most of my studying the night before so the material will be fresh on my mind.
- \_\_\_\_\_ 7. Review study material with a friend.
- \_\_\_\_\_ 8. Ask questions if you don't understand something.
- \_\_\_\_\_ 9. Relax and take my time the day of the test. Do not panic.
- \_\_\_\_\_ 10. Cheat.

## LESSON ACTIVITY

### Lesson 4 1b

To be completed if mastery is not reached in 1a.

Three goals are provided below. Specify behaviors one should follow that would allow him to reach that goal. You must specify at least 5 behaviors for each goal.

Mastery - 12 out of 15 behaviors reasonably and rationally stated (80%).

#### Goal 1.

I will make a better final grade in English this 9 weeks.

#### Behaviors:

1.

2.

3.

4.

5.

#### Goal 2.

I will read Chapter One carefully.

#### Behaviors:

1.

2.



3.

4.

5.

Goal 3.

I will write better sentences in my English class.

Behaviors:

1.

2.

3.

4.

5.

## LESSON ACTIVITY

### Lesson 4

#### 1c

To be completed if mastery is not reached in 1b.

Mastery - 100%.

Student should be able to explain what is incorrect about each of the INC behaviors in lesson 3b, then substitute with correct behaviors.

1.

2.

3.

4.

## LESSON ACTIVITY

### Lesson 4 2a

Mastery - Teachers judgement of appropriate ordering.

Refer to lesson activity 16 in Lesson 4. For each goal, prioritize the behaviors you have listed so that your behaviors are sequenced in order of importance.

#### Goal 1 Behaviors

1.

2.

3.

4.

5.

#### Goal 2 Behaviors

1.

2.

3.

4.

5.

Goal 3 Behaviors

1.

2.

3.

4.

5.

## LESSON ACTIVITY

### Lesson 4

#### 2b

Mastery - 5 out of the possible 6 or 83%.

To be completed if mastery is not reached on 2a.

Refer to lesson activity 10, Lesson 4. Prioritize the C behaviors so that the student can reach the specified goal. You may include some additional ones if so desired.

1.

2.

3.

4.

5.

6.

## LESSON ACTIVITY

### Lesson 4 2c

To be completed if mastery is not reached on 2b.

Mastery - Teacher Judgement

Write appropriate behaviors and sequence them to the following goal:

Goal: I will finish high school and pass the competency test.

Behaviors: You may list as many as you deem necessary.

Sequence Behaviors:

## LESSON ACTIVITY

### Lesson 6 1a

Mastery 8 out of 10 or 80%.

1. What is step T \_\_\_\_\_.
2. What is step S \_\_\_\_\_.
3. T and S are in which stage: T W A.
4. Why is step T so important \_\_\_\_\_.
5. Give 2 reasons why step S should be done daily.
  - 1.
  - 2.
6. Daily checks do not take long if you have everything  
\_\_\_\_\_ down and in order.
7. Step S helps you decide if any \_\_\_\_\_ are  
needed.
8. Adjustments are made only if \_\_\_\_\_. They may  
not be needed everyday but you should still check.
9. Daily checks should become a \_\_\_\_\_ so that it  
will be a part of you.

## LESSON ACTIVITY

### Lesson 6

#### 1b

Mastery - 9 out of 10 or 90%

To be completed if 1a is not mastered.

Fill in the blanks.

1. Evaluation should be done \_\_\_\_\_.
2. If you fail to reach your goal, you should \_\_\_\_\_  
your behaviors to see if you followed through with them.
3. Evaluation can refresh your memory, help you keep tabs on your progress  
and can help decide your direction for the next day. Therefore daily  
evaluations are very \_\_\_\_\_.
4. You may not always have to make adjustments in your plan but you should  
still evaluate them \_\_\_\_\_.
5. Daily evaluations can take just a minute if you have everything  
\_\_\_\_\_ down.
6. Evaluation can tell you when you need to make \_\_\_\_\_ in  
your plan.
- 7 You should make daily evaluations a \_\_\_\_\_.
8. Staying in control is very important. \_\_\_\_\_ help  
you stay in control of your progress.
9. Adjustments help you to \_\_\_\_\_ your goal.



10. Evaluation is another way to get feedback. Feedback lets you know how you are doing without asking the \_\_\_\_\_.

## LESSON ACTIVITY

### Lesson 6

#### 2a

To be completed if mastery is not reached on 5a.

Mastery - 100%.

List 5 reasons why daily evaluations are so important.

1.

2.

3.

4.

5.

## LESSON ACTIVITY

### Lesson 6

#### 3a

To be completed if mastery is not reached on 5b.

Mastery - 100%

List 5 reasons a person may need to make adjustments in his plans.

1.

2.

3.

4.

5.

REVIEW

1a

Total Mastery  
22 out of 25 or 88%

1. Complete by writing what each letter represents.

T =

A =

R =

G =

E =

T =

S =

2. There are 3 stages in TARGETS. What does each letter represent.

T

W

A

3. List each step in its correct stage:

Stage  
T

Steps

W

A

4. Circle the type goals TARGETS emphasizes.

Quality

Quantity

Long Term

Short term

5. Goals set too high can cause you not to reach your goal because \_\_\_\_\_.

6. Goals set too low can cause you not to reach your goal because \_\_\_\_\_.

7. Planning behaviors to reach goals is just as important as \_\_\_\_\_ the goals.

8. Step Evaluation must be done \_\_\_\_\_ in order to keep you in control of what's going on.

9. Daily evaluation also lets you know how you are \_\_\_\_\_ and sets your \_\_\_\_\_ for the next day.

## LESSON ACTIVITY

### Review 2a

#### Situational Goal Setting

Three situations are provided below. You are to write one goal that would lead you to accomplishing the task. The goal should be reasonable and clearly expressed. You should use the goal writing sheet and be sure all sections are complete.

Mastery - Teacher judgement of a good goal and logical reasoning given for selecting this goal.

Situation #1 - You have a spelling test next week and you have 30 words that you will be tested on.

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Situation #2 - English has always been a problem for you especially. when you have to write. Your poor writing skills have kept your grades low. You have just learned a writing program that will improve your writing and therefore your grades. Your resource teacher taught you the new program and it has really helped you in the resource classroom. You also want to improve your English class work and grades.

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Situation #3 - You failed the last test and you have a paper due next week that can help your grade.

TRANS./CHART #3

THOSE STUDENTS WHO DID NOT USUALLY DO WELL AND WHO THE TEACHER

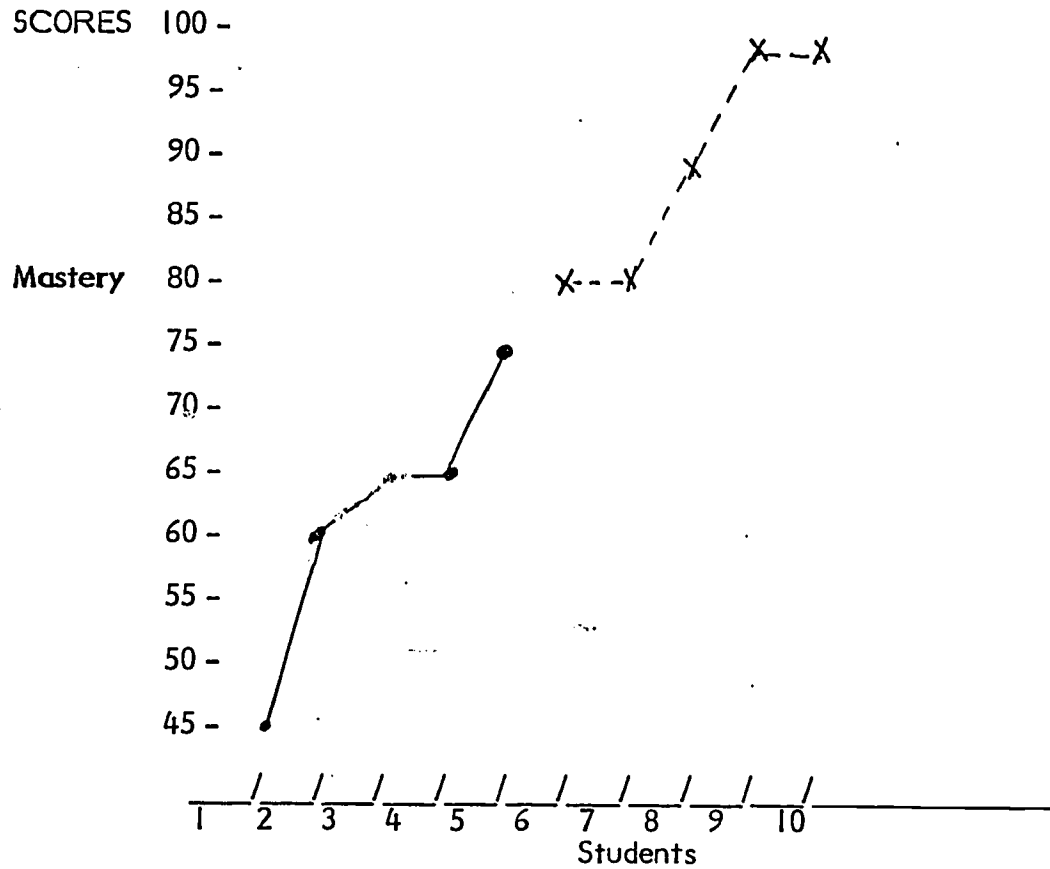
FELT WOULD NOT DO WELL REACHED MASTERY IF THEY USED TARGETS



TRANS./CHART #4

THOSE STUDENTS WHO USUALLY DO WELL AND WHO THE TEACHER  
FELT WOULD DO WELL DID NOT REACH MASTERY  
IF THEY DID NOT USE TARGETS

TRANS./CHART  
#5



Used TARGETS X ----X  
Did not use TARGETS . . . . .

TRANS./CHART  
#7

OTHER STUDENTS SAY IT HELPS BECAUSE:

1. GIVES YOU A SENSE OF DIRECTION
2. HELPS YOU PREPARE AND TELLS YOU WHAT YOU ARE GOING TO DO AND HOW TO KEEP UP WITH IT.
3. GIVES YOU SOMETHING TO REACH FOR.
4. GIVES YOU A PURPOSE.
5. LETS YOU KNOW WHERE YOU ARE GOING.

TRANS/CHART  
#8

T = TASK SPECIFIED WITH QUESTION

A = ANSWER QUESTION WITH "I NEED TO" STATEMENT

R = REVIEW PAST PERFORMANCE

G = GOAL WRITING

E = ENTERING PLANNED BEHAVIORS ON GOAL SHEET

T = TRYING PLANNED BEHAVIORS

S = STEPS EVALUATED

TRANS/CHART  
#9

TARGET STAGES

T hinking

W riting

A pplying

TRANS/CHART  
#10

REMEMBER TO ASK YOURSELF BEFORE YOU BEGIN A TASK

"WHAT DO I NEED TO DO?"

**TRANS/CHART  
#11**

**TARGETS EMPHASIZES WRITING  
SHORT TERM GOALS**

**SHORT TERM GOALS CAN BE  
REACHED IN A SHORT PERIOD OF TIME.**

TRANS./CHART  
#12

**QUANTITY GOAL**

STATES HOW MUCH OR HOW MANY THINGS YOU WANT TO COMPLETE.

**QUALITY GOAL**

STATES HOW WELL YOU WANT TO DO, HOW ACCURATE YOU COMPLETE  
YOUR ASSIGNMENT AND/OR HOW THOROUGH YOU WANT TO BE.



TRANS./CHART  
#13

**QUALITY GOALS ARE BEST BECAUSE THEY DIRECT YOU TO IMPROVE HOW WELL YOU DO.**

**QUANTITY GOALS SOMETIMES MAKE YOU FORGET TO DO WELL BECAUSE THEY MAY MAKE YOU RUSH.**

TRANS./CHART  
#14

WISHING DOES NOT CAUSE ACTION.

SETTING GOALS CAUSE ACTION

TRANS./CHART  
#15

SETTING GOALS TOO HIGH CAN KEEP YOU FROM REACHING YOUR GOAL.

TRANS./CHART  
#16

SETTING GOALS TOO LOW DOES NOT CHALLENGE YOU,

SO YOU CAN EASILY LOOSE INTEREST.

TRANS.CHART  
#17

STUDENTS SETTING TOO MANY GOALS, OFTEN FORGET TO

CONSIDER HOW MUCH TIME HE HAS TO COMPLETE A TASK.

ALWAYS CONSIDER TIME!

TRANS.CHART  
#18

YOU SHOULD ALWAYS HAVE A GOOD REASON FOR SETTING A GOAL.

EXAMPLE:

**GOAL:** I WILL WRITE 3 TYPES OF COMPLETE SENTENCES IN THE  
PARAGRAPH I HAVE FOR AN ASSIGNMENT.

**REASON:** BECAUSE DIFFERENT TYPES OF SENTENCES SHOWS  
WRITING SKILLS I HAVE AND MAKES MY WRITING MORE  
INTERESTING.

TRANS./CHART  
#19

**WRITING GOALS DOWN:**

1. REMINDS YOU OF YOUR GOALS
2. KEEPS YOUR GOAL BEFORE YOU
3. HELPS YOU KEEP A RECORD OF WHAT YOU HAVE ACCOMPLISHED.
4. ORGANIZES YOU

TRANS/CHART  
#20

**GOAL: I WILL GET MY DRIVER'S LICENSE BY THE END OF THE SUMMER.**

**PLANNED BEHAVIOR:**

1. PASS DRIVER'S EDUCATION.
2. STUDY DRIVER'S MANUAL.
3. PRACTICE DRIVING SKILLS.
4. PASS DRIVER'S TEST.
5. GET A PERMIT.



# GOALS WORKSHEET

Name: \_\_\_\_\_ Date: \_\_\_\_\_

## Evaluation

Check

Goals:

1. \_\_\_\_\_

2. \_\_\_\_\_

3. \_\_\_\_\_

A. My goal(s) is/are:

1. \_\_\_\_\_

2. \_\_\_\_\_

3. \_\_\_\_\_

Type Goal

B. I have chosen this goal because:

C. Planned Behaviors:

For Goal #1

1. \_\_\_\_\_

2. \_\_\_\_\_

3. \_\_\_\_\_

4. \_\_\_\_\_

5. \_\_\_\_\_

For Goal #2

1. \_\_\_\_\_

2. \_\_\_\_\_

3. \_\_\_\_\_

4. \_\_\_\_\_

5. \_\_\_\_\_

For Goal #3

1. \_\_\_\_\_

2. \_\_\_\_\_

3. \_\_\_\_\_

4. \_\_\_\_\_

5. \_\_\_\_\_

Note if adjustments were made and where: