

DOCUMENT RESUME

ED 445 027

TM 031 632

AUTHOR Armour, Katherine S.  
TITLE The Effect of Weekly Progress Reports on Academic Achievement.  
PUB DATE 1999-00-00  
NOTE 106p.; Graduate field problem report, Mercer University.  
PUB TYPE Dissertations/Theses (040)  
EDRS PRICE MF01/PC05 Plus Postage.  
DESCRIPTORS \*Academic Achievement; Black Students; \*Junior High School Students; Junior High Schools; Language Arts; \*Locus of Control; Report Cards; \*Student Evaluation; Student Motivation; Suburban Schools  
IDENTIFIERS African Americans; \*Progress Reporting

ABSTRACT

This study investigated the effect of weekly progress reports on the academic achievement of seventh grade language arts students. It also investigated the effects of weekly progress reports on locus of control attribution and the relationship between academic achievement and locus of control attribution. The study took place in a suburban school of 1,344 students, 95% of whom were African American. Two seventh grade language arts classes that were equivalent based on standardized tests scores were chosen as treatment and control groups. The comparison group received progress reports at 3-week intervals, but the treatment group received weekly progress reports itemizing the student's score on each assignment. No significant differences were found between the groups for academic achievement or locus of control. Twelve appendixes contain a sample report, the locus of control measure, grade sheets, and statistical data about student achievement and locus of control. (Contains 54 references.) (SLD)

# The Effect of Weekly Progress Reports on Academic Achievement

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**Field Problem Report**

**Mercer University**

**Spring 1999**

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# **The Effect of Weekly Progress Reports on Academic Achievement**

**Katherine S. Armour**

## **Abstract**

This study investigated the effect of weekly progress reports on the academic achievement for seventh grade Language Arts students. It also investigated the effect of weekly progress reports on locus of control attribution. Lastly, it investigated the relationship between academic achievement and locus of control attribution.

The research study was conducted in a middle-class to upper middle-class suburban school located in a neighborhood 20 miles from a large metropolitan city. Although the neighborhood was overall affluent, the school district included three shelters which had students attending the school. The student body was 95% African-American and 5% other (Caucasian, Hispanic, and Asian). The school contained 1344 students in grades six through eight.

Two seventh grade Language Arts that were equivalent based the mean ITBS reading total, mean ITBS language total, and mean numerical Language Arts average at the ninth week of the first semester were chosen as the treatment and comparison groups. The independent variable was the frequency of progress reports, and the dependent variables were: 1) student achievement as measured by the mean numerical average for seventh grade Language Arts students; and 2) locus on control as measured by the Nowicki-Strickland Locus of Control Scale for Children. Academic achievement as measured by the mean numerical average for seventh grade students in Language Arts at the nine-week mark of the first semester served as the pretest. The pretest for locus of control consisted of the numerical score for seventh graders on the Nowicki-Strickland Locus of Control Scale for Children at the beginning of the second semester.

The comparison group received school-wide progress reports beginning at the 3-week mark of the second semester, continuing at 3-week intervals throughout the 9-week treatment period. The school-wide progress reports consisted of numerical grade averages, conduct grades, attendance records, and teacher comments for each class. Stapled to each individual school-wide progress reports was a grade sheet identical to the weekly progress report received by the treatment group. The school-wide progress report was sent home for parent signature.

In addition to the school-wide progress report, the treatment group received the weekly progress report at 1-week intervals between each 3-week school-wide progress report. The treatment began at week-1 of the second semester at the end of January and continued throughout the 9-week treatment period. The weekly progress report consisted of a one-page individualized computer grade sheet, which itemized a student's scores on each assignment. The report included the cumulative numerical average to date as calculated by weighted assignment categories. In addition to the weekly progress report, the treatment group also received the school-wide progress reports, which were sent home for parent signature at three-week intervals. The school-wide progress reports consisted of numerical grade averages, conduct grades, attendance records, and teacher comments for each class. At three-week intervals, the treatment group received their weekly computer grade sheet stapled to the school-wide progress report.

At the end of the treatment period the two posttests were administered, which were identical to the two pretests, measuring academic achievement and locus of control. The mean scores on each test were calculated for both groups. The researcher scored the tests and results were compared. No significant differences were found between the treatment and comparison groups for either dependent variables.

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## Chapter I

### Rationale for Study

A recent study of academic achievement in middle school students has described a disturbing trend. Researchers found that children experienced a statistically significant loss of achievement associated with the transition from elementary to middle schools. Similarly, students experienced another loss when leaving the middle school to transition to high school. Students from schools with a K-8 configuration transitioning to a 9-12 high school did not experience this degree of loss of academic achievement. A loss was experienced, but it was not statistically significant. In addition, high school dropout rates were higher for districts with middle schools (6-8) than for those districts with K-8 elementary schools (Alspaugh, 1998).

The middle school used for this study mirrored the above-mentioned trend of downward spiraling achievement for students after the transition to the school middle school setting. This loss in achievement combined with the researcher's personal experience of this phenomenon provided the backdrop for this study, which measured the effect of weekly progress reports on academic achievement of seventh graders. The purpose of this study was to determine whether the use of such a report aided students in self-regulation and provided motivation for improved achievement.

Further review of the literature revealed several relevant bodies of information related to academic achievement, which supported the need for a study on the use of weekly progress reports to improve academic achievement. This research included early adolescent developmental theory, theories of motivation, studies on the relationship of motivation to locus of control, self-efficacy, self-regulation, social comparison theory, intrinsic versus extrinsic motivation, and feedback (including computer-based instruction). Research also included studies

of motivation as it related to relationships between early adolescents, their peers, teachers, and parents. Finally, substantial research was devoted to the use of progress reports as a part of many overall intervention programs.

Regarding early adolescent development, Caissy (1994) indicated that the majority of students in the middle school operate primarily within the concrete stage of development. In this transition from concrete to formal thinking, early adolescents see their world primarily in concrete terms and have difficulty thinking in abstract terms. During this phase of development, physiological changes bring many social, emotional, and intellectual changes. These physiological changes due to puberty include unstable emotions, short attention spans, restlessness, and an increased interest in social activity (Caissy, 1994). Given the concrete thinking of early adolescents, the need for frequent, individualized feedback detailing the students' academic progress to help students develop self-monitoring skills and set goals for academic achievement was supported. The concrete thinking of the early adolescent also indicated a need for a concrete tool to help students understand both the nature of grade averaging and how individual grades affect a student's cumulative average from week to week (abstract concepts).

Ray (1992) outlined the following theories of motivation related to school achievement which relate directly to this research. Carl Jung believed humans are "pulled" by goals for the future. Alfred Adler believed a basic desire for socialization guides motivation. Karen Horney believed motivation is grounded in needs related to anxiety. William McDougal saw self-preservation as the primary motivator. B.F. Skinner believed that behavior was determined by past reinforcement and the present environment. Maslow saw needs as hierarchical with primary needs being secured before higher needs of achievement are addressed. These theories supported

the contention that students can be both goal-oriented and social in nature interested in fulfilling a range of needs. Researchers agreed that students sought to avoid anxiety and preserve and develop their esteem within the school context (Ray, 1992). Given the nature of the early adolescent, however, these goals were often displaced by competing distractions, which relate to the physiological changes manifested during this period of development. These findings further substantiated the need for this study as a way of directing students toward the attainment of these needs of esteem while in the midst of this complex developmental period.

Locus of control was closely related to school achievement. Kopera-Frye (1991) found that students with an external locus of control attribute success or failure to external forces beyond the individual's control and measure lower in school achievement. Students with an internal locus of control see themselves as agents of change, controlling their destinies with hard work and effort, and experience greater academic achievement. These students are less likely to give up, seeing tasks through to completion. While students of both attributions improved in achievement, students with an internal locus of control increased lesson completion to a greater degree than external locus of control students when given frequent progress reports in a computer-based instructional setting. The findings of Kopera-Frye further substantiated this study as an effort to determine whether students with an internal locus of control would respond in a similar way to weekly progress reports. It was the researcher's purpose to determine the effect of frequent progress reports on students with external locus of control. It was also the researcher's purpose to measure any change in student locus of control after being confronted weekly with the result of one's efforts as reflected in the report, thereby challenging the students' beliefs about their locus of control.

Researchers found that peers, as opposed to parents and teachers, were the primary influence for students during the early adolescent stage of development. However, parent and teacher relationships, as well as peers, were important in determining student motivation. Researchers found that parents' attitudes toward school had a large impact on student behavior and attitudes toward school. Teacher characteristics of fairness, warmth, and caring were positively motivating. Acceptance and encouragement of students were motivating as was patience (Ray, 1992). Overall, perceived support from peers, teachers, and parents was positively motivating to students (Wentzel, 1988). It was possible that students perceived the use of weekly progress reports as teacher encouragement; however, measurement of this perception was not an aim of this study.

Self-efficacy, a student's belief in their own ability, was found to be highly correlated with achievement. In a recent study by Nichols and Utesch (1998), self-efficacy was modified in students through an intense intervention program consisting of prosocial behavior and academic training and individualized instruction. If self-efficacy was capable of being modified, as was demonstrated in this study, the use of progress reports was supported as an instrument used in helping a student see his or her competency as his or her efforts improved or faltered over time. In this study the student's peer group was likewise instrumental in affecting the student's goals and academic success, demonstrating the fact that a negative peer group can override a student's need to show one's self as capable (Nickols and Utesch, 1998).

Self-regulation is the ability to monitor and regulate one's learning and progress. Researchers found that this ability was positively correlated with performance and achievement in early adolescents. A weekly progress report was thereby further supported by the research as a

tool which could be used for self-regulation, thereby assisting students with learning the process of self-regulation (Pintrich, Roeser, and DeGroot, 1994).

A theory regarding a student's ability to assess one's achievement accurately is referred to as Social Comparison Theory. This theory states that students' ability to accurately assess their achievement and mastery level of material is developed by comparing one's achievement to one's peer group. This ability is established by age nine. Students who begin school with high expectations develop this ability at an earlier age and are highly motivated to compete with the achievement of their peers. For the child who experiences success early in school, these comparisons are positively motivating, fostering an increased value and interest in the activity or subject. Conversely, the child who experiences early failure, in comparison with their peers, devalues the importance of the subject matter and is less motivated to excel in these areas in the future. Students with a low achieving peer group who wish to be accepted by this group respond with lower achievement (Suls & Sanders, 1979). This research lent support for the weekly progress report as a means of self-comparison, in spite of its limitations with students influenced by a negative peer group.

Ray (1992) found that intrinsically motivated students were motivated by the activity or desire to learn the subject matter. Extrinsically motivated students were motivated by outward rewards; however, findings of diminished value placed on extrinsically motivated work were cited as well. McCaughan and Kinley (1981) found that success or failure was a stronger motivator than the extrinsic rewards of chocolate candy in 12-14 year old female students. Students increased intrinsic motivation to a greater degree after success. Intrinsic motivation decreased after reports of failure. Rewards of candy did not affect the intrinsic motivation in either the success or failure groups (McCaughan and McKinley, 1981). Ray's and McCaughan

and McKinley's research gave support to the idea that weekly progress reports, without candy or other rewards, would positively or negatively affect the intrinsic motivation of a student depending upon the week's success or failure, respectively. Given the prevalence of extrinsic rewards systems in middle schools, this study which involved intrinsic motivation was supported.

B. F. Skinner saw the use of feedback as applicable to American education. However, later theorists found feedback to be more complex than earlier believed (Ray, 1992). The term "advisement" was often used to describe the process of feedback given to students to aid in self-assessment. Many researchers found that feedback aided in raising student achievement in some students. Frequent progress reports (daily, weekly, or monthly) and checklists were especially successful in motivating low-ability students in computer-based instruction (Clariana, 1992). Delayed feedback was found to be equally motivating when used to relay the accuracy of an answer to a question. Private feedback was more effective than public feedback for previously low achievers (Monteil, 1996).

Researchers found that progress reports were integrated into a variety of intervention programs designed to improve academic achievement and behavior. Programs using progress reports included the following: mentoring programs, peer tutoring, delinquency intervention, and after-school programs. While integrated into larger intervention programs, each program featured the common thread of frequent feedback to students in the form of daily, weekly, or monthly progress reports. These reports were used with a variety of populations and ages including elementary students, middle school students, and college students, to address both academic and behavior problems.

## **Statement of the Research Problem**

The following questions were investigated in this research project:

1. Is there a significant difference in academic achievement for seventh grade Language Arts students who receive progress reports at one-week intervals and those students who receive progress reports at three-week intervals?
2. Is there a significant difference in academic achievement in Language Arts for seventh grade students with an internal locus of control and those with an external locus of control?
3. Is there a significant difference in locus of control attribution for seventh grade Language Arts students who receive progress reports at one-week intervals and those students who receive progress reports at three-week intervals?

## **Definition of Terms**

The following definitions apply to this research project:

**Academic Achievement** – Academic achievement was defined and measured by numerical average in seventh grade Language Arts classes.

**Advisement** – Advisement was used synonymously with feedback and was defined as information provided to a student about the result of a process such as the accuracy of that student's answer to specific question or problem, or the academic progress of that student in a class.

**Computer-based Instruction** – Computer-based instruction was defined as instruction provided via computer hardware and computer software.

**Concrete Thinking** – Concrete thinking was defined as a stage in Piaget's child development theory which is characterized by thinking done in concrete terms based on real experience as perceived by the senses, which is absent of abstract thinking.

**External Locus of Control** – External locus of control was defined as an external position which attributes success to luck, fate, or the actions of powerful others.

**Extrinsic Motivation** – Extrinsic Motivation was defined as motivation tied to an external reward for an activity.

**Feedback** – Feedback was used synonymously with advisement and was defined as information provided to a student regarding the accuracy of that student's answer or the academic progress of that student.

**Formal Thinking** – Formal thinking was defined as a stage in Piaget's theory of child development which is characterized by abstract thinking.

**Internal Locus of Control** – Internal locus of control was defined as an internal position which attributes success as to the result of ability or effort.

**Intrinsic motivation** – Intrinsic motivation was defined as motivation tied to the desire to complete an activity for the enjoyment of the activity and the sense of accomplishment or competency associated with the activity.

**Locus of Control** – Locus of control was defined as a construct that reflects an individual's perception of control over his or her own destiny. One's locus of control attribution reflects the degree to which an individual believes he or she has control or responsibility for all outcomes resulting from his or her conscious or unconscious decisions. Locus of control was measured by the Nowicki-Strickland Locus of Control Scale for Children.

**Self-regulation** – Self-regulation was defined as the ability to monitor and regulate one's learning and progress.

**Weekly Progress Report** – A weekly progress report was defined as a computer-generated grade sheet, which itemized the student's score on each assignment. The report included the cumulative numerical average to date as calculated by the following weighted categories: notebook checks (10%), participation (20%), writing assignments (20%), tests (20%), and projects (30%).

## **Assumptions**

For purposes of this study the following assumptions were identified:

1. It was assumed that treatment period of nine weeks was long enough to measure the effect of the treatment.
2. It was assumed that the different class times did not affect the treatment. The treatment group met daily from 10:10-10:40 a.m. with a break for lunch, and from 11:10-11:30 a.m. The control group met from 2:15-3:00 p.m.
3. It was assumed that the treatment and comparison groups were equivalent based on the selection criteria. A significant difference was not found between groups regarding the mean ITBS scores for total reading and total language. A significant difference was not found between the mean numerical average in Language Arts.
4. It was assumed that the differences in gender distribution for the two groups would not affect the study, as gender was not a prevalent issue in the research. The classes were chosen despite the gender ratio differences because they were equivalent in other important variables.

## **Delimitations**

The results of this study may be affected by the following factors:

1. The treatment group met during a divided lunch period. The period was split with the first 30 minutes before lunch (10:10 – 10:40 a.m.), a 30-minute lunch period, and the remaining 20 minutes after lunch (11:10 - 11:30 a.m.). The break and the potential distractions of lunch were a potential delimitation. The comparison group met during the last class period of the school day in an uninterrupted class period (2:20 – 3:10 p.m.) with 3:00 – 3:10 p.m. set aside for daily announcements via the intercom. The comparison group was, however, subject to occasional assemblies held at the end of the school day causing the comparison group to

occasionally miss instruction in order to attend the assembly together. The comparison group ended instruction at approximately 3:00 p.m. The beginning time for announcements was irregular and affected the actual ending time for instruction (i.e., the teacher continued with instruction until the announcements began). These scheduling factors were considered to be delimitations.

2. The treatment group and comparison group had a different numbers of students who were part of the gifted program. The treatment group had three gifted students. Although one of these gifted students was excluded from the sample, this student remained in the classroom for treatment. The control group had five gifted students, none of whom were excluded from the sample.

## Chapter 2

### Achievement Loss in Middle School

Alspaugh (1998) conducted a recent study of academic achievement in middle school students which revealed a disturbing trend. Researchers found that children experienced a statistically significant loss of achievement associated with the transition from elementary to middle schools. Similarly, students experienced another loss when leaving the middle school to transition to high school. Students from schools with a K-8 configuration transitioning to a 9-12 high school did not experience this degree of loss of academic achievement. A loss was experienced, but it was not statistically significant. High school dropout rates were higher for districts with middle schools (6-8) than for those districts with K-8 elementary schools.

Additionally, Seidman, Allen, Aber, Mitchell, and Feinman (1994) found that students making a transition from elementary to middle to high school experienced a loss in self-perception and self-esteem. Alspaugh (1998) contends that this loss in self-esteem may be a contributing factor in the increase in school dropout rates for students transitioning from elementary to middle to high school. Students in larger schools experienced greater losses in achievement than those in smaller schools, and students transitioning from elementary school to a middle school with multiple feeder elementary schools experienced greater losses than those with only one feeder elementary school. Implementation of middle school practices (use of teams and smaller group configurations) had little impact on student achievement.

The middle school used for this study mirrored the above-mentioned trend of downward spiraling achievement after the transition from several feeder elementary schools to a large middle school. The purpose of this study was to determine whether the use of a weekly progress

report would aid students in self-regulation and provide motivation for improved achievement in the middle school setting.

### **Early Adolescent Development**

Caissy (1994) notes that early adolescence is a unique period in the development of a child. It is characterized by physical changes due to the onset of puberty. Early adolescents are subject to unstable emotions, restlessness, short attention spans, and an increased interest in social activity. The changing nature of the intellect is also characteristic of early adolescence. This period is a time of transition from concrete thinking to formal thinking.

Caissy (1994) notes that concrete thinkers organize information in terms to concrete objects which they can see and understand. Information is understood with concrete examples. Concrete thinkers need concrete events, people, and places in order to relate to new ideas. They think in the present and are less likely to contemplate consequences in the future. Formal thinkers can think abstractly, developing an objective perspective on time and history. They can conceive and manipulate ideas that are not concretely visible and can contemplate future implications of an action. Formal thinkers can solve problems without concrete visuals. Most early adolescents are in a transition period between the worlds of concrete and formal thinking. They sometimes demonstrate signs of formal thinking, but at other times and in other circumstances they are confined to concrete thinking, or a combination of both. The transition from concrete to formal thinking is gradual. Early adolescents typically make the transition between ages 14 and 16. This transition can be delayed due to problems with nutrition, general intellectual ability, or drug use.

Given the concrete thinking of early adolescents, the need for frequent, individualized feedback detailing students' academic progress was supported as a way to help students develop

self-monitoring skills and set goals for academic achievement. The concrete thinking of the early adolescent also indicated a need for a concrete tool to help students understand both the nature of grade averaging and how individual grades affect a student's cumulative average from week to week (abstract concepts).

Caissy (1994) describes early adolescence, specifically ages 12-14, as being a time when intellectual ability slows down. This slowing of ability typically happens earlier in girls than in boys. Students in this age group cannot learn as quickly or master the same volume of material. They have limited attention spans and are less able to concentrate than formal thinkers. Once formal thinking is acquired during ages 14-16, the rate and volume of material learned increases along with attention span. Early adolescents often have difficulty with organization skills due to the distractions of puberty and the transition to a new school setting. The transitional time from concrete to formal thinking lends itself to the development of needed organization skills, study skills, and information processing skills. Given the need for organization among early adolescents, a weekly assessment was supported as a way to keep students advised of their academic status.

In addition to this intellectual slowdown, Caissy (1994) describes early adolescents as being highly focused on friendships and socialization. The desire for peer acceptance is strong and can influence the early adolescent in a variety of ways including interests, academic goals, and effort exerted in school. They see their world as revolving around them and often find little relevance of school subjects. Early adolescents may even avoid success to avoid being seen as different than their peers. Social skills are emphasized during this time including leadership and personal responsibility. Given the distraction of peer influence, a weekly reminder of one's academic status was supported as a means of helping students focus on academics.

Caissy (1994) points out that early adolescents are highly idealistic. They are less able than formal thinkers to view situations and solutions to problems realistically. They are in a search for their own identity and often experiment to find that identity. Early adolescents enjoy talking about their experiences and viewpoints. They are curious and are highly interested in events or topics which relate to their own experiences. These students often debate differing points of view as a means of clarifying their own. They are creative but often struggle with both the desire to express that creativity and the risk of appearing different. Given the absence of realism, the weekly progress report was supported as a method to remind the students of assignments completed and the consequences thereof.

Wigfield (1994a) notes that competency beliefs related to academics decrease as students grow older. Early adolescents strongly value peer approval and often lose interest in academics. As they grow older, children value their schoolwork less and less. They even sometimes do poorly to please a peer group. Wigfield (1994b) attributes this change to two factors: 1) a change for students in the way they process evaluative feedback in school, and 2) the change in school and environment students experience as they move into early adolescence. Additionally, Ruble's (1994) findings include differences in student values related to school. Younger students value their performance and are thus more likely to show bias in self-evaluation of performance; whereas, older students value their ability and are more likely to show bias in self-evaluation of their ability.

Wigfield (1994b) found that adolescents are generally able to assess their competency in academic areas by early adolescence. Students in early grades appear to be overly optimistic about academic ability; whereas, older students are more realistic about their ability to succeed in school. This difference is attributed to increased experience with evaluative feedback given in

school. Early adolescents see their ability as static as opposed to younger students who are more optimistic about their ability to do well in school. Because of their tendency toward idealism and their inability to see things realistically, it was the purpose of this research project to determine whether weekly progress reports would aid students in realistically assessing their achievement, strengths, and areas for improvement.

In addition to the developmental changes in self-evaluation, Wigfield (1994b) found that the transition to a new school environment, in the form of a junior high school, affected the competency beliefs of early adolescents. These schools are often larger and less personal than many elementary schools. Teachers instruct more students and see individual students for a smaller portion of the school day. Instruction is often oriented toward the entire class with greater exposure to public display of the student's ability. Student autonomy is often limited, and school discipline is often emphasized to a greater extent than in the elementary school. Schools are more controlling with a greater emphasis on competition. These changes in school environment are keenly felt during this phase of early adolescent development. Students increasingly desire autonomy from adults and are more focused on peer acceptance. Students also are self-focused and increasingly aware of their abilities as compared with the abilities of others. Students need strong relationships with adults outside of the home, but often do not receive individual attention available in a smaller school or a self-contained classroom. As their perceived abilities become more realistic, and the value and importance placed on school work decreases, so does their interest in subject matter. Although early adolescents need a challenging and caring environment in order to succeed academically, their experience is often to the contrary. These environmental changes contribute to lower achievement in early adolescents

once they reach the middle grades school environment, and these negative beliefs about school place students at risk for school failure.

Given the distractions of a larger, less personal school environment, the weekly progress report was supported as a means of frequent, private, and individualized feedback to students. It was also supported as a means to helping students with self-assessment and providing a focus on academic achievement.

### **Theories Related to Motivation**

Ray (1992) defines motivation as those processes which instigate, direct, give persistence to, and lead to preference for a behavior. Ray reports that motivation is central to the learning process. Several basic theories of motivation are outlined in Ray's work. Freud believed that the id was the central source of motivation. The id is the seat of instinct which motivates human behavior. Freud distinguished between conscious and unconscious processes. Humans are aware of conscious thinking and unaware of unconscious thoughts.

In contrast to Freud, Ray (1992) outlines Carl Jung's view of human motivation as being more optimistic. Jung believed that humans are motivated by drives and lured by future goals. Jung saw the past as highly influential on a person's motivation; however, Jung also saw directional goals as important as pursued through self-actualization, the process of understanding one's personality in the context of meaningful goals.

Ray (1992) describes Alfred Adler as a theorist who believed that people are naturally motivated toward socialization. People strive to overcome feelings of inferiority by competing with and gaining superiority over others. Similarly, Ray reports that Karen Horney believed that motivation is rooted in the reaction to anxiety. Out of the desire to avoid anxiety comes the need for power, love, or isolation. William McDougall believed that motivation is centered in

instincts. These instincts are responses to stimuli in the environment. Motivation is, therefore, directed toward survival.

Ray (1992) describes B.F. Skinner as a strict behaviorist who would deny any inner process call motivation. Skinner saw behavior as response to stimuli in the environment. Other behaviorists, such as Hull, acknowledge the existence of motivation. Hull believed that humans made associations between stimuli and responses which are reinforced. Hull saw drives as motivational in meeting needs. Maslow saw needs as hierarchical. Basic physical needs must be met before safety, love needs, esteem needs, and finally self-actualization needs. Physical needs include food, water, and shelter. Safety needs include a sense that one is safe from harm and not threatened. Love needs include the need to be loved or belong to a group. Respect is part of this need as is closeness with one's classmates and teachers. Maslow distinguished between inner and outward esteem. Inner esteem includes self-respect, achievement, and a sense of competence. Outward esteem involves relationships with others, recognition, attention, status, and prestige. Finally, self-actualization represents a person's sense of fulfillment. Reaching one's potential is crucial to self-actualization.

It was the purpose of this research project to determine the effect of the weekly progress report as a tool for: setting academic goals, managing the anxiety associated with not knowing one's standing in a class between school progress reports, and attaining the inner esteem of achievement.

### **Locus of Control**

Related to the theories of motivation is the concept of locus of control. Griffore (1981) defines locus of control as the degree to which individuals believe that they are in control of their environment and the consequences of their behavior. Locus of control is defined as an element of

the personality and is therefore rather constant across varying situations. Internal locus of control refers to the belief that a person is in control of one's behavior. External locus of control refers to the belief that forces outside of a person's influence are responsible for a person's behavior.

Locus of control is closely related to school achievement. Griffore (1981) refers to locus of control related to school achievement as intellectual achievement (IAR). Tendency toward internal or external locus of control as it relates to achievement is established early in elementary school. The child who is a high achiever tends to avoid failure and tends toward extrinsic rewards such as approval from others, conformity, and compliance with others' expectations. Treatments designed to alter the achievement motivation of students have resulted in lasting improvements in academic achievement. With specific teacher training, students in these programs are taught how to think and act like high achievers and are able to sustain improvements in study habits and patterns of the successful student.

Kopera-Frye (1991) found that students with an external locus of control attribute success or failure to external forces beyond the individual's control and measure lower in school achievement. Students with an internal locus of control see themselves as agents of change, controlling their destinies with hard work and effort, and experience greater academic achievement. These students are less likely to give up, seeing tasks through to completion. While students of both attributions improved in achievement, students with an internal locus of control increased lesson completion to a greater degree than external locus of control students when given frequent progress reports in a computer-based instructional setting.

The findings of Kopera-Frye further substantiated this study as an effort to determine whether students with an internal locus of control would respond in a similar way to weekly progress reports. It was the researcher's purpose to determine the effect of frequent progress

reports on students with external locus of control. It was also the researcher's purpose to measure any change in student locus of control after being confronted weekly with the result of one's efforts as reflected in the report, thereby challenging the students' beliefs about their locus of control.

Creek (1991) conducted a study to measure the relative impact of both IQ and locus of control on academic achievement in third, fourth, and fifth grader students. While Samuel (1981) found that IQ is negatively correlated with external attribution, Creek (1991) later found that locus of control, like IQ, is a strong predictor of achievement on standardized achievement tests. In Creek's study, students with a mean IQ score of 120 and an internal locus of control scored as well as students with a mean IQ score of 140 who had an external locus of control. Therefore, 20 points in IQ scores appear to be offset by the difference in locus of control.

In contrast to the above findings, Sink (1991) found a weaker relationship between locus of control and academic achievement among 11-13 year old students. Sink found that locus of control is not a strong predictor of classroom grades or scores on standardized tests for sixth graders. Instead, student perception of academic competency is a greater predictor of achievement in school and on standardized tests.

Leung (1993) found that locus of control attribution appears to vary from culture to culture. Leung compared the attribution of Chinese students in Hong Kong to their counterparts in the United States in grades 8, 10, and 12, and found that attribution differs between the two cultures. American students tend to blame their teachers for their low grades more and more as they get older, while Chinese children tend to blame themselves more and more as they get older for their academic failure. Chinese children tend to prefer social comparison with others even when their school performance is low; whereas, American children tend to avoid social

comparison with peers when their school performance is low. Girls of both cultures show more internal attribution than boys, and students with a higher socioeconomic status from both cultures perceive themselves as higher achievers than their low SES counterparts. Students from both cultures who perceive themselves as high achievers also show internal attribution, crediting their abilities as the source of their achievement as opposed to their low achieving counterparts. Leung argues that the differences in cultures are most likely due to the differing cultural values related to family and education in the respective countries.

Scapinello (1989) found that attribution (internal versus external locus of control) can be changed with manipulated outcomes of achievement results for test groups. Scapinello used two groups: low motivation students and high motivation student. Surprisingly, Scapinello found that both low and high motivation students attribute success to effort when everyone in the group succeeds. This finding contradicts the body of literature which contends that high motivation students attribute success to effort and low motivation students attribute success to luck. Scapinello's findings, therefore, suggest that attribution is not fixed but can be changed in a student.

It was the researcher's purpose to determine the effect of frequent progress reports on students with an external locus of control. It was also the researcher's purpose to measure any change in student locus of control after being confronted weekly with the result of one's efforts as reflected in the report, thereby challenging the student's beliefs about their locus of control.

### **Relation to Peers, Teachers, and Parents**

Wentzel (1998) found that perceived support from teachers, peers, and parents are indicators of motivation related to school among sixth and seventh graders. Perceived teacher support highly correlates with interest in class. Family cohesion and perceived teacher support

positively correlate with interest in school and a mastery goal orientation toward school (the desire to learn and master concepts and processes for the sake of learning. Distress negatively correlates with school interest. Perceived peer support correlates highly with school related interests and pro-social goal pursuits (the desire to behave in socially positive and responsible ways). Perceived support from parents, teachers, and peers and a sense of family cohesion are all negatively correlated with student distress.

Wenzel (1998) found that seventh-grade grade point average is most highly correlated with school-related interests, mastery goal orientation, responsibility goal pursuit, class interest, and gender. While family cohesion, perceived teacher and peer support are independent predictors of grade point average, Wenzel concluded that family cohesion is indirectly related to grade point average because it is correlated with student interest in school which is positively correlated with family cohesion. Wenzel also concludes a similar link between perceived support from teachers and grade point average: grade point average is correlated with responsibility goal pursuit (including responsible behavior and academic aspirations) which is directly related to perceived teacher support. Furthermore, Wenzel concludes that support from family cohesiveness, teachers, and peers build on one another rather than compensating for the absence of each other.

It was the purpose of this research project to determine the effect of weekly progress reports on academic achievement. Wenzel's (1998) findings supported a study to determine whether weekly progress reports were perceived as teacher support and a means to mastery, thereby, increasing academic achievement or whether they were perceived as a source of distress, thereby, decreasing academic achievement.

## **Self-efficacy**

Nichols and Utesch (1998) define self-efficacy as one's personal evaluation of one's ability to perform a certain task. Those with a high self-efficacy take on challenges with a mastery orientation, great effort, and persistence. Those with a low self-efficacy shy away from challenging tasks because they believe they are incapable of accomplishing them. Self-efficacy is positively correlated with achievement and motivation. Nichols and Utesch (1998) found that self-efficacy can be modified in middle school students through an intense intervention program consisting of pro-social behavior and academic training with individualized instruction. In this study the student's peer group was likewise instrumental in affecting the student's goals and academic success, demonstrating the fact that a negative peer group can override a student's need to show one's self as capable. Waxman and Huang (1996) found that self-efficacy is also strongly correlated with motivation. In their study of resilient and non-resilient students, those with a high self-efficacy were highly motivated with a strong sense of class involvement. It was the purpose of this research project to determine whether the use of weekly progress reports affects student achievement which is highly correlated with self-efficacy in the literature.

## **Self-regulation**

Pintrich, Roeser, and DeGroot (1994) found that the ability to regulate one's learning and progress are positively correlated with performance and achievement in early adolescents. Positive motivational beliefs on the part of the student are positively correlated with the use of self-regulating ability of students. Positive motivational beliefs include an intrinsic value of the material to the student, self-efficacy of the student, and low anxiety levels in the student. Students who experience some element of control over their learning environment and over academic tasks via choice of assignments are more motivated than those who do not experience

such control. Students who see their work as more productive than their peers also experience greater motivation. These students see their achievement as the result of their own efforts. The ability to regulate and monitor one's progress in learning results in an increase in performance and achievements. This brings on increased motivation which makes the relationship reciprocal.

Shin (1998) cites Bandura's Social Cognitive Theory which includes a self-regulating element through which people demonstrate control over their learning and build confidence in their abilities through positive academic outcomes. Shin argues that self-regulation gives the student a sense of ownership and control over achievement. Self-regulated learners approach learning experiences with a goal of mastery. They are more persistent and demonstrate greater effort than students who do not engage in self-regulation. They monitor their progress by means of planning and analyzing the effectiveness of learning techniques. They then revise their efforts where necessary to maximize achievement. Shin (1998) insists that these strategies can be learned through teacher modeling. Modeling includes student observation, imitative practice, and eventual self-regulated practice. Shin emphasizes that students must understand that abilities are not static and are therefore under the control of the self-regulating student. This is accomplished by linking academic results to the use of appropriate or non-appropriate learning strategies. Once students learn the direct, positive correlation between self-regulation and results, students are then able to comprehend that increased effort and persistence result in improved learning. Repeated success then can build self-efficacy and promote a cycle of self-regulation and improved academic success.

DiGangi, Maag, and Rutherford, Jr. (1991) found that academic performance improves for learning-disabled early adolescents who engage in self-monitoring of on-task behaviors in math class. Students who monitor on-task behaviors such as writing answers, reading questions,

and checking problems experience an increase in on-task behavior and academic performance. Students who also engage in self-graphing of their on-task behavior further increase their on-task and academic performance. DeGangi, et al. (1991) concluded that while some students respond to self-monitoring alone, others respond with addition of self-graphing.

It was the purpose of this research project to determine whether the use of weekly progress reports as a tool for self-regulation affected student motivation and, consequently, academic achievement.

### **Social Comparison**

Suls and Sanders (1979) found that self-comparison to peers plays an important role in motivation. Students use self-comparison to accurately assess their achievement and mastery of material. This theory regarding a student's ability to assess one's achievement accurately is referred to as Social Comparison Theory. This theory states that students' ability to accurately assess their achievement and mastery level of material is developed by comparing one's achievement to one's peer group. Without this comparison, the student is unable to gain a perspective on achievement and what can be achieved in the future. This ability is established by age nine. Suls and Sanders found that student achievement is not a fixed standard, but rather is based on how well one does in comparison with one's peers. Those who begin school with high parental expectations develop this ability at an earlier age and are highly motivated to compete with the achievement of their peers. For the child who experiences success early in school, these comparisons are positively motivating, fostering an increased value and interest in the activity or subject. Conversely, the child who experiences early failure, in comparison with their peers, devalues the importance of the subject matter and is less motivated to excel in these areas in the future. Low achievers see their standing in comparison with others as less meaningful. This

devaluing thus begins a cycle of low achievement. Students who have a low-achieving peer group and wish to be accepted by this group also respond with lower achievement.

Suls and Sanders (1979) also found that gifted or high achievers may deliberately choose to hide their abilities by choosing less challenging work to avoid being socially ostracized by others who are threatened by their success. High achievers perform at a higher level around high achievers, while lower achievers are less motivated around higher achievers. Social comparison can, therefore, bring on a positive or a negative effect depending upon the student's peer group and academic background. Students who seek to out-perform peers will continue to strive to do so. Students who wish to hide their achievement or please a low-achieving peer group may fall short of their potential achievement.

It was the purpose of this research project to determine the effect of the weekly progress report on motivation and academic achievement as students utilized the weekly reports for possible social comparison.

### **Intrinsic versus Extrinsic Motivation**

McCaughan and McKinlay (1981) found that female high school students receiving success/failure feedback in a motor task respond with increased intrinsic motivation when compared to students receiving extrinsic rewards. Groups receiving success feedback, when compared to fictitious others, show greater persistence than those receiving failure feedback. Conversely, groups promised the extrinsic reward of a chocolate bar for performance superior to fictitious others respond with decreased intrinsic motivation. Given their findings, McCaughan and McKinlay (1981) concluded that success/failure feedback is a greater motivator than extrinsic rewards.

Tang and Sarsfield-Baldwin (1991) found that students receiving positive feedback show higher intrinsic motivation than those receiving negative feedback. Additionally, the nature of the feedback can affect task liking varying with the self-esteem of the student. In this study, students were given bogus task difficulty ratings and bogus success/failure results. Tang and Sarsfield-Baldwin found that students with a high self-esteem who are given success feedback after a difficult task increase their task liking and their motivation. Students with a low self-esteem who are given success feedback decrease their task liking and motivation. It was the purpose of this research project to determine the effect of weekly progress reports on academic achievement in the absence of tangible extrinsic rewards such as candy.

### **Feedback**

Nishikawa (1985) notes several relevant theorists related to feedback. In the 1800's feedback was seen in terms of the mechanical nature of behavior. This view was based on Descartes and perpetuated by Hobbes. In the late 1800's Pavlov studied conditional reflexes in the laboratory which transformed a theoretical understanding of the mind into a study of human behavior. Influenced by Pavlov, Watson came to believe that human nature is the sum of human behaviors. He believed that human behavior could be studied by observation just as the physical scientist studies the natural world in a laboratory. Later, Thorndike advanced the simple theories of the past to encompass and explain more complex behaviors. He believed that behaviors which are reinforced through feedback are continued to meet an anticipated goal. Those behaviors which are reinforced with negative consequences are terminated because they do not aid in attaining the anticipated goal. Thorndike's view added an element of purpose to human behavior that had not previously existed in behavioral theory. Following Thorndike, Skinner was a proponent of the Stimulus-Response theory. This theory states a stimulus initiates a response.

like a reflex. Skinner applied this theory to American education contending that reinforcement of correct behavior molds behavioral patterns.

Nishikawa (1985) notes that current theorists believe feedback to be far more complex than once thought. Goals are currently seen as integral to the stimulus-response process. Differing results with the same stimuli can thus be attributed to different goals and purposes. The learner's perception can also present another variable which can produce different results from the same stimuli. There is debate as to Skinner's view that immediate feedback is preferable to delayed feedback. While there are studies which support immediate feedback over delayed feedback, there are contradicting studies which show the contrary. Additional factors which may affect these findings include individual differences in learners, their level of academic achievement, their self-concept, and their locus of control. Higher achievers are more able to give self-feedback than low achievers. Students with low aptitudes appear to benefit more from delayed feedback over immediate feedback. The learning environment is also thought to affect the feedback process including the student's perception of the credibility of the feedback source. Tangible feedback in the form of material reward can often be counter-productive in improving academic achievement because of the distraction it can present. Tangible feedback can vary in success depending on individual and environmental differences. Nishikawa concludes that given the complex nature of feedback, additional research should be conducted to test the theories of feedback by testing a particular method of feedback with the same students in the same subject matter. It was the purpose of this research project to test one such method, feedback in the form of weekly progress reports and its impact on academic achievement.

Meyer (1979) found that receiving praise after success and neutral feedback after failure leads students to perceive that their ability level is low. Students receiving neutral feedback after

success and critical comments after failure believe that their ability level to be high. This trend becomes stronger during the seventh grade year (ages 12-14) and is solidified during the eighth grade year (ages 13-15). It was the purpose of this research project to learn the effect of neutral, written feedback to seventh graders (in the form of weekly progress reports) on student achievement.

Monteil, Brunot, and Huguet (1996) found that past academic history influences present academic performance in a memory task when given fictional positive versus negative feedback. Monteil, et al. found that 13-14 year old French boys responded differently to the same feedback depending on their academic histories and their anticipation of public feedback. Low achievers perform well after positive feedback (unfamiliar feedback, inconsistent with their academic histories) when there is no anticipation of public feedback. Low achievers perform poorly after positive feedback when there is the anticipation of public feedback. Low achievers perform better after negative feedback when there is no anticipation of public feedback than when anticipation of public feedback is present (although the difference between mean scores is not significant). High achievers also perform better after negative feedback with no anticipation of public feedback. High achievers, on the other hand, perform better after positive feedback (familiar feedback consistent with their academic histories) when there is anticipation of public feedback versus no anticipation of such public feedback. Monteil, et al. believe these results indicate a level of mental disengagement of the low achiever who receives negative feedback consistent with the past. It also suggests a distracting level of anxiety on the part of the low achiever whose focus is on positive feedback inconsistent with past performance coupled with high social visibility. Monteil, et al. conclude that their study gives support for anonymous

feedback as opposed to public classroom feedback. It was the purpose of the present study to learn the effect of written feedback given to students in the form of a weekly progress report.

Low (1995) found that frequency of feedback impacts retention of material among undergraduate students. In Low's study, psychology students were taught statistics using statistical analysis of personal data collected in class. Data was collect and analyzed as a class using one of three feedback models: one group was given daily feedback on results of statistical analysis using class data; the second group was given bi-monthly feedback on results of statistical analysis using class data; the third class was given no feedback. Low found that students receiving daily feedback score significantly higher on statistics tests than those receiving bi-weekly or no feedback on statistics problems using class data. Low found the frequency of feedback on data derived from class statistics to be motivating to students. It was the purpose of this research project to determine whether frequency of feedback on personal student academic achievement would have a similar impact on motivation.

Thomas (1993) reports that feedback promotes independent learning and self-regulation in middle and high school students. He reports a lacking in instruction in the middle school setting of study skills beyond the basic rote memorization, reading, and re-reading emphasized in the elementary school setting. Thomas reports that the middle school years are a time when students are able to engage in independent, analytical learning. Such practices are needed but not taught as part of the regular curriculum. Adolescents, therefore, typically lack study skills necessary for mastering materials presented at the middle school and high school levels. Adolescents study without a sense of purpose or goal and typically do not study to a point of mastery. They even elect counter productive practices such as distracting settings for homework and test preparation. As part of a solution to ineffective study skills and self-monitoring, Thomas

recommends regular feedback to allow students to reflect on effective study practices and areas where improvement is needed. Similarly, Smith (1985) recommends that feedback be frequent, positive in presentation, and provide extensive information. It was the purpose of this research study to measure the effectiveness of feedback in the form of weekly progress reports which provided a detailed analysis of the individual's strengths and weaknesses, allowing independent self-monitoring of academic progress.

Samuel (1981) found that varying feedback affects attribution in college students. In his study Samuel gave varying, fictional feedback on an unfamiliar concept formation task. Samuel found that students who are given positive feedback attribute their success to ability and effort (internal locus of control). Students who are given negative feedback on the task attribute their failure to luck and task difficulty (external locus of control). Students who are given no feedback on their performance show no preference for attribution. Samuel contends, therefore, that attribution is related to feedback received on a task. Samuel also found that feedback affects future anticipation of success or failure in a related task. Those receiving success feedback predict future success. Those receiving negative feedback predict future failure. Those receiving no feedback show lower, more ambiguous aspirations for future achievement on a similar task than the positive and negative feedback groups.

It was the purpose of the present study to determine whether frequent feedback in the form of weekly progress reports would motivate students toward higher aspirations. Given the findings of Samuel (1981), the present study was further substantiated as a measure of the effect of feedback versus no feedback and its effect on motivation.

## **Computer-based Instruction**

Various types of advisement have been used in the context of computer-based instruction. Adaptive advisement is personalized information regarding current learning needs which aids the student in estimating how much practice is needed to master a content area. Evaluative advisement differs from adaptive advisement in that it typically includes grades or mastery ratings. Directive advisement involves giving prior instruction about the events of instruction and how to proceed through a sequence of events (Santiago & Okey, 1992). Advisement differs from feedback in that it is larger in scope. Feedback is more specific, i.e., correct versus incorrect answers. Advisement deals instead with the bigger picture of overall standing in a class (Clariana, 1992).

R. B. Clariana (1992) found that providing public progress reports as advisement within the context of computer-based instruction results in improvement in completion of lessons for some students. Clariana believes that these gains are due to a productivity oriented classroom culture. In his study Clariana found that high achievers increase productivity with advisement to a greater degree than low achievers. He also found that the computer instructional environment motivates some students to work harder, varying by the age of the student. Clariana found that first and second graders experience some short term increases in productivity. Third graders experience consistent increases in productivity. Progress reports for these age groups are motivating in the short term. Differences in achievement for internal and external locus of control also exist with external locus of control yielding a higher level of completion (though not a significant difference). Clariana and Smith (1989) found that progress reports used with computer-assisted instruction increase completion rates of students of all ability levels and all attribution levels among eleventh grade high risk students. He also found that students increase

in both attendance and achievement when given progress reports. Clariana (1992) cautions against the negative effects of public progress reports and the stigma of failure for those unable to achieve at the level of others in a class. It was the purpose of this research project to determine the effect of private progress report and their effect on academic achievement.

Santiago and Okey (1992) found that adaptive advisement is more effective than evaluative in raising post-test scores among pre-service teachers. Adaptive was also more effective than a combination of adaptive and evaluative. Santiago and Okey conducted this study in the context of computer-based instruction and found that students receiving adaptive advisement score significantly higher scores on post-tests than those who receive evaluative or no advisement. Students with an internal locus of control significantly outperform those with an external locus of control, regardless of the form of advisement received. The effectiveness of adaptive advisement is, therefore, not contingent upon the learner's locus of control. Internals also find course work to be more enjoyable and less difficult than externals. It was the purpose of this research project to determine the effect of locus of control and evaluative advisement on academic achievement in seventh grade Language Arts students.

Clariana (1993) found that high school students who receive progress reports as evaluative advisement of their academic progress have better rates of attendance and achievement than those who do not receive progress reports. Clariana measured locus of control as a variable but found that it does not interact with advisement. In addition, he found that ability level does not interact with advisement.

Goetzfried and Hannafin (1985) found that there are no significant differences in the achievement of low-achieving seventh graders who received advisement with learner control versus those who received externally controlled adaptive advisement. Posttest scores showed no

significant difference between these two treatments and the linear control group. Advisement with learner control involved learner advisement of skills mastered and allowed the learner to ignore or heed the advice given via the computer program. Externally controlled adaptive advisement involved computer control of advancement depending upon the accuracy of responses given. The linear control group received the same progression of lessons without advisement of mastery and without any opportunity to revisit examples or past lessons.

Goetzfried and Hannafin note that these findings contradict past studies favoring learner control strategies; however, they attribute their findings to the possible deficiencies of low achievers in the areas of self-evaluation and information evaluation. Goetzfried and Hannafin also note the issues of time and efficiency involved in their study. Advisement involves an investment of extra time on the part of students which may be to no avail. It was the purpose of this research project to determine both the effect of weekly progress reports on achievement and, consequently, the return on time invested by both teacher and students involved in the evaluative advisement of the weekly progress report.

R. Tennyson (1981) notes that traditionally many students are unable to assess needed practice required to become proficient in a content area and give up too soon before reaching mastery when working independently in computer-assisted instruction. In an effort to find a remedy to this situation, Tennyson (1981) conducted a study to measure the effect of computer-assisted advisement. In his study, he found that twelfth grade students using computer-assisted instruction with advisement perform better on post-tests than those who do not receive such advisement. Those receiving advisement stayed on task and achieved mastery in less time than the control group. Students in the treatment group received advisement including their learning

progress and their individual learning strategies required to meet the criterion of mastery for the content area.

The advisement received in Tennyson's study fits the title of adaptive advisement as defined by Santiago and Okcy (1992). It was the purpose of this research study to determine if advisement in the form of weekly progress reports would similarly impact achievement.

Arnone, Grabowski, and Rynd (1994) found that first graders with advisement performed significantly higher than those without advisement. Second graders without advisement, however, performed better than those with advisement. Arnone, et al. believe this difference is due to closer attention paid by first-graders to the advisement. At the opposite end of the age spectrum, Self (1984) found that remedial college students with poor reader skills improve when given updated advisement regarding their achievement and instructional needs. Self recommends further research on advisement in this area to possibly address the diverse ability levels found in community colleges with remedial level classes. It was to purpose of this research project to determine the effect of advisement on seventh graders many of whom have low reading skills.

### **Progress Reports as Integral Part of Intervention Programs**

Progress reports have been used as an integral part of a variety of programs designed to achieve a number of goals including improved academic achievement, improved behavior, dropout prevention, and juvenile delinquency prevention. While progress reports are not the sole treatment, they are included in each of the following treatment programs.

Rumberger and Larson (1992) found that student attendance, grades, and attrition rates improve after participating in a drop-out prevention program which includes frequent feedback to parents and students regarding progress. Subjects in the Rumberger and Larson study were at-risk seventh graders including learning disabled and severely emotionally disturbed students.

Students received other services including counseling, problem-solving training, parent literacy training, and extracurricular activities. Similarly, Buckner (1993) found that a dropout prevention program using progress reports was successful. Subjects were seventh and eighth graders with learning disabilities who were at risk of dropping out of school. The program included self-esteem activities, social skills training, career training, peer tutors, motivational techniques, parent phone calls, parent conferences, and student progress reports. The program's goals of improved academics, behavior, attendance, and demonstration of social skills were all met.

Fatum (1987) describes a peer counseling program designed to develop leadership skills among incarcerated youths through counseling and educational programs. The youths were trained to visit and interact with students speaking openly about consequences of criminal activity. A weekly progress report was used to monitor progress of youth offenders.

Shannon (1997) found that student-led conferences which include feedback on progress assist students in learning the importance of learning, personal responsibility for learning, the importance of assignments, and the value of communication. Conferences included parental participation, student self-assessment, presentation of student portfolios, and the emphasis on student control over learning. Picciotto (1996) details a model similar to the one described in the experiment by Shannon (1997). Picciotto's model includes a three-way report card in which students, teachers, and parents are invited to make remarks regarding student progress. It was the purpose of this research project to discern the impact of the weekly progress report as a tool used by students to monitor and control their own learning.

Borders (1981) outlines the use of progress reports as a part of the student contract used with special needs students in regular and vocational classroom settings. The contract entails the initial contract and regular progress reports used to monitor progress. Similarly, Scaringi (1994)

reports the use of a weekly progress report as a part of an overall effort to keep parents of Hispanic students informed of their children's progress. This practicum included tutoring, weekly parent calls, and mailed postcards to parents with a weekly homework hint. Results of the practicum showed that parents are willing to be involved in their children's education when their native language is used in school-home communication.

Ontario-Montclair School District (1981) found that middle school students participating in a basic skills level math curriculum which included progress reports increased their skills on the Comprehensive Test of Basic Skills (CTBS) by 3.4 months for each month of instruction. The instruction was individualized and involved drill, pretests, posttests, and quizzes. The program also included enrichment activities, motivational games, filmstrips, and manipulative games. Similarly, Holt (1984) found that progress reports were used in conjunction with a successful reading instructional program. Unlike the other programs mentioned, this program involved community volunteers.

Lordeman (1977) found that a two-way home-school feedback program is a feasible way to keep parents and their middle school students informed of student progress on a regular basis. An interim report of student progress was used in the study in conjunction with reminder postcards sent to parents. The program was designed to measure the feasibility of such two-way communication which would replace the need for a parent visit to the school. The interim progress report included a record of attendance, homework requirements for each subject, and at least one teacher comment for every subject. The report was mailed to parents. Parents were then asked to return an enclosed form asking for their reaction to the progress report. Students were asked to return the response form to the school. Teachers then reviewed the returned forms. In the first grading period, postcards were sent and phone calls were made reminding parents to

return their response forms. In subsequent grading periods, no reminder calls were sent. Post cards were sent during the second and fourth grading periods. Lordeman found that a high percentage of parents returned the response forms.

Abcug (1991) found that students participating in a mentoring program including a weekly progress report experienced significant improvement in academic achievement, behavior, attendance, and attitudes toward school. The program included weekly one-hour sessions and brief daily meetings between mentors and their students. Similarly, Denoyer (1984) found that a mentoring program using school non-teaching staff as mentors along with biweekly progress reports to parents improved student concern over academic progress. The program also allowed counselors to intervene at the first sign of any difficulties. The program was used at the middle school and high school levels. Similarly, Campbell-Peralta (1995) details a mentoring program aimed at adolescent minority males. It was designed to improve the academics, attitudes, and behavior in school. The goal of improving behavior was met; the other goals were not met. Students in this program were given a mentor and peer tutor. Students participated in group counseling and received instruction in career exploration. The program included a progress report to parents as a means of providing feedback. It was the purpose of this research project to measure the effects of an interim progress report given solely for the benefit of student self-monitoring (with no parent signature or response required).

Kehayan (1983) describes a peer tutoring program for seventh and eighth graders designed to improve attitudes and motivation that interfere with learning. The program involved peer counseling and a support team consisting of peer tutors and peer consultants. It included mandatory group meetings and weekly progress reports. The program was successful with improved grade point averages and 80% of the students being promoted.

Blumberg (1986) describes the daily progress report as a means of monitoring and providing feedback to students regarding their daily behavior. The individualized program includes daily counseling and has proven effective in assisting adolescents monitor and manage their own behavior.

Ackerman, Hughs, and Wilder (1997) describe an action research project designed to increase student academic and social responsibility among kindergarten, first, and fifth graders. An assessment found that students lacked involvement in the assessment process, were overly dependent on extrinsic rewards, and lacked the ability to do self-assessment. Intervention was implemented which included portfolio assessment, student self-assessment, peer helpers, and an increase in communication between teachers, students, and parents. The results were an increase of awareness of academic progress and behavior on the part of students as observed by their teachers.

Goldman (1994) found that progress reports were successfully used with a program designed to insure that high school student athletes meet academic requirements and complete necessary courses for college entrance. The program included early morning study hall, small group and one-on-one individual counseling with the school guidance counselor, and SAT preparation classes. All goals of the program were exceeded.

Hakel (1997) describes a college program aimed at teaching students the importance of academic performance through the use of self-assessment and feedback. The program stresses competition using individual feedback as a tool for measuring improvement. The program also emphasizes communication and problem solving skills.

## Chapter 3

### Overview of the Project

The primary purpose of the study was to measure the difference in academic achievement of seventh grade Language Arts students who received a weekly progress report with their current numerical average at one-week intervals versus seventh grade Language Arts students who received their numerical average in Language Arts at three-week intervals. In order to obtain a valid comparison for this study, two seventh grade classes with similar make-up were used based on equivalency in the following variables: 1) mean numerical average at the nine week grading report of the fall semester in Language Arts; 2) mean ITBS reading total; and 3) mean ITBS language total scores. Students in the treatment group received a weekly computer-generated grade sheet, which itemized their score on each assignment and included the cumulative numerical average to date. It also outlined numerical averages within five categories of assignments (notebook checks, participation, writing assignments, tests, and projects). A secondary purpose of the study was to determine the difference in academic achievement between students with an external locus of control score and students with an internal locus of control score within the two groups, as measured by the Nowicki-Strickland Locus of Control Scale for children. A third purpose of the study was to determine the effect of weekly progress reports on locus of control scores.

## **Hypotheses**

The following hypotheses apply to this study:

1. There is no significant difference in academic achievement for seventh grade Language Arts students who receive progress reports at one-week intervals and those who receive progress reports at three-week intervals.
2. There is no significant difference in academic achievement for students with an internal locus of control and those with an external locus of control.
3. There is no significant difference in locus of control attribution for seventh grade Language Arts students who receive progress reports at one-week intervals and those students who receive progress reports at three-week intervals.

## **Description of the Sample**

The research study was conducted in a middle-class to upper middle-class suburban school located in a neighborhood 20 miles from a large metropolitan city. Although the neighborhood was overall affluent, the school district included three shelters which had students attending the school. The student body was 95% African-American and 5% other (Caucasian, Hispanic, and Asian). The school contained 1344 students in grades six through eight. Average daily attendance was 97%. Special education students made up 6.77% (91 students), excluding gifted students. Gifted students represented 6.32% (85 students). There were 2 ESOL students. Students receiving less than 25 hours per week of special education services comprised 3.72% (50 students) of the school population. Students receiving free or reduced lunch comprised 36% of the student body. Students who were retained comprised 3.72 % of the school's population.

The school building was a large, well-maintained three year old facility. Both the treatment and comparison groups were taught in the same classroom. The classroom was

equipped with a TV/VCR, an overhead projector and screen, a dry-erase board, a large bulletin board, one teacher computer with no access to the internet, the daily newspaper, many magazines, and many books including fiction, nonfiction, and poetry. The room had windows along the top of one wall and one small 3x6' window in the corner of the room. The room was located on a large, main hall in the center of the school.

The sample consisted of two groups of heterogeneously grouped seventh graders taught by the same Language Arts teacher. The teacher was certified in Middle Grades 4-8 with a Master's degree and seven years of teaching experience. The sample was part of a four-teacher team with 114 regular education students. The treatment group consisted of 26 students, 12 males and 14 females. Two of these students were gifted students who took World Studies with the gifted teacher; the remaining 24 students were regular education students. One student was excluded from the sample because of the lack of available ITBS scores; however, this student remained in the classroom for instruction. The treatment group contained 25 African-American students and one Hispanic student. The comparison group consisted of 25 students, 14 males and 11 females. Five were gifted students who took World Studies with the gifted teacher; the remaining 20 were regular education students. Two students were excluded from the comparison group sample, one because of the absence of available ITBS scores, and the other because of chronic absences. These students remained in the classroom for instruction but were excluded from the sample. The comparison group contained 23 African-American students, one Caucasian student, and one Hispanic student. (See Table 1)

**Table 1**

**Summary Data for Sample**

	Male	Female	N	ITBS Total Reading Mean	ITBS Total Lang. Mean	Mean Num. Avg. @ 9 Wks.	Failing @ 9 Wks.	Gifted
<b>Treatment Group</b>	12	14	26	50.38 percentile	60.34 percentile	78.46	6	2
<b>Comparison Group</b>	14	11	25	45.24 percentile	60.64 percentile	78.4	7	5

## **Instrumentation**

Academic achievement was measured by the weekly progress report consisting of a one-page individualized computer grade sheet, which itemized a student's scores on each assignment. The report included the cumulative numerical average to date as calculated by the following weighted assignment categories: Notebook (daily homework checks) 10%, Participation (individual work, group work, and whole class instruction) 20%, Writing Assignments 20%, Tests 20%, and Projects 30%. See Appendix A for a sample of the weekly progress report. The mean numerical average for seventh graders in Language Arts at the first semester nine-week mark and the second semester nine-week mark served as the pretest and posttest for academic achievement, respectively.

Locus of control was measured by the Nowicki-Strickland Locus of Control Scale for Children. (Permission to use was granted via phone conversation on December 15, 1998.) The pretest and posttest for locus of control consisted of the numerical score for seventh graders on the Nowicki-Strickland Locus of Control Scale for Children at the beginning of the second semester and the second semester nine-week mark, respectively. Research regarding the validity of this locus of control scale was consulted. It was determined to be valid when compared to other locus of control inventories.

## **Design**

The numerical average in Language Arts at the nine-week mark of the first semester served as the pretest for academic achievement for the comparison and experimental groups. The comparison and experimental groups were given a pretest to measure locus of control at the beginning of the second semester. For nine weeks, students in both groups received the school-wide progress reports at three-week intervals beginning at the third week of the second semester.

The treatment group received the school-wide progress reports at three-week intervals and, in addition, received the weekly progress report. The numerical average in Language Arts at the nine-week mark of the second semester served as the posttest for academic achievement for both groups. At the end of the nine-week treatment period, both groups were given a posttest for locus of control. The pretests and posttests for locus of control were identical for both groups. See Appendix A for a sample of the pretest for academic achievement. See Appendix B for a sample of the locus of control scale. (See Table 2)

Table 2

Design	Group	N	Pretest For Acad. Achieve.	Pretest For Locus Of Control	Treatment	Posttest For Acad. Achievement	Posttest For Locus Of Control
	Treatment	26	$x_1$	$y_1$	Weekly progress reports @ 1-week intervals in addition to school-wide progress reports @ 3-week intervals	$x_2$	$y_2$
	Comparison	25	$x_1$	$y_1$	School-wide progress reports @ 3-week Intervals	$y_2$	$y_2$

## Procedures

Four seventh grade Language Arts classes were examined to find two that were equivalent based on the mean ITBS reading total, mean ITBS language total, and mean numerical Language Arts average at the ninth week of the first semester. To achieve equivalency on these variables, three students were omitted from the treatment sample and three were omitted from the comparison sample due to extreme numerical averages or an absence of available ITBS scores. After eliminating these students from the sample, three *t* tests were done to determine equivalency. It was determined that there was no significant difference between the two groups on the above listed criteria. These two groups were also the most similar of the four examined in class stability and the failure rates at the end of the nine-week mark of the first semester. These two groups were chosen as the treatment and comparison groups.

The independent variable was the frequency of progress reports, and the dependent variables were: 1) student achievement as measured by the mean numerical average for seventh grade Language Arts students; and 2) locus on control as measured by the Nowicki-Strickland Locus of Control Scale for Children.

The same teacher taught both groups, using the same classroom and classroom management style. Academic achievement as measured by the mean numerical average for seventh grade students in Language Arts at the nine-week mark of the first semester served as the pretest. The pretest for locus of control consisted of the numerical score for seventh graders on the Nowicki-Strickland Locus of Control Scale for Children at the beginning of the second semester.

The comparison group received school-wide progress reports beginning at the three-week mark of the second semester, continuing at three-week intervals throughout the nine-week

treatment period. The school-wide progress reports consisted of numerical grade averages, conduct grades, attendance records, and teacher comments for each class. Stapled to each individual school-wide progress reports was a grade sheet identical to the weekly progress report received by the treatment group. The school-wide progress report was sent home for parent signature. The homeroom teacher followed up with a parent phone call for any progress report not returned with a parent signature.

In addition to the school-wide progress report, the treatment group received the weekly progress report at one-week intervals between each three-week school-wide progress report. The teacher distributed the weekly progress reports during the last five minutes of class each Tuesday, beginning with the second Tuesday of the treatment period. The treatment began at week one of the second semester at the end of January and continued throughout the nine-week treatment period. The weekly progress report consisted of a one-page individualized computer grade sheet, which itemized a student's scores on each assignment. The report included the cumulative numerical average to date as calculated by the following weighted assignment categories: Notebook (daily homework checks) 10%, Participation (individual work, group work, and whole class instruction) 20%, Writing Assignments 20%, Tests 20%, and Projects 30%. See Appendix A for a sample of the weekly progress report. In addition to the weekly progress report, the treatment group also received the school-wide progress reports, which were sent home for parent signature at three-week intervals. The school-wide progress reports consisted of numerical grade averages, conduct grades, attendance records, and teacher comments for each class. At three-week intervals, the treatment group received their weekly computer grade sheet stapled to the school-wide progress report.

At the beginning of the treatment period, the teacher gave detailed instructions to both the treatment and comparison groups on reading and interpreting the information on the computer grade sheets. Information on points possible and points earned was provided as well as how weighted averages are calculated. A sample was reviewed on the overhead projector. Student questions were addressed regarding the grade sheet. See Appendix C for lesson plan on Interpreting the Computer Grade Sheet.

The treatment group was informed at the beginning of the nine-week treatment period that each student in the class would be receiving a weekly progress report in the form of a weekly computer grade sheet. Students were already very familiar with the grade sheet, which was attached to each school-wide progress report during the first semester. Students were told that the weekly progress reports were for their use, for purposes of evaluating their progress from week to week. Students were informed that parent signatures were not required on the weekly progress report. (Parent signatures were required on the school-wide progress reports. Follow-up phone calls were made to parents of students not returning signed school-wide progress reports.)

At the end of the treatment period the two posttests were administered, which were identical to the two pretests, measuring academic achievement and locus of control. The mean scores on each test were calculated for both groups. The researcher scored the tests and results were compared.

### **Method of Data Analysis**

At the conclusion of the treatment period, mean numerical averages in Language Arts were compared for the treatment and comparison groups using a *t*-test. Secondly, mean numerical averages in Language Arts were also compared locus of control scores to determine a

correlation using a Pearson's  $r$  correlation test. Lastly, locus of control gain scores were compared for the treatment and comparison groups using a  $t$  test.

## Chapter 4

### Purpose of the Research Project

The primary purpose of the research project was to determine the effect of weekly progress reports on academic achievement for seventh grade Language Arts students. It was also the purpose of the research project to determine the effect of weekly progress reports on locus of control attribution. Furthermore, it was the purpose of the research project to determine whether there is a significant difference in academic achievement in Language Arts for seventh grade students with an internal versus external locus of control.

### Results

1. There was no significant difference in academic achievement for seventh grade Language Arts students who receive progress reports at one-week intervals and those students who receive progress reports at three-week intervals. A difference in mean averages between groups was found; however, the difference was not statistically significant. Therefore, the researcher failed to reject the null hypothesis.
2. There was no significant difference in academic achievement in Language Arts for seventh grade students with an internal locus of control and those with an external locus of control. A negative correlation was found; however, the correlation was weak. Therefore, the researcher failed to reject the null hypothesis.
3. There was no significant difference in locus of control attribution for seventh grade Language Arts students who receive progress reports at one-week intervals and those students who receive progress reports at three-week intervals. A difference in the mean gain scores was found; however, the difference was not significant. Therefore, the researcher failed to reject the null hypothesis.

**Table 3**

**Summary Results**

	Male	Female	N	Mean Num. Avg. @ 9 Wks. Semester 2	Correlation Between Num. Avg. & LOC @ 9 Wks. Semester 2	Mean LOC @ 9 Wks. Semester 2
<b>Treatment Group</b>	12	12	24	83.875	-0.209	1.5833333
<b>Comparison Group</b>	14	11	25	80.96	-0.423008	0.84

## **Conclusions and Discussion**

The findings of this research project indicated that there was no significant difference in academic achievement between groups who receive progress reports at one-week intervals and those who receive progress reports at three-week intervals. Although the treatment group improved in numerical average over the treatment period, the difference was not statistically significant (see Appendix G). Therefore, the researcher failed to reject the null hypothesis.

The findings of the research project also indicated that there was no significant difference in academic achievement in Language Arts for seventh grade students with an internal locus of control and those with an external locus of control. A negative correlation was found for each group at semester one, week nine (see Appendices H and I) and semester two week nine (see Appendices J and K); however, the correlation was weak in each case. Therefore, the researcher failed to reject the null hypothesis.

The findings of the research project, furthermore, indicate that there was no significant difference in locus of control attribution for seventh grade Language Arts students who receive progress reports at one-week intervals and those students who receive progress reports at three-week intervals. A difference in the mean gain scores was found; however, the difference was not significant (see Appendix L). Therefore, the researcher failed to reject the null hypothesis.

The above findings indicate that weekly progress reports did not have a significant impact on academic achievement or locus control attribution. This finding confirms the findings in the literature which stated that locus of control attribution is rather constant (Griffore, 1981). This finding contradicts the findings in the review of the literature which stated that locus of control can be changed through varying outcomes of achievement. Scapinello (1989) found that attribution (internal versus external locus of control) can be changed with manipulated outcomes

of achievement results for test groups. The results of this research project contradicted Scapinello's (1989) findings. In addition, the researcher did not find a correlation between locus of control attribution and academic achievement as was indicated in the review of the literature. Research indicated that low attribution is highly correlated with high academic achievement (Kopera-Frye, 1991). The finding of this research project contradicted these findings. Instead, the findings of this research project confirmed the findings of Sink (1991) who found a weaker relationship between locus of control and academic achievement among 11-13 year old students. Sink found that locus of control is not a strong predictor of classroom grades or scores on standardized tests for sixth graders. The findings of this research project also contradicted the findings of Clariana and Smith (1989) who found that students increase in academic achievement when given progress reports.

During the treatment period, the researcher made the following observations. First, students in the treatment group appeared to be excited when the weekly progress reports were announced. They indicated with smiles and applause that they were glad to be getting weekly feedback on their numerical average in the class. In addition, students appeared glad to receive the report each week, often asking about the distribution of the report at the beginning of the class period on the days reports were due. The researcher noticed that students seldom forgot their report when leaving class and seldom reported losing their weekly reports. Only once was a weekly report found on the classroom floor, which is unusual for papers distributed in class. The researcher concluded, therefore, that the reports were valuable to the students as a means of self-monitoring.

The weekly reports had a surprising effect on two students who were excluded from the sample due to their extremely low numerical averages and apparent lack of motivation. Both

students improved tremendously during the treatment period. On one occasion early in the treatment period, the male student who was excluded from the sample made a verbal comment about how he anticipated a low grade again. He said so in a bragging tone. Prior to the treatment period, he had transferred to the school with a low numerical Language Arts grade, and he chronically failed to make any substantial effort to turn in assignments or participate in class. As the treatment period progressed, he stopped making negative comments and received his grade sheet with the same anticipation and seriousness as the other students. His numerical average was low at the end of the treatment period (50), but his attitude toward the grade sheets showed improvement in that he appeared to take them more seriously without making sarcastic remarks. (He entered school late in the first semester, so there was no nine week Language Arts numerical average from the first semester for sake of comparison.) He also showed improvement with completion of projects as the treatment progressed. The female student who was excluded from the study made considerable strides in her numerical average. At the end of the treatment period, her numerical average was 75 (a gain of 37 points over her previous numerical average of 38 at the end of the first semester at the nine week mark.)

Despite the findings of no significant difference in numerical averages, the treatment appeared to have a positive effect on the treatment group. The emphasis on academic achievement brought about by the weekly distribution of the progress reports seemed to boost class morale. The teacher/researcher and students were constantly made aware of the need to make up assignments. Students took more initiative in making up tests and other missed assignments. High achievers, in particular, appeared to utilize the weekly report to monitor the accuracy of the grades on the report. Occasionally, an error was found, verified, and then corrected. This monitoring also appeared to remind other students of missing assignments. The

teacher/researcher noticed that students in the treatment group did not ask about their current numerical average as did the comparison group.

### **Limitations**

After the treatment had begun, two students from the treatment group were removed from the classroom. One transferred to another school; the other was moved to another team in the school because of disciplinary reasons. This reduced the treatment group to 24 students. In addition, a student was moved to the comparison group class from another class taught by the researcher/teacher. The presence of this student who was considered to be a discipline problem might have influenced the effectiveness of the treatment.

Due to a three-day holiday, students in the treatment group received printouts on Wednesday of that week rather than on Tuesday per usual. In addition, due to illness, the teacher/researcher was absent for five consecutive days in the second week of the treatment. Consequently, the treatment was suspended during that week. The teacher was also ill for a three-day period during the fifth week of the treatment; however, the treatment continued with the progress reports being distributed on the proper day by the substitute teacher.

The conclusion of the treatment period fell three days prior to Spring Break. The teacher/researcher was unable to administer the Locus of Control post-test on that day or the following day due to scheduled appointments off campus during the comparison group's class period. The researcher, therefore, gave the post-test on the third day after the end of the treatment period, the Friday before Spring Break. There was high absenteeism that day, and the Locus of Control post-test scores appeared to be erratic. The teacher/researcher gave the Locus of Control post-test a second time after the students returned from Spring Break. The second post-test scores appeared to form a more consistent pattern and were, therefore, used as the post-test.

Several students expressed dislike for taking the Locus of Control test a third time. The negative attitudes of some students might have influenced the scores on the Locus of Control post-test. Some students in the treatment group expressed suspicion as to the real purpose of the test, especially having taken it for a third time. This also might have influenced the scores.

### **Implications for Classroom Practice**

Despite the findings of this research project, the researcher found the use of the weekly progress report to be very beneficial to students and their teacher. Students in the treatment group were able to stay current with regard to their academic achievement, and students seemed to be able to better understand the averaging process as they watched weekly grades affect their weekly average. Students in the treatment group often expressed a feeling of control over their learning. These students asked to complete make-up work more frequently than students in the comparison group as they were informed of zeros resulting from work not made up after absences. Students in the treatment group never asked the status of their grade in the class as did students in the comparison group. Students also often checked the accuracy of the reports, occasionally finding errors which were verified and corrected before the next week's progress report.

The teacher/researcher benefited from the weekly progress reports as well. The teacher was able to give current numerical average updates to parents in the treatment group during parent conferences. Parents seemed impressed and appreciative of the current averages. The teacher/researcher was also able to stay more current with the status of incomplete student assignments due to student absences. The overall emphasis on academic achievement due to the weekly reports seemed to remind students of the teacher's desire to see students succeed academically.

The time invested in the treatment was considerable. The researcher found that 30 – 45 minutes per week were spent entering grades and printing individual weekly progress reports. The treatment also required a significant investment of paper, one sheet at the beginning of the treatment period and later two sheets per student when the number of grades per student increased. The teacher/researcher considered the time investment worthwhile and a time saver when grades were due for the school wide progress reports. The paper was available from the school and created no hardship; however, the volume of paper required for the treatment if done on a larger scale could perhaps present a problem. Paper shortages were often discussed at faculty meetings during the treatment period.

In conclusion, the teacher/researcher found the weekly progress reports to be worthwhile to the students given the concrete nature of the middle school learner (Caissy, 1994). Despite the findings of no significant difference in scores, the teacher/researcher believes that students benefited from regular, objective, concrete feedback regarding the status of their academic achievement in a class. The teacher/researcher also found that the weekly progress reports were worth the time and paper invested. Grades were entered into the computer on a regular basis. This enabled the teacher to provide parents with make-up work and current averages. Parents were able to get weekly feedback as to the academic progress of their student.

### **Recommendations for Further Research**

It was recommended that a similar research project be conducted with a longer treatment period, with a larger sample, and on a larger scale. Given the improved numerical average of the treatment group, the researcher recommended that future studies be conducted with a treatment period of an entire school year measuring the mean numerical average at the end of an entire school year compared with students who did not receive the treatment. It was also recommended

that weekly progress reports be used across all subjects so students could be confronted with the results of their efforts in every class for an entire school year. It was also recommended that students review the weekly report with a teacher or counselor on a weekly basis to help the student focus on the week's progress in a one-on-one setting. A comprehensive program with students receiving reports in every class on a weekly basis might help students focus on their efforts and address deficiencies before a negative pattern is established. Such a school-wide program might also impact the school environment with a greater emphasis on academics. The researcher also contends that the potential change in Locus of Control from weekly feedback is worth further study. A longer treatment period would help measure whether the change in Locus of Control during the seventh grade year is part of the developmental process versus an effect from the treatment. Given the disturbing trend of achievement loss in middle schools (Alspaugh, 1998), it is worthwhile to make every effort to continue research which has the potential to help students monitor and improve their academic achievement.

It was also recommended that anxiety be measured in a study on the effect of weekly progress reports. It is possible that students need some help in managing the potential anxiety of weekly progress reports in order to utilize them for purposes of self-regulation. Weekly one-on-one sessions with a teacher or counselor might be used to measure the variable of anxiety which weekly confrontation might bring to the student. This view is supported by Pintrich, Roeser, and DeGroot (1994) who found that the ability to regulate one's learning and progress are positively correlated with low anxiety levels in the student. Pintrich, et al. (1994) contend that students who experience some element of control over their learning environment and over academic achievement in the absence of anxiety are more motivated than those who do not experience

such control. It is, therefore, the recommendation of the researcher that some form of counseling support in conjunction with the weekly reports is warranted in future studies.

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**Appendix A:**  
**Sample of Weekly Progress Report**

STUDENT NAME (sample)

AT MIDDLE SCHOOL  
IN PER.3 ENGLISH

SCORES AS OF: 11-12-98

( 1 ) NOTE-CHECK: 0 / 100  
( 2 ) NOTE-PLANNER: 100 / 100  
( 3 ) NOTE-MIND ESSAY: 100 / 100  
( 4 ) WRITE-4 DRAFTS: 100 / 100  
( 5 ) WRITE-FINAL DRAFT AUTOBIOG: 100 / 100  
( 6 ) TEST-LITWORD CRUSH: 92 / 100  
( 7 ) TEST-GRAM FRAGRUNON : 95 / 100  
( 8 ) PROJ-ORAL PRESENTATION: 95 / 100  
( 9 ) PROJ-NOVEL PROJECT: 98 / 100  
( 10 ) PART-AUDIENGE: 90 / 100  
( 11 ) PART-SIGNED PARENT LTR 8/24: 100 / 100  
( 12 ) PART-SIGNED SYLLABUS: 100 / 100  
( 13 ) PROJ-READING RESPONSE 10/6: 100 / 100  
( 14 ) PART-1ST 6 WKS: 100 / 100  
( 15 ) PART-SIGN INTERNET: 100 / 100  
( 16 ) NOTE-VOCAB.10/12: 0 / 100  
( 17 ) NOTE-TSQR/DRAFT10/21: 100 / 100  
( 18 ) NOTE-REVISIONS 10/22: 100 / 100  
( 19 ) NOTE-EDITING 10/21: 100 / 100  
( 20 ) TEST-IRREG.VERB10/14: 97 / 100  
( 21 ) TEST-RET.REFORM10/12: 85 / 85  
( 22 ) NOTE-NOTEBK CHK 10/6: 0 / 100  
( 23 ) PART-PARENT SIGN PTS: 100 / 100  
( 24 ) WRITE-4 DRAFTS 10/28: 100 / 100

NOTE: 500 / 800  
(WEIGHT FACTOR = 10) 62.5 % = F

PART: 590 / 600  
(WEIGHT FACTOR = 20) 98.3 % = A

WRITE: 300 / 300  
(WEIGHT FACTOR = 20) 100 % = A

TEST: 369 / 385  
(WEIGHT FACTOR = 20) 95.8 % = A

PROJ: 293 / 300  
(WEIGHT FACTOR = 30) 97.7 % = A

WEIGHTED AVERAGE: 94.4 % = A

**Appendix B:**  
**Nowicki-Strickland Locus of Control Inventory**

## CNSIE

YES

NO

- \_\_\_ \_\_\_ 1. Do you believe that most problems will solve themselves if you just don't fool with them?
- \_\_\_ \_\_\_ 2. Do you believe that you can stop yourself from catching a cold?
- \_\_\_ \_\_\_ 3. Are some kids just born lucky?
- \_\_\_ \_\_\_ 4. Most of the time, do you feel that getting good grades means a great deal to you?
- \_\_\_ \_\_\_ 5. Are you often blamed for things that just aren't your fault?
- \_\_\_ \_\_\_ 6. Do you believe that if somebody studies hard enough he or she can pass any subject?
- \_\_\_ \_\_\_ 7. Do you feel that most of the time it doesn't pay to try hard because things never turn out right anyway?
- \_\_\_ \_\_\_ 8. Do you feel that if things start out well in the morning that it's going to be a good day no matter what you do?
- \_\_\_ \_\_\_ 9. Do you feel that most of the time parents listen to what their children have to say?
- \_\_\_ \_\_\_ 10. Do you believe that wishing can make good things happen?
- \_\_\_ \_\_\_ 11. When you get punished, does it usually seem it's for no good reason at all?
- \_\_\_ \_\_\_ 12. Most of the time, do you find it hard to change a friend's (mind) opinion?
- \_\_\_ \_\_\_ 13. Do you think that cheering more than luck helps a team to win?
- \_\_\_ \_\_\_ 14. Do you feel that it's nearly impossible to change your parent's mind about anything?
- \_\_\_ \_\_\_ 15. Do you believe that your parents should allow you to make most of your own decisions?
- \_\_\_ \_\_\_ 16. Do you feel that when you do something wrong there's very little you can do to make it right?
- \_\_\_ \_\_\_ 17. Do you believe that most kids are just born good at sports?
- \_\_\_ \_\_\_ 18. Are most of the other kids your age stronger than you are?
- \_\_\_ \_\_\_ 19. Do you feel that one of the best ways to handle most problems is just not to think about them?
- \_\_\_ \_\_\_ 20. Do you feel that you have a lot of choice in deciding who your friends are?
- \_\_\_ \_\_\_ 21. If you find a four leaf clover, do you believe that it might bring you good luck?

- \_\_\_ \_\_\_ 22. Do you often feel that whether you do your homework has much to do with what kind of grades you get?
- \_\_\_ \_\_\_ 23. Do you feel that when a kid your age decides to hit you, there's little you can do to stop him or her?
- \_\_\_ \_\_\_ 24. Have you ever had a good luck charm?
- \_\_\_ \_\_\_ 25. Do you believe that whether or not people like you depends on how you act?
- \_\_\_ \_\_\_ 26. Will your parents usually help you if you ask them to?
- \_\_\_ \_\_\_ 27. Have you felt that when people were mean to you it was usually for no reason at all?
- \_\_\_ \_\_\_ 28. Most of the time, do you feel that you can change what might happen tomorrow by what you do today?
- \_\_\_ \_\_\_ 29. Do you believe that when bad things are going to happen they just are going to happen no matter what you try to do to stop them?
- \_\_\_ \_\_\_ 30. Do you think that kids can get their own way if they just keep trying?
- \_\_\_ \_\_\_ 31. Most of the time, do you find it useless to try to get your own way at home?
- \_\_\_ \_\_\_ 32. Do you feel that when good things happen they happen because of hard work?
- \_\_\_ \_\_\_ 33. Do you feel that when somebody your age wants to be your enemy there's little you can do to change matters?
- \_\_\_ \_\_\_ 34. Do you feel that it's easy to get friends to do what you want them to?
- \_\_\_ \_\_\_ 35. Do you usually feel that you have little to say about what you get to eat at home?
- \_\_\_ \_\_\_ 36. Do you feel that when someone doesn't like you there's little you can do about it?
- \_\_\_ \_\_\_ 37. Do you usually feel that it's almost useless to try in school because most other children are just plain smarter than you are?
- \_\_\_ \_\_\_ 38. Are you the kind of person who believes that planning ahead makes things turn out better?
- \_\_\_ \_\_\_ 39. Most of the time, do you feel that you have little to say about what your family decides to do?
- \_\_\_ \_\_\_ 40. Do you think it's better to be smart than to be lucky?

**Appendix C:**

**Lesson Plan**

**Interpreting the Computer Grade Sheet**

## Interpreting the Computer Grade Sheet

### Lesson Plan

#### Objectives:

1. The student will be able to explain the grade ratios on a computer grade sheet.
2. The student will be able to calculate a mean grade from a list of grades.
3. The student will be able to calculate a grade based on a weighted average.
4. The student will be able to compare and contrast two grade sheets with different averages and identify factors which contribute to the different averages (see Appendices D and E).

#### Content:

1. Calculating a mean grade from a list of grades.
2. Grade sheets.
3. Comparison/contrast.

#### Assignment (in class):

1. Calculate the mean of the following project grades:
  - 1) 90, 75, 80, 88.
  - 2) 90, 75, 80, 88, 0
  - 3) 90, 75, 80, 88, 0, 0
  - 4) 90, 75, 80, 88, 0, 0, 0
  - 5) 90, 75, 80, 88, 70, 70, 70
2. Compare and contrast two grade sheet with different averages.

#### Methods:

1. Board work
2. Discussion
3. Questioning
4. Demonstration
5. Drill

#### Materials:

1. Handout (computer grade sheet)
2. Overhead projector
3. Transparency (computer grade sheet)
4. Dry-erase board and markers
5. Calculator

#### Evaluation:

1. Oral Response
2. Questions
3. Daily work

**Appendix D:**  
**Comparison Gradesheet #1 Used in Lesson Plan**

**Student Name (sample)**

AT MIDDLE SCHOOL  
IN PER.3 ENGLISH

SCORES AS OF: 01-26-99

( 1 ) NOTE-CARDS ALLSUMMER: 0 / 100  
( 2 ) NOTE-P.496: 100 / 100  
( 3 ) NOTE-HANDOUT 57/58: 100 / 100  
( 4 ) TEST-EDITING 1/25: 90 / 100

NOTE: 200 / 300  
(WEIGHT FACTOR = 34) 66.7 % = F

TEST: 90 / 100  
(WEIGHT FACTOR = 66) 90 % = B

WEIGHTED AVERAGE: 82.1 % = C

**Appendix E:**  
**Comparison Gradesheet #2 Used in Lesson Plan**

**Student Name (sample)**

AT MIDDLE SCHOOL  
IN PER.3 ENGLISH

SCORES AS OF: 01-26-99

- ( 1 ) NOTE-CARDS ALLSUMMER: 100 / 100
- ( 2 ) NOTE-P.496: 0 / 100
- ( 3 ) NOTE-HANDOUT 57/58: 100 / 100
- ( 4 ) TEST-EDITING 1/25: 70 / 100

NOTE: 200 / 300  
(WEIGHT FACTOR = 34) 66.7 % = F

TEST: 70 / 100  
(WEIGHT FACTOR = 66) 70 % = D

WEIGHTED AVERAGE: 68.9 % = F

**Appendix F:**  
**t test Comparing Treatment Group Numerical Average**  
**With Comparison Group @ 9 Weeks Semester 1**  
**Used to Establish Equivalency**

Period 3 Sem. 1 9wk. Avg. 93  
 Period 7 Sem. 1 9wk. Avg. 97  
 90  
 71  
 86  
 73  
 80  
 82  
 59  
 97  
 73  
 70  
 56  
 67  
 95  
 50  
 85  
 96  
 70  
 64  
 47  
 70  
 91  
 95  
 95  
 91  
 94

t-Test: Two-Sample Assuming Unequal Variances

	Period 3 Sem. 1 9wk. Avg.	Period 7 Sem. 1 9wk. Avg.
Mean	78.46153846	78.4
Variance	233.6184615	194.75
Observations	26	25
Hypothesized Mean Difference	0	
df	49	
t Stat	0.015024885	
P(T<=t) one-tail	0.494036669	
t Critical one-tail	1.676551165	
P(T<=t) two-tail	0.988073338	
t Critical two-tail	2.009574018	

**Appendix G:**  
**t test Comparing Treatment Group Numerical Average**  
**With Comparison Group @ 9 Weeks Semester 2**

Period 3 S Period 7 Sem.2 9wk.avg. t-Test: Two-Sample Assuming Unequal Variances

	Period 3 Sem.2 9wk. Avg.	Period 7 Sem.2 9wk.avg.
Mean	83.875	80.96
Variance	112.7228261	166.9566667
Observations	24	25
Hypothesized Mean Difference	0	
df	46	
t Stat	0.864294762	
P(T<=t) one-tail	0.195955351	
t Critical one-tail	1.678658919	
P(T<=t) two-tail	0.391910701	
t Critical two-tail	2.012893674	

**Appendix H:**  
**Pearson's  $r$  Correlation Between Numerical Average and**  
**Locus of Control @ 9 Weeks Semester 1**  
**Treatment Group**

Per.3 Sem.1 9 wk. Num. Avg.	Per.3 Sem.1 9 wk. LOC
93	18
90	13
71	14
86	12
80	16
82	15
97	15
73	10
70	20
56	11
67	17
95	19
50	14
85	12
96	9
70	17
64	22
47	13
70	13
91	11
95	18
95	13
91	6
94	9

	Column 1	Column 2	Column 3
Column 1	1		
Column 2	#DIV/0!	1	
Column 3	-0.166096	#DIV/0!	1

**Appendix I:**  
**Pearson's  $r$  Correlation Between Numerical Average and**  
**Locus of Control @ 9 Weeks Semester 1**  
**Comparison Group**

Per.7 Sem.1 9 wk. Num. Avg.    Per.7 Sem.1 9 wk. LOC

97	18
70	18
90	19
96	9
81	18
82	18
98	13
73	21
97	18
78	15
68	19
73	20
51	15
67	17
65	18
74	16
77	16
61	20
92	9
90	11
55	18
71	8
67	15
92	19
95	17

	Column 1	Column 2	Column 3
Column 1	1		
Column 2	#DIV/0!	1	
Column 3	-0.25588	#DIV/0!	1



**Appendix J:**  
**Pearson's  $r$  Correlation Between Numerical Average and**  
**Locus of Control @ 9 Weeks Semester 2**  
**Treatment Group**

Per.3 Sem.2 9 wk. Num. Avg.	Per.3 Sem.2 9 wk. LOC
92	24
86	15
65	17
85	12
87	12
85	13
98	10
63	19
84	15
89	10
71	16
94	16
64	17
98	14
94	22
80	21
86	23
81	16
71	16
74	13
91	18
91	11
93	11
91	13

	Column 1	Column 2	Column 3
Column 1	1		
Column 2	#DIV/0!	1	
Column 3	-0.209	#DIV/0!	1

**Appendix K:**  
**Pearson's  $r$  Correlation Between Numerical Average and**  
**Locus of Control @ 9 Weeks Semester 2**  
**Comparison Group**

Per.7 Sem.2 9 wk. Num. Avg.	Per.7 Sem.2 9 wk. LOC
89	26
80	11
69	23
98	4
90	14
84	23
90	16
71	27
91	18
97	14
79	24
79	15
75	18
80	17
79	16
54	19
83	17
60	20
84	15
100	14
70	13
58	20
77	14
95	14
83	14

	Column 1	Column 2	Column 3
Column 1	1		
Column 2	#DIV/0!	1	
Column 3	-0.423008	#DIV/0!	1

**Appendix L:**  
**t test Comparing Treatment Group Locus of Control Gain Scores**  
**With Comparison Group @ 9 Weeks Semester 2**

3rd period LOC gain scores 7th period LOC gain scores

6 8  
 2 -7  
 3 4  
 0 -5  
 -4 -4  
 -2 5  
 -5 3  
 9 6  
 -5 0  
 -1 -1  
 -1 5  
 -3 -5  
 3 3  
 2 0  
 13 -2  
 4 3  
 1 1  
 3 0  
 3 6  
 2 3  
 0 -5  
 -1 12  
 5 -1  
 4 -5  
 -3

t-Test: Two-Sample Assuming Unequal Variances

	Variable 1	Variable 2
Mean	1.583333333	0.84
Variance	17.99275362	22.72333333
Observations	24	25
Hypothesized Mean Difference	0	
df	47	
t Stat	0.577176535	
P(T<=t) one-tail	0.283287408	
t Critical one-tail	1.677926775	
P(T<=t) two-tail	0.566574816	
t Critical two-tail	2.011738616	

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