COMPARING THE SELF-ESTEEM OF EARLY ADOLESCENTS

IN A TRADITIONAL CLASSROOM WITH THE SELF-

ESTEEM OF EARLY ADOLESCENTS IN A

WHOLE LANGUAGE CLASSROOM

BY

BEVERLY A. DEVRIES

Bachelor of Arts
Northwestern College
Orange City, Iowa
1968

Master of Arts
Western Michigan University
Kalamazoo, Michigan
1980

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Oklahoma State University
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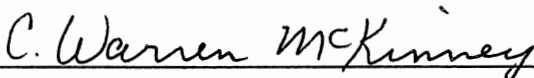the Degree of
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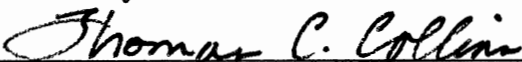
WHOLE LANGUAGE CLASSROOM

Thesis Approved:

David Yelli
Thesis Advisor

Ted Neille

C. Warren McKinney

Carol Lynn Moder

Thomas C. Collins
Dean of the Graduate College

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CHAPTER I

INTRODUCTION

In recent years much attention has been given to the
type of school environment which nurtures academic success
and a positive self-esteem in early adolescent students
(Beane, 1986; Bloomer, 1986; Drinkard, 1986; Epstein, 1990;
Manning, 1988; McEwin & Thomason, 1982; Onyehalu, 1983;
Wayne, 1987). Combs (1971) and Coopersmith (1981) found
that students' self-esteem and academic success are
interrelated. Students with high self-esteem are generally
academically successful, and students with low self-esteem
are generally academically unsuccessful.

An important question for educators is, "What type of
school environment best enhances high self-esteem and
academic success in early adolescent students?" For this
study, the question is narrowed to "What type of environment
in a language arts classroom is best for early adolescent
students to develop high self-esteem?" Beane (1986), Combs
(1971), Coopersmith (1975), and Glasser (1986) found that it
must be a school environment that responds to the learner;
it must be a student-centered school where the students are
in control over their learning situation. Schools must give

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students "an awareness of their powers and help them recognize that they can make a difference in their own lives" (Coopersmith, 1990, p. 9). Therefore, a school's goal must be to encourage initiative (Coopersmith, 1975; Glasser, 1986) and autonomy (DeVries, 1987; Kamii, 1982).

The following list describes a school that has a student-centered environment:

1. Students have choices of activities.

2. Students set their own pace for learning.

3. Students are given free use of materials so they can make their own discoveries.

4. Students evaluate themselves and their progress instead of being "measured-up" by others (Atwell, 1987; Coopersmith, 1975; DeVries, 1987; Goodman, 1986).

The student-centered classrooms have teachers who are philosophically based in constructivism. The constructivists consider two aspects of adolescents' intellectual growth. First, they believe that students do not "learn" facts by internalizing them from outside forces as the behaviorists believe. Piaget, a Swiss psychologist, found in his many studies of how humans acquire knowledge that humans construct their own knowledge from within. As humans interact with their environment, they construct new knowledge by creating and coordinating relationships between their prior knowledge and their present new experience (DeVries, 1987; Kamii, 1982). For example, a student learns

through experience with his environment that he/she lives in a house. Later the student may visit a friend and discover that the friend calls his/her "house" an apartment. At another time, the student may be invited to visit his/her grandfather who lives in a cottage. This student categorizes his/her house, the friend's apartment, and his/her grandfather's cottage as places to live, yet he/she begins to recognize the differences among the three without any direct instruction.

Second, not all students are at the same cognitive level. During the early adolescent years (ages 11 through 14) most students are either in the concrete stage of development with the need to manipulate objects, or they are in the formal operational stage with the ability to do abstract reasoning (Kamii, 1982; Piaget & Inhelder, 1969; Toepfer, 1980; Wadsworth, 1989). The transition from one stage to the next must be fostered if it is going to occur; the students need time to work with objects, to ask their own questions, and to follow their own interests (Duckworth, 1987; McEwin & Thomason, 1982).

The student-centered classrooms have teachers who also understand students' social needs. When Glasser (1990) and Goodlad (1984) asked students what they liked most about school, they said, "Friends"; and when asked what courses they liked best, their responses included classes such as music, drama, and sports because they liked to interact and

be part of a "team." In the classroom, students desire the "team" atmosphere of working together in pairs, small groups, or as a whole class. Instead of competing against their classmates for a letter grade, they enjoy cooperating together for one goal (Beane, 1986; Glasser, 1990; Johnson & Johnson, 1987; McEwin & Thomason, 1982). These peer groups in turn contribute to high self-esteem among individuals (Glasser, 1990; Wayne, 1987).

Glasser (1986) and Goodlad (1984) found, however, that the typical classroom is not student-centered and does not have the "team" atmosphere; instead, they found that the typical classroom is the traditional, teacher-centered classroom with students working in isolation. The teachers in the teacher-centered classrooms have beliefs that are based in essentialism and behaviorism. They believe that the human mind is an informational receptacle which can be trained to master factual content and that "[m]astery of content is assisted by organization" (Dobson & Dobson, 1981, p. 19). Therefore, traditional teachers break concepts into small parts and have students memorize a fact or master a skill through repetitious drills that take the students from the simplest to most complex concepts. For example, in a traditional middle school classroom, a teacher may explain that a comma precedes a coordinating conjunction in a compound sentence. The students then "learn" the concept by completing a worksheet of 25 of more sentences that

instructs the students to insert a comma in each compound
sentence.

The traditional teachers believe that the content that
must be mastered is a universal set of basic facts that are
necessary for all individuals. Therefore, in the teacher-
centered classroom, students are not given a choice of
activities or materials. Instead, the teachers closely
follow the textbook's curriculum and have all students
individually doing the same lessons which are sequenced from
the simplest to most complex skills. Evaluation in the
teacher-centered classroom is conducted by the teachers, who
often use standardized tests and national norms to evaluate
the individual student. Glasser (1990) found that the main
goal in the traditional classroom is to have the students
learn and memorize fragmented concepts so they can pass the
minimum criteria of the standardized tests which are
mandated by most state departments of education.

The typical classroom does not foster a positive self-
image in the early adolescent students either. Combs (1971)
and Glasser (1990) found that early adolescents need control
over their learning in order to have high self-esteem.
Coopersmith (1981) found that domination, isolation, and
rejection, which are often found in the typical classroom,
result in low self-esteem. In the typical classroom, the
teacher dominates the learning experience and isolates
students from other classmates by having them sit in

straight rows and working quietly by themselves. Any
innovative ideas suggested by the students are often
rejected by the teacher because they are not part of the
predetermined curriculum.

As shown, the teacher-directed classroom is not
conducive to the early adolescents' diversified intellectual
growth nor to their development of a high self-esteem.
However, in the whole language classroom, which is student-
centered, the teacher helps students "to achieve a sense of
control and ownership over their own use of language, and
thinking [that] will help to give them a sense of their
potential powers" (Goodman, 1986, p. 10). When they have
control over their own learning and have a sense of power,
students possess a positive self-esteem (Coopersmith, 1990;
Glasser, 1986). With the students being active
participants, rather than passive recipients, the students
are immersed in exploring whole topics that interest them,
that are useful, and that are at their cognitive level.
Whole language educators know that growth occurs when the
material is relevant, meaningful, and functional to the
individual (Atwell, 1987; Calkins, 1986; Goodman, 1986;
Graves, 1983; Hansen, 1987). In such an environment, the
students acquire a positive self-esteem (Beane, 1986;
Glasser, 1986).

Studies have been conducted which show that the whole
language approach to reading, which is literature-based, is

an effective way to teach reading. One of the earliest studies was conducted by Cohen (1968) who compared 130 second-grade students in a basal program with 155 second-grade students in a literature-based program. The students in the literature-based program did significantly better on the word knowledge, the reading comprehension, and the vocabulary sections of the Metropolitan Achievement Tests.

Eldredge and Butterfield (1986) conducted a study with 1,149 second-grade students in 50 classrooms in Utah. The study compared the basal-reader approach to five experimental approaches, of which two were literature-based programs. The results showed that students in the two literature-based programs scored significantly better on the Gates-MacGinitie Reading Test and on a Pictorial Self-Concept Scale than did the students in the other groups.

Tunnel (1986) conducted a study with 28 fifth-grade students who were in a Chapter I reading program. Tunnel used the literature-based approach for seven months and found an average overall gain of 1.1 grades in the students.

In 1988 Reutzel conducted a study with 63 first-grade students in Utah (Tunnel & Jacobs, 1989). Reutzel used the literature-based program for the entire year. Utah's state goal is to have first graders score at an 80% level on the Utah Benchmark Skills Test in May. This group of students scored at the 93% level in January. In March, this group of students took the Stanford Achievement Test and uniformly

scored at the 99 percentile.

Statement of the Problem

Combs (1971) and Glasser (1990) found that one way for students to gain a positive self-esteem is for them to have control over their learning situation. Atwell (1987), Calkins (1986), Goodman,(1986), Graves (1983), Hansen (1987), and other whole language advocates emphasize students' ownership and control over their learning. Studies have been conducted to show that the whole language approach is an effective way to teach reading. However, no study comparing the self-esteem of middle school students in a whole language classroom with the self-esteem of students in a traditional language arts classroom has been found. Therefore, the purpose of this study is to compare the self-esteem of middle school students in a whole language classroom with the self-esteem of middle school students in a traditional classroom.

The Hypotheses

Literature suggests that self-esteem and reading ability are interrelated and that the whole language approach gives the students control over their learning, which helps them gain a positive self-esteem. However, no study can be found that compares the self-esteem of students in a whole language classroom with the self-esteem of

students in a traditional teacher-centered classroom;
therefore, the following null hypotheses will be tested:

1. There is no significant difference between the mean
score on the School Form of the Coopersmith Self-Esteem
Inventory of middle school students who experience a whole
language classroom and the mean score of middle school
students who experience a traditional classroom.

2. There is no significant difference between the mean
score on the School Form of the Coopersmith Self-Esteem
Inventory of middle school students with high reading
ability and the mean score of middle school students with
low reading ability.

3. There is no significant difference between the mean
score on the School Form of the Coopersmith Self-Esteem
Inventory of middle school students with high reading
ability who experience a whole language classroom and the
mean score of middle school students with high reading
ability who experience a traditional classroom.

4. There is no significant difference between the mean
score on the School Form of the Coopersmith Self-Esteem
Inventory of the middle school students with low reading
ability who experience a whole language classroom and the
mean score of the middle school students with low reading
ability who experience a traditional language arts
classroom.

5. There is no significant difference between the mean

score on the School Form of the Coopersmith Self-Esteem Inventory of the boys and the mean score of the girls in the whole language classroom.

6. There is no significant difference between the mean score on the School Form of the Coopersmith Self-Esteem Inventory of the boys and the mean score of the girls in the traditional classroom.

7. There is no significant difference between the mean score on the School Form of the Coopersmith Self-Esteem Inventory of the boys in the traditional classroom and the mean score of the boys in the whole language classroom.

8. There is no significant difference between the mean score on the School Form of the Coopersmith Self-Esteem Inventory of the girls in the traditional classroom and the mean score of the girls in the whole language classroom.

<center>Definitions</center>

1. Coopersmith defined self-esteem as "the evaluation a person makes, and customarily maintains of him- or herself; that is overall self-esteem is an expression of approval or disapproval, indicating the extent to which a person believes him- or herself, competent, successful, significant and worthy" (Coopersmith, 1990, p. 4).

2. Whole language is a concept that "includes the use of real literature and writing in the context of meaningful, functional, and cooperative experiences in order to develop

in students motivation and interest in the process of learning" (Bergeron, 1990, p. 319).

3. Traditional refers to a teacher-directed classroom that uses the skills approach.

4. Early adolescence include the students in the middle school (grades six through eight) who range in ages from 11 to 14.

5. Reading ability was determined on the basis of the student's reading score on the Iowa Tests of Basic Skills or on the Gates-MacGinitie Reading Test. Students whose National Rank was 50% or above on the Iowa Tests of Basic Skills were classified as students with high reading ability, and students whose National Rank was 49% or below were classified as students with low reading ability. The division of the two categories was determined by the researcher, based on the assumption that in a normal population, 50% should be the median and mean of the reading scores. On the Gates-MacGinitie Reading Test, students with a 6.9 score or above were classified as students with high reading ability, and students with a 6.8 score or below were classified as students with low reading ability. This scale was set with the help of the classroom teachers who stated that a score of 6.9 is considered a desirable reading level for incoming seventh graders.

6. Internal locus of control is the feeling "that what happens to [oneself] is a result of, or dependent on,

[one's] own behavior and attributes" (Diesterhaft & Gerken, 1983, p. 367).

7. External locus of control is the feeling that one's "outcomes are contingent on luck, fate, chance, or powerful other" (Diesterhaft & Gerken, 1983, p. 367).

8. Constructivism is the cognitive theory that states that humans construct their own knowledge from within as they interact with their environment.

Limitations

1. The students were selected from school districts in one south central state; results may vary in different areas of the country.

2. The selection of the school buildings was based on the criteria that on the sixth- or seventh-grade level one teacher used the whole language approach and another teacher used the traditional approach.

3. The researcher used intact classrooms. The classrooms were not randomly selected, nor were the students or teachers randomly placed by the researcher.

4. There was no control over the personalities of the teachers.

5. The study could be conducted for only one semester because of the class scheduling in the departmentalized schools.

6. The whole language classrooms in two of the schools

experienced a student-centered classroom for only one period of the day because the schools were departmentalized.

Organization of the Remainder

of the Dissertation

The remaining chapters are organized in the following manner. Chapter two contains a review of the literature in the related areas of adolescents' needs and their self-esteem, and in the areas of language learning and the whole language theory. The description of the subjects, and the instruments with the design and procedure are discussed in chapter three. The statistical analysis of the data and interpretation of the findings are included in chapter four. The final chapter summarizes the study and lists recommendations for further study and research. An appendix includes a sample of the questionnaire, a sample of the letter sent to the parents, a sample of the consent form, and basic data for verification of statistical analysis. A sample of the School Form of the Coopersmith Self-Esteem Inventory is not included because of copyright laws.

CHAPTER II

REVIEW OF THE LITERATURE

Psychologists and educators agree that students with a positive self-esteem are happier, more effective, and more productive than are students with a low self-esteem (Beane, 1983; Combs, 1971; Coopersmith, 1981). Theorists have tried to determine what the antecedents are to a positive self-esteem and what types of environment, if any, can enhance one's self-esteem. Educators are particularly interested in the types of classroom environments and teaching methods that affect self-esteem. In recent years, whole language advocates posited that the whole language classroom enhances self-esteem (Goodman, 1986), yet that statement has not been challenged or proven to be true.

A review of the literature indicates that previous studies have been conducted (a) to establish if there is a relation between self-esteem and academic achievement (Brookover, Thomas & Paterson, 1964; Combs, 1971; Coopersmith, 1981; Handsford & Hattie, 1982; Mintz & Muller, 1977; Primavera, Simon, & Primavera, 1974; Rosenberg & Simmons, 1973; Rubin, Dorle & Sandidge, 1977; Stenner & Katzenmeyer, 1975), (b) to establish the causal predominance

of self-esteem or academic achievement (Anderson & Evan, 1974; Pottebaum, Keith & Ehly, 1986; Scheirer & Kraut, 1979), and (c) to compare academic achievement in the whole language classroom to the academic achievement in the traditional classroom (Klesius, Griffith & Zielonka, 1991; Reutzel & Cooter, 1990; Stahl & Miller, 1989; Tunnell & Jacobs, 1989). However, no studies have been found that compare the self-esteem of early adolescents in the whole language classroom with the self-esteem of early adolescents in the traditional classroom. The purpose of this study is to compare the self-esteem of early adolescents (ages 11 to 14) in a whole language classroom with the self-esteem of early adolescents in a traditional classroom.

Significant to this study is an understanding of the following topics which will be discussed in this chapter: (a) the physical, social, emotional, and cognitive needs of the early adolescents (ages 11 to 14), (b) the antecedents of self-esteem, (c) the correlation between self-esteem and academic success, (d) the causal predominance of self-esteem or academic achievement, (e) the analyses of various self-esteem inventories, (f) the individual's construction of knowledge, (g) language learning, (h) the whole language theory, and (i) previous research conducted in all of these areas.

Early Adolescents' Idiosyncrasies

Many educators (Beane, 1986; Bloomer, 1986; Lake, 1988; Maynard, 1986; McEwin & Thomason, 1982; Toepfer, 1980; Wayne, 1987) have found that the early adolescents' needs are very diverse. At different rates they experience physical, intellectual, social, and emotional changes that affect the type of classroom they need.

Physical Needs

Physically, adolescents are experiencing many changes that make them self-conscious. The boy whose voice is changing is embarrassed with the squeaks and the squawks, while the boy whose voice has not changed fears he will never become a man. The girls are just as self-conscious about their developing or not so developing bodies.

Both boys' and girls' glands produce excess hormones and adrenalin so they have bursts of energy, which tend to cause restlessness. This restlessness causes early adolescents' attention span to be approximately 18 minutes, but most of their classes are 45 to 55 minutes long (Lake, 1988).

Restlessness may also be caused by their developing tail-bones. F. M. Smith (1990) reported that during the early adolescent stage, the tail-bone takes its final form and the three lower bones fuse together; therefore, sitting on hard chairs is very uncomfortable. Considering their

physical growth and their attention spans, teachers are asking the impossible when they ask early adolescents to sit still for 50 minutes in a chair that often does not fit them.

Cognitive Growth

Intellectually, Piaget found that most early adolescents pass from the concrete level of operation (a conceptual stage when information is organized around categories, and learning is done through manipulation of objects) to the formal operational level (a conceptual stage when logic and reasoning is used in decision making, and abstract thinking is possible) (Kamii, 1982; Piaget & Inhelder, 1969; Wadsworth, 1989). This passing from one level to the next includes two aspects: (a) going from concrete thinking to abstract thinking, and (b) going from thinking about the actual to what is possible. In order to pass from concrete thinking to abstract thinking, early adolescents still need to manipulate objects in order to understand a novel concept (Piaget & Inhelder, 1969) and need time to discuss observations so they can "think aloud" (Lake, 1988).

Social interaction aids the intellectual development. Vygotsky (1962) stressed the importance of the zone of proximal development where students learn from others around them who already understand the novel concept. Through discussion and interaction the student who already

understands the concept (Student A) will explain it to the student who does not understand the concept (Student B). As Student A explains the concept, Student B begins to understand the concept; Student A's understanding develops new and deeper levels of understanding as he/she verbalizes the idea (DeVries, 1987).

At times these discussions may end in "constructive conflict" when Student A and Student B have a different understanding of the concept. However, DeVries (1987) found that learning occurs through "constructive conflict." When students have conflicting ideas among themselves, they find it necessary to explain their reasoning. Through their explanations, either they come to understand the "error" in their reasoning or they better understand the correct concept.

Early adolescents not only pass from concrete to abstract thinking, but they begin to think about "what might be" instead of just "what is" (Kroll, 1983). Again they need ample opportunities to relate new information to prior knowledge and need time to idealize and romanticize. They need time to explore new ideas and social issues and to discuss outlandish possibilities with peers and adults.

To pass from the concrete stage to the formal operational stage, students need questions posed to them that encourage higher-level thinking. Instead of being asked questions that require regurgitation, early

adolescents need to be asked questions that require synthesizing, analyzing, and critical thinking. Social interaction can aid this type of thinking.

The passing from one level of thinking to the next requires time. Instead of scurrying from one topic to the next, students need time to reflect and write out what they learned (Lake, 1988), what they still do not understand (Tompkins & Hoskisson, 1991), and what they still desire to learn (Atwell, 1987).

Piaget and Inhelder (1969) found that children do not develop at the same rate and some children never reach the formal operational stage. Toepfer (1980) reported that Shayer and Wylam found in their study of thousands of adolescents that the following percentages of adolescents can perform abstract thinking skills:

5% of 11-year-olds

12% of 12-year-olds

14% of 13-year-olds

14% of 14-year-olds (p. 226).

However, Stefanich (1982) reported that 20% of 12-year-olds have entered the formal operational stage, while 40% of privileged 12-year olds have entered this stage. The privileged adolescents were those who came from stimulating environments which included many books and other enriching activities such as trips to museums, concerts, etc. He found that a stimulating environment accelerates

intellectual growth rate.

Epstein and Toepfer (1978) discovered that the human brain increases in weight from 350 grams at birth to about 1,400 grams at brain maturity (about age 17). Within that period there are five spurts of growth--3 to 10 months, 2 to 4 years, 6 to 8 years, and 14 to 16 years. Following each of the spurts is a plateau. During the plateau, they found that "it is relatively more difficult to initiate novel intellectual processes" (p. 657); therefore, students should be engaged in activities that are maturing "already initiated and learned cognitive skills" (p.658). Epstein and Toepfer emphasized the affective and psychomotor aspects of learning during the plateaus. They recommended that the middle grades' curricula be altered "to avoid such introduction of new cognitive skills and to include a much larger component of experience and practice of skills already acquired in the cognitive area" (p. 658).

Social Needs

Erikson (1968) found that early adolescents are confused and disturbed by social conflicts as they establish a new sense of ego identity which takes them from egocentrism to peer approval. They constantly try out new relationships while being highly influenced by their peers because they are concerned about meeting their peers' expectations. They need a sense of belonging (Calkins,

1986), and sometimes they go to extremes just to be accepted. However, inner conflict occurs when they are challenged to go to extremes and to give up their ethics and morals that they have internalized from their parents. Early adolescents often don a social role that is aimed to please their peers; however, that role often is not acceptable to their parents nor to themselves.

Even though their peers may cause situations that bring inner conflict, social interaction with peers is one of the most important aspects of the early adolescent's life. Through interaction, they share problems and discover that a problem is not unique to them. When asked why they like school, eighty percent said, "Friends" (Goodlad, 1984). Peers are the most influential and the most important significant other in the early adolescent's life (Glasser, 1990).

Early adolescents are not only disturbed by peer pressures, but they are also disturbed by social demands. The early adolescent often encounters new experiences that require social graces that they have not yet acquired; therefore, they find themselves in awkward situations that cause embarrassment. For example, a student may be the recipient of some academic or athletic award given by a civic organization. The student may need to receive this award in public at the organization's monthly meeting. Once the student arrives at the meeting, he/she may discover that

his/her dress is not appropriate and that he/she needs to give an acceptance speech for which he/she made no preparation. The student may stutter and stammer and be totally embarrassed. After such an experience, the student may isolate himself/herself just so he/she never needs to experience embarrassment again (Beane, Lipka & Ludewig, 1980).

Socially, early adolescents also have the need to be useful. They recognize their relationship with the wider society and have the desire to change social ills (Tierno, 1983). Group discussions give them opportunities to brainstorm about ways to change the status quo, and class outings and clubs give them opportunities to help others. Peer tutoring, tutoring a younger student, visits to nursing homes, ecology projects, and other services to their community help them to them to fulfill this need.

Emotional Needs

Emotionally, adolescents are moody. They have extreme behavioral swings--from sophisticated to childlike (Padgett, 1983) and from independent to dependent (Elkind, 1970). They are very critical of themselves and others, have high ideals, and become frustrated when plans do not materialize. Often their "ideal" self grows more rapidly than the real self and depression sets in (Blyth & Traeger, 1983). They have feelings of inadequacy and inferiority and have many

concerns and fears such as "Am I normal?" "Who am I?" "Do I look appealing?" "Will I fail in this endeavor?" (Calkins, 1986; Crain, 1985; McEwin & Thomason, 1982).

Early adolescents have two myths, the "Imaginary Audience" and the "Personal Fable" (Beane, 1983). The "Imaginary Audience" is the myth that "Everyone is watching me." With this myth, adolescents put themselves under extreme pressure because they want to be accepted by their peers, especially by the "in-crowd." Because they are very self-conscious in a crowd, they may often become obnoxious.

The "Personal Fable" is the idea that "This doesn't happen to anyone else." Television advertisements display perfect, carefree adolescents who are sure of themselves and have no problems. When adolescents encounter a problem, they feel isolated and are afraid to discuss the problem with anyone else.

The vast amount of physical, social, emotional, and cognitive changes in the early adolescent causes "ego-disequilibrium or self-concept disturbance" (Tierno, 1983, p. 578); and their self-concept effects personal experiences and interpersonal relationships.

Self-Esteem

There are two aspects of self-perception, self-concept and self-esteem. Self-concept is the description one holds of him- herself, and self-esteem is the value one gives to

him- herself (Beane & Lipka, 1980). Since most researchers
use the terms interchangeably, this study does the same.

Antecedents of Self-Esteem

Stanley Coopersmith, an American psychologist, did
extensive studies in the 1960s in order to understand "the
background, the personal characteristics, and the parental
treatment associated with high, medium, low, and defensive
self-esteem" (Coopersmith, 1981, p. vii). Coopersmith, who
conducted his studies with early adolescents, defined self-
esteem as "the evaluation a person makes, and customarily
maintains of himself or herself; that is overall self-esteem
is an expression of approval or disapproval, indicating the
extent to which a person believes him- or herself,
competent, successful, significant and worthy" (Coopersmith,
1981, p. 4, 5). This evaluation is a process in which the
individual judges his/her abilities and performance
according to his/her own standards and values, and then
personally decides on his/her worthiness. However,
throughout the process, the individual internalizes
attitudes expressed by significant others in his/her life;
thus he/she values him- herself as others value him/her and
"demeans himself [herself] to the extent that they reject,
ignore, or demean him [her]" (Coopersmith, 1981, p. 31).

Rosenberg (1965) and Coopersmith (1981) conducted
extensive studies to determine characteristics associated

with positive self-esteem and low self-esteem and have given useful insights to educators. Most of Coopersmith's studies were with early adolescents and most of Rosenberg's studies were with older adolescents. They with other psychologists and educators have a general consensus that self-esteem is an important factor in personal experiences and interpersonal behavior; therefore, it is assumed that students with high self-esteem can function better in a school setting than students with low self-esteem.

Students with high self-esteem know their capabilities, consider themselves as an individual, assume active roles in society, express themselves effectively, and set realistic goals and attain them. These individuals are happy and effective in responding to environmental demands; they do not feel despair. They enjoy new challenges and do not easily give up if they do not succeed immediately. They are satisfied with their work because they feel it is worthwhile doing and that they did their best (Coopersmith, 1981).

Individuals with low self-esteem see themselves as helpless and inferior. They find it hard to make friends and maintain friendships; they isolate themselves from others. Because they have the feelings that others do not like them, they have low faith in others and have feelings of hostility (Beane, Lipka & Ludewig, 1980; Coopersmith, 1981; Rosenberg, 1965).

The goal of one of Coopersmith's studies was to

determine the antecedents of self-esteem. The 85 subjects
used in his study were normal early adolescent (ages 10 to
12) white males from a middle class background. They were
selected from a mixed population of 1,748 children in
central Connecticut. To determine if there was any
significant difference between the females' and males' self-
esteem, he calculated the mean score for the boys and the
girls. The mean for the boys was 70.10 with a standard
deviation of 13.80, while the mean for the girls was 72.20
with a standard deviation of 12.80. Since the difference
was not significant, he decided to work with only the males.
The 85 subjects were selected after all 1,748 students had
taken the Coopersmith Self-Esteem Inventory and after their
teachers and principals had rated them on the Behavior
Rating Form, designed also by Coopersmith. The 85 subjects
had been selected on the basis of their scores. The
subjects were divided into three levels--low (scores within
the lowest quartile), medium (scores within the
interquartile), and high (scores within the upper quartile).

To determine the conditions and experiences that are
antecedents to the three levels of self-esteem, an eighty-
item questionnaire was given to the mothers. In addition to
the questionnaire, an interview, which lasted an average of
two and a half hours, was conducted with each mother. A
questionnaire dealing with parental attitudes and practices
was completed by each subject.

Coopersmith (1981) found four major factors that affect the development of the early adolescents' self-esteem. The four factors are the following:

1. The "amount of respectful, accepting and concerned treatment that an individual receives from significant others" (p. 37),

2. The "history of successes and the status position we hold in the world" (p. 37),

3. The ability to live up to one's personal aspirations and values, and

4. The "individual's manner of responding to devaluation" (p. 37).

Of the four factors, Coopersmith found that the first one has the greatest influence on an early adolescent. Therefore, as the circle of significant others for early adolescents grows from parents to teachers, teachers need to be aware of the environmental aspects that affect the early adolescents' self-esteem and then attempt to create an environment that fosters a positive self-esteem. The following findings of Coopersmith (1981) have some implication for teachers:

1. Children with low self-esteem perceived that their parents wanted them to be accommodating to others; they were molded by the opinions and actions of others.

2. Children with low self-esteem had parents who stressed the value of making oneself acceptable to others;

it was important to please others.

3.   Children with high self-esteem had parents who had clearly defined, structured and enforced sets of demands; but the demands were not rigid or unduly restrictive. The parents did not administer severe punishment, instead they used discussion and reasoning.

4.   The children with high self-esteem had parents who permitted the children to express differing opinions with the result being a compromise.

5.   Children with high self-esteem had parents who encouraged independence; they had "freedom from the influence and control of others" (Coopersmith, 1981, p. 217).

Coopersmith's study contributed much to educators better understanding the antecedents of high and low self-esteem. Other researchers, interested in the consistency and components of self-esteem, have contributed much to educators better understanding any differences there may be in the self-esteem of students at different ages and in the differences between boys and girls.

Age and Sex Effect in Self-Esteem

Many studies have been conducted (a) to see if an individual's self-concept is consistent throughout life or if it changes with age, and (b) to see if there is a difference in the self-esteem of males and females.

Blyth and Traeger (1983) found that self-concept is not consistent throughout life and that many changes in self-concept occur during early adolescence. Four major factors affect the early adolescents' views of themselves: (a) physical and sexual changes, (b) significant others, (c) developing cognitive ability, and (d) school environment.

The first major factor is the physical and sexual changes that occur during early adolescence. Both girls and boys are concerned about their body image (Blyth & Traeger, 1983; Coopersmith, 1981), and the degree of satisfaction they possess about their physical changes affect their self-concept. Blyth and Traeger found that boys who developed early had a higher self-esteem than boys who had not yet developed. However, they found "no significant relationship between self-esteem and the relative onset of puberty for girls" (p. 92).

A second factor that affects early adolescents is significant others (Beane, Lipka & Ludwig, 1980; Blyth & Traeger, 1983; Brookover, Thomas & Paterson, 1964; Coopersmith, 1981). No longer are parents the main significant other; peers become just as important as the parents. Early adolescents become self-conscious about what their peers think of them. If they believe they measure-up to their peers' expectations, they have a higher self-esteem than if they perceive that they do not measure-up (Beane, Lipka & Ludewig, 1980; Blyth & Traeger, 1983; Coopersmith,

1981).

The third factor that causes the self-esteem of individuals to change during early adolescence is their developing cognitive abilities. Many early adolescents move from the concrete level of thinking to the formal operational level. They have "an increase in the degree of abstraction used to refer to the self as well as an increase in the use of psychological rather than physical descriptions of the self" (Blyth & Traeger, 1983, p. 93).

Finally, the transition from elementary school, which usually is a protective environment, to the secondary school, which is more complex, causes changes in the early adolescents' self-esteem (Blyth & Traeger, 1983; Simmons, Rosenberg & Rosenberg, 1973).

Each of these major factors by themselves may not cause the change in self-concept during early adolescence, but rather "the rate of change a given individual experiences and the degree to which the various changes occur simultaneously" (Blyth & Traeger, 1983, p. 93) cause change in self-concept.

Simmons, Rosenberg, and Rosenberg's (1973) and Marsh's (1989) studies indicate that the self-concept of both boys and girls decline from grades two through six. At the beginning of grade seven, the boys' self-concepts begin to rise, while the girls' self-concepts continue to decline through grade eight, and then their self-concepts do not

rise until the 11th grade (Marsh, 1989).

Long, Ziller, and Henderson (1968) and Marsh (1989) found that even though self-concept declines through grade six for both boys and girls, that boys' general self-concepts were slightly higher than girls' self-concepts. However, Coopersmith (1981) and Stefanich (1982) found no difference between boys' and girls' general self-concepts.

Juhasz (1985) reported that in a study of 196 early adolescents there was a significant difference between the boys' and girls' responses on "The How I See Myself Survey." The survey had two open-ended statements. In the first statement, students had to list all the things that made them feel satisfied or good about themselves. In the second statement, students had to list all the things about themselves that were important to them. When Juhasz organized the responses into 17 categories, she found distinct differences in the responses between age and gender.

In another study, Long, Ziller, and Henderson (1968) also found a significant difference between the boys' and girls' self-esteem. Their study included 420 students (thirty boys and thirty girls in each grade, grades 6-12). Analyses of variance in relation to grade and sex were carried out for each measurement on The Self-Social Symbols Tasks. Results indicated that early adolescent girls, when compared with early adolescent boys, had lower scores.

Shavelson, Hubner, and Stanton (1976) and Marsh (1989) posited that self-concept becomes more differentiated with age, and the differentiation becomes noticeable during the early adolescent years. Therefore, when specific components of self-esteem are rated, there is a difference between boys and girls; some components favor boys and some favor girls.

Marsh (1989) conducted a study with 4,362 students, grades two through nine, in Sydney, Australia. Using the Self Description Questionnaire, which measures multiple dimensions of self-concept (appearance, physical, parents, verbal/reading, math, school, and total self), he found that boys have higher self-concepts about their physical ability, their appearance, their peer relationships, opposite-sex relationships, and math ability; while the girls have higher self-concepts about their reading ability and their general school ability.

Marsh's (1989) findings support earlier findings of Harter (1982), Meece, Parson, Kaczala, Goff, and Futterman (1982), Marsh, Relick, and Smith (1983), Stevenson and Newman (1986), and Marsh, Byrne, and Shavelson (1988).

Marsh and others researched the self-concepts that early adolescents had regarding their math and reading ability and their concept about succeeding in school, while other researchers studied the correlation between the self-concept and the actual academic performance.

Self-Esteem and Academic Achievement

Theorists, supported by empirical research (Brookover, Thomas & Paterson, 1964; Coopersmith, 1981; Handsford & Hattie, 1982; Mintz & Muller, 1977; Primavera, Simon & Primavera, 1974; Rubin, Dorle & Sandidge, 1977; Rosenberg & Simmons, 1973; Stenner & Katzenmeyer, 1975), agree that self-esteem and achievement are related. Hansford and Hattie (1982) conducted a meta-analysis of studies on self-esteem and achievement. They explored 1,136 correlations and found a mean relationship of .21 to .26 (significant at .001). Of the 1,136 correlations, 210 were specifically on reading and self-esteem; the average mean correlation on that relationship was .18 (significant at .001, although low).

Brookover, Paterson, and Thomas (1964) conducted a study with 1,050 seventh-grade students (513 boys and 537 girls). They found a positive correlation between the grade-point average (the measure of achievement), intelligence, and self-concept of ability. The multiple correlation was .69 for boys and .72 for girls. Even when the effect of intelligence was taken out, there was a significant positive correlation between their self-concept and their grade-point average.

There is an agreement among theorists and researchers that there is a correlation between self-esteem and academic achievement; however, there is some disagreement as to the

causal ordering. Caslyn and Keeny (1977) and Shavelson and Stuart (1981) posited that achievement is causally predominant. Pottebaum, Keith, and Ehly (1986) posited that there may not be a causal relationship between self-esteem and academic achievement, but that other variables such as social class and ability may be predominant over both self-esteem and achievement. However, Combs (1971), Anderson and Evan (1974), Coopersmith (1975), Scheirer and Kraut (1979), and Shavelson and Bolus (1982) posited that one's self-esteem is a cause for one's achievement.

In an extensive study of 99 junior high students, Shavelson and Bolus (1982), using six self-esteem tests and a crosslagged panel model for analysis, found that there is a causal predominance of self-esteem over achievement.

Combs (1971) found that the single most important factor that either hinders or augments academic growth is the student's self-esteem. Students behave in terms of their self-esteem. Whatever they believe about themselves affects what they can or attempt to do. "Intelligence itself is a factor of self-concept. Those who have positive self-concepts because they feel good about themselves are able to try, to be creative, to go out into the blue, and make use of their world" (Combs, 1971, p.352). When students have a positive self-esteem, they are willing to "risk" new experiences with no fear of "failure." Thus, a positive self-esteem enables students to utilize the

resources and world around them to their fullest possible capacity; this leads to academic achievement.

Students develop their self-esteem from significant others in their lives (Beane, Lipka & Ludewig, 1980; Brookover, Thomas & Paterson, 1964; Combs, 1971; Coopersmith, 1975). Therefore, in order for early adolescents to experience academic success, it is important that these significant others accept each child as he/she is and that they permit each student to experience some degree of academic success; each one needs to have the feeling of "being able." Combs found that students "feel challenged when confronted with a problem that interests them and with which they believe they have a chance to succeed" (p.354), and they "feel threatened when confronted with a problem they do not feel able to handle" (p.354). Coopersmith found that the students need to value the problem in order for them to remain interested in solving it.

From these studies it is apparent that environment does affect students' self-concepts; therefore, it is important that early adolescents are in an environment that enhances self-esteem.

Enhancing Students' Self-Esteem

It is assumed that "high self-esteem promotes happiness, social acceptance, and achievement, whereas low self-esteem contributes to failure, partly in the manner of

a self-fulfilling prophecy" (Rubin, Dorle & Sandidge, 1977), and that one's self-esteem is largely influenced by one's environment and the acceptance of significant others (Baily, 1987; Beane, Lipka & Ludewig, 1980; Brookover, Thomas & Paterson, 1964; Combs, 1971; Coopersmith, 1975; Lake, 1988). Significant others for early adolescents include parents, peers, and teachers. Acceptance includes (a) a devotion to the individual's interest, (b) a sensitivity to the individual's needs and desires, (c) expressions of affection and approval, and (d) availability when the individual needs help (Coopersmith, 1981). The environment where early adolescents spend most of their waking hours is the classroom, and the classroom environment affects their self-esteem (Beane, Lipka & Ludewig, 1980). There are two opposing types of classroom environments found in today's schools. They are the teacher-directed classroom and the student-directed classroom.

Since a positive self-esteem is highly correlated with internal locus of control, while low self-esteem is highly correlated with external locus of control, it is assumed that the student-directed classroom enhances the student's self-esteem (Beane, Lipka & Ludewig, 1980; Diesterhaft & Gerken, 1983; Johnston & McCann, 1982; Madonna, 1987). In the student-directed classroom, students have a voice in the curriculum, their activities, and the government; and "One of the key issues in developing a positive sense of self-

worth is the degree to which the individual perceives control over his/her life" (Beane, Lipka, Ludewig, 1980, p. 86). This internal locus of control includes the need to influence others and know that weight is given to their opinions. Their opinions must be appreciated and seen as unique (Coopersmith, 1967; DeVries, 1987; Glasser, 1986; Kamii, 1982). Students have a greater sense of control over their lives and their environment in a humanistic (student-directed) classroom, rather than in a custodial (teacher-directed) classroom (Beane, Lipka & Ludewig, 1980; Deibert & Hoy, 1977; Diesterhaft & Gerken, 1983; Lake, 1988).

Some characteristics of a student-directed classroom where early adolescents have a sense of control over their own learning are the following:

1. There are democratic procedures where students participate in making major decisions about rules and curricula (Beane, Lipka & Ludewig, 1980; Tierno, 1983).

2. There is interaction between teacher and students and between student and student (Beane, Lipka & Ludewig, 1980; Lake, 1988).

3. There is an emphasis on team learning (Beane, Lipka & Ludewig, 1980; Glasser, 1986; Johnson & Johnson, 1987; Lake, 1988).

4. There is a variety of grouping patterns rather than grouping by ability (Beane, Lipka & Ludewig, 1980; Lake,

1988).

5. There is opportunity for interaction with younger and older people by arranging for cross-age tutoring and involving elderly people in school activities (Beane, Lipka & Ludewig, 1980; Diesterhaft & Gerken, 1983; Tierno, 1983).

6. There is an opportunity for students to evaluate their own progress through written statements in their learning logs that reflect what they have learned, problems they still encounter, and a plan they would like to implement to overcome the problem (Beane, lipka & Ludewig, 1980; Lake, 1988).

7. There are many diverse opportunities so all students can be successful in some area that is important to them (Coopersmith, 1981; Diesterhaft & Gerken, 1983).

8. The classroom activities cater to the early adolescent's restlessness and attention span by having many diverse activities in which students can move about the room and manipulate objects (Diesterhaft & Gerken, 1983; Lake, 1988).

9. There is ample time for students to explore new ideas and to discuss observations with peers and the teacher (Lake, 1988).

10. There is a safe, accepting environment that encourages students to attempt new things without fear or failure (Lake, 1988).

11. There is an accepting environment that permits

students to adhere to their own moral and ethical standards,
which they internalized from their parents (Coopersmith,
1981).

12. There is an inclusion in the curriculum that gives
direct attention to personal and social development through
readings, discussions, and outside activities so they can
see that others are experiencing similar identity problems
(Dully, 1989; Lake, 1988; Shermis, 1991; Tierno, 1983;
White, 1989).

It is assumed from studies of Beane, Lipka and Ludewig
(1980), Glasser (1986) and others that self-esteem can be
enhanced if the students are placed in an environment where
they have control over their learning. When measuring self-
esteem, it is important that the self-esteem instruments are
appropriate for the age group and the situation.

Self-Esteem Inventories

Buros (1978) lists numerous inventories used to measure
individual's self-esteem, but only a few are appropriate for
early adolescents. The type of self-esteem inventory most
widely used with early adolescents in the classroom are the
self-reporting inventories. There various ways students
can self-report their self-esteem. In some inventories, the
student responds if the simple statement describes or does
not describe himself/herself; while in other inventories,
the student simply checks the adjectives that best describe

himself/herself. A few inventories measure the student's general self-esteem, and other inventories have subscales that measure external aspects of self-esteem. Some external aspects include parents, teachers, peers, siblings, and academics. Some inventories are not very practical for a beginning researcher because a trained psychologist is needed to administer and to interpret the inventory.

Following is a short review of some of the self-esteem inventories that were designed for the early adolescent. Included is the Coopersmith Self-Esteem Inventory which was used in this study.

The Self-Concept and Motivation Inventory: What Face Would You Wear? has four levels for grades kindergarten through senior high. The Later Elementary Form (grades three-six), which takes thirty to thirty-five minutes to complete, measures motivation, self-concept and support climate (parents, teachers, peers, sibling, academic self, academic activity climate, and school climate). The Secondary Form (grades 7 through 12), which takes forty minutes to complete, measures the same areas as the Later Elementary Form plus physical and social self, immediate-intrinsic orientation, and fulfillment orientation (Shepard, 1978a). A typical question is, "What face would you wear if you forgot your story or song in front of the whole class?" The students respond by marking a happy, neutral, or sad expression. The validity and reliability of each have not

been established. Shepard recommended that these
inventories not be used by classroom teachers "to make
judgements about the emotional well-being of individual
children" (p. 1054). This inventory was not used because
the reliability and validity had not been established and
because it took almost an entire class period to complete.

The Self-Perception Inventory, also appropriate for
early adolescents, has three different forms--subject's
perception of self, his/her perceptions of how others
perceive him/her, and perceptions others have of him/her.
In the first form, students respond to statements such as "I
trust people." In the second form, students respond to
statements such as "Others trust me." In the third form, the
second party rates the individual on items such as
"_____can be trusted" (Shepard, 1978b). An
advantage of this inventory is that it can be used to find
discrepancies between self-perception and how others
perceive the student. However, a disadvantage is the
excessive time it takes to administer the three forms; it
takes up to 20 minutes for each form. The test-retest
reliability coefficients range from .68 to .89. However,
the retest was given four weeks after the first test,
allowing students to remember former responses. Shepard
reported that the validity was "not very compelling" (p.
1057).

Another self-esteem inventory appropriate for the early

adolescents is the Self-Esteem Questionnaire, which has two sections, self-esteem and self-other satisfaction. The students answer the items on a five-point scale from "Not at all" to "Yes, very much." The scale and some of the long statements (e.g. "Most persons who I want to do things with really want me to do things with them") may be difficult for students to understand (Crandall, 1978, p. 1055). The test-retest reliability after two weeks for 250 elementary students was .70. The correlation with the Coopersmith Self-Esteem Inventory was .61 (Crandall, 1978, p. 1055), which is not considered very strong.

The Culture-Free Self-Esteem Inventories for Children and Adults was developed to measure the examinee's self-esteem related to peers, home, and school. The students respond to 60 items such as "I worry a lot," "I have only a few friends," or "I am a failure at school." It was designed to be "independent of cultural context" (Malgady, 1985, p. 221); however, it is not clear how the culture-free bias has been established. Although in one study the test-retest reliability was high (.81 to .89), internal consistency reliability was less than .60 (Malgady, 1985, p. 217). In a number of studies, the validity showed a high correlation with other self-esteem inventories (Malgady, 1985, p. 221).

The Piers-Harris Children's Self-Concept Scale is also used with early adolescents although it was written on a

third-grade reading level for students in grades three
through five. It is a self-evaluation of student's
behavior, intellectual and school status, physical
appearance, anxiety, popularity, and satisfaction. The
students mark "Yes" or "No" to 80 items such as "My parents
love me."

The internal consistency coefficient of .90 is
relatively high. The test-retest reliabilities range from
.62 to .96 with retest intervals of a few weeks to six
months. The correlation coefficient with Coopersmith Self-
Esteem Inventory was .85. Other validity coefficients have
not been established (Cosden, 1984).

There are three reasons why this inventory is not
appropriate for a study with "normal" students over a short
period of time. First, the inventory was designed to
identify "at-risk" students with emotional problems.
Second, it "does not provide reliable, detailed self-esteem
measures that would be expected to change over limited
periods of time" (Cosden, 1984, p. 514). Third, an expert
trained in psychological testing is needed to interpret the
results.

The Coopersmith Self-Esteem Inventory is designed to
measure "attitudes toward the self in social, academic,
family, and personal areas of experience" (Coopersmith,
1981, p. 1). It includes a Lie Scale. Six items of the Lie
Scale include such statements as "I never worry about

anything," or "I always do the right thing." If the student marks "Like me" on all six items, the rater is encouraged to disregard that inventory when calculating the mean score for the group.

The School Form is for students aged 8 through 15, for both sexes, and for all ethnic groups. All 50 statements are short (e.g. "I'm a lot of fun to be with" or "I find it very hard to talk in front of the class.") with the students marking a box "Like me" or "Unlike me." It takes only 10 to 15 minutes to complete and can be given to a group or to individuals.

The Coopersmith Inventory has been given to tens of thousands students in a wide variety of studies that included topics about the disadvantaged, racial integration, behavior problems, underachievement, and various types of teaching methods (Coopersmith, 1981; Fabiano, 1989).

Adair (1984) considered the reliability and the validity of the Coppersmith Inventory to be adequate. The reliability was tested in 1973 by Spatz and Johnson. The School Form was given to 600 students in grades 5, 9, and 12. Using the Kuder-Richardson reliability formula, they reported split-half reliability coefficients in excess of .80 at all three levels.

In 1978, Kokenes did a study to test the construct validity of the Coopersmith School Form. She included over 7,600 students in grades four through eight. The purpose of

"things that move in the water" (E. B. Smith, Goodman, & Meredith, 1976).

Piaget and Inhelder (1969) also discovered that humans construct their own knowledge by creating and coordinating relationships between their prior knowledge and their present new experience; therefore, they are constructing their own knowledge as an interrelated whole, not as isolated fragments. For example, as the child matures and experiences more types of water transportation, such as barges, ocean liners, and cruise ships, he/she will begin to see the relationship between all these "boats" and be able to categorize them into subclasses such as boats and ships used for pleasure and those used as means of transportation.

Both Piaget and Inhelder (1969) and Vygotsky (1962) found that children construct much of their own knowledge through social interaction. However, their emphases differ. Piaget emphasized that language is involved in cognitive growth but it is not needed for cognitive growth. Language merely translates what is already understood; language is not used to introduce new thoughts. The individual needs "to assimilate and accommodate the lingual signs to his thought structure, but if he is to find his own meaning, the symbolic structuring comes first" (E. B. Smith, Goodman, Meredith, 1976, p. 133).

Vygotsky, on the other hand, believed that dialogue between an adult and child is very powerful because the

adult "supplies the ready-made meaning of a word around which the child forms a complex [concept or idea cluster]" (Vygotsky (1962, p. 67). He believed that the interaction between an individual's schemata (knowledge base) and the language of the environment is crucial. It is as crucial in the development of an individual's thinking as manipulation of objects in one's environment.

Both Piaget and Vygotsky found that students know more when they interact with an adult or peer because it gives opportunity for the students to "talk out" his/her thoughts.

How Individuals Learn Language

Goodman (1986) found that "Children are literally driven to language by their need to communicate.... Language development is a matter of survival" (p.15). They need language to function, and they learn language easily from others because there is a purpose for it. Babies first use language (babbling) just for social participation. Soon young children use language to express needs; and by the time they enter school, they fluently use language for seven different functions (Halliday, 1973). The seven functions of language are the following:

1. Instrumental - language used to fulfill needs
2. Regulatory - language used to control others
3. Interactional - language used to relate to others
4. Personal - language used to express oneself

5. Heuristic - language used for inquiry

6. Imaginative - language used for creative expression

7. Representational - language used for giving content

These functions are not learned in isolation or through direct instruction. They are learned through social interaction (Goodman, 1986; Halliday, 1973, 1989; F. Smith, 1985; Vygotsky, 1962).

Children construct a theory about print also through social interaction. When they see others around them reading wrappers, notes, signs, and other environmental print in order to obtain information, they realize that there is a purpose for reading. When they see others writing notes in order to give a message, young children realize that there is a meaningful purpose for that activity too (Goodman, 1986; Graves, 1983; F. Smith, 1985). F. Smith also found that as children experience more print, they realized that different marks on the page represent the spoken word.

Readers, of all ages, get meaning from print on the basis of the visual information on the page, their knowledge of language, and their knowledge about the world which is based on previous experiences. Readers are active in the process, and they only get meaning from print when they can relate it to past experiences and when there is a motive for abstracting the message (Goodman, 1986; F. Smith, 1971; Teale, 1982; Weaver, 1988).

Tompkins and Hoskisson (1991) summarized the way individuals learn language in the following points:

1. Children learn to talk by being immersed in the language of their community, not by being taught talking skills in a prescribed sequential order.

2. "Children construct their knowledge [about language] as they make and test hypotheses" (p.17).

3. "Children learn language through adults modeling and providing scaffolds" (p.30).

One main belief of whole language is that students learn to read and write through reading and writing and not by doing worksheets on separate subskills. The reading materials are genuine texts--children's literature, newspapers, magazines, and environmental print. For writing, students are engaged in writing meaningful passages for a particular purpose. Whole language is using language to learn, rather than learning about language (Edlesky, Altwerger, Flores, 1991; Goodman, 1986; Weaver, 1988).

Whole language advocates are particularly interested in how children learn and how they become literate. Through descriptive research, researchers such as Holdaway, Goodman, F. Smith and Halliday, have come to understand the development of the four language systems--phonological, syntactic, semantic, and pragmatic--and how the four modes of language--speaking, listening, reading, and writing--are interrelated. The four systems and modes begin to develop

at birth and continue through life as individuals engage in meaningful communication.

Speech. Speech consists of four subsystems: (a) the phonological or sound system, (b) the syntactic or grammatical system, (c) the semantic or meaning system, and (d) the pragmatic or cultural/social system. The development of these systems begin in infancy and continue throughout life.

This development occurs because infants have a natural need to communicate (Goodman, 1982; Halliday, 1989; Vygotsky, 1962) and because they are in an environment that reinforces their efforts when they make familiar sounds (Holdaway, 1979). Infants learn language from supportive adults who speak whole words and thoughts when talking with their infants. Parents do not break words down into individual, separate sounds and demand mastery of the separate sounds before they go on to another sound. Instead, infants learn to speak by being spoken to and by being supported and encouraged as they make approximations (Goodman, 1974; Halliday, 1989; Holdaway, 1979).

During the preschool years, children acquire language systems that are adequate for their own use (Goodman, 1982; Halliday, 1989; F. Smith, 1985) in "the presence of a supportive and emulative adult or peer who answers questions directly and readily without interfering with what the child is trying to do" (Holdaway, 1979, p. 38-39).

Whole language advocates understand that throughout the entire elementary grades, this growth continues when students are in a supportive environment and when using speech for meaningful communication.

In particular, the semantic system undergoes vigorous growth in the elementary grades. It is estimated that children learn approximately 3,000 words per school year. They not only learn new words, they learn that words carry more than one meaning and that words can be used for entertainment and creative purposes. They learn words by hearing them in meaningful context, rather than by memorizing the definition of a list of words each week (Tompkins & Hoskisson, 1991).

The fourth language system, the pragmatic system, is also highly developed throughout the elementary grades. The pragmatic system is the cultural and social aspect of language (Halliday, 1973). Children come to school with the language of their community (Goodman, 1986). In the elementary grades, they learn how to vary language for different forms (essay, poem, letters, stories, etc.), for different purposes (formal or informal plus the seven functions described by Halliday, 1973), and for different audiences (close friend or for the general public). The whole language advocates realize that this learning is a part of natural development when the students are involved in meaningful speech.

Reading. Learning to read is a natural developmental process just like learning to speak is (Goodman, 1982; Holdaway, 1979; F. Smith, 1985; Weaver, 1988). Children learn to read in "the presence of supportive and emulative adult or peer" (Holdaway, 1979, p. 38) who realizes that a child's "approximating is crucial and healthy" (Holdaway, 1979, p. 52). Students continue to develop their reading ability by being involved in meaningful reading activities that have purpose for the individual student (Goodman, 1982; Holdaway, 1979; F. Smith, 1985).

Without the reader's awareness, the brain is active in the reading process. The brain actually contributes more to the reading process than the eyes do. The brain has three kinds of memory that are active and interrelated in the reading process. The sensory memory picks up the raw material and briefly retains it for less than a second. Most of this raw material is erased by an intake of new information. However, some of the information from the sensory memory is transferred to the short-term memory which holds the information while it is being processed. The short-term memory can hold only four or five separate items at one time, and can hold it for only as long as the reader attends to it. The information is then stored in the long-term memory which has unlimited storage. As the information is stored, the brain categorizes the information into the individual's already existing knowledge base. It is

the long-term memory that aids the reader as he/she reads new print. The eyes pick up the light rays, but the brain does all the processing and organizing of the incoming information which becomes the reader's theory of the world, or knowledge base (F. Smith, 1971; 1985).

The reader's knowledge base includes his/her knowledge about (a) the physical features of letters (shapes of letters such as ascenders [d, h, l], curved strokes [c, o], and symmetry [v, w, o]), (b) sequential information (construction of words), (c) grammatical information (word order and morphological information), (d) semantic information (meaning of words and combination of words), (e) rhetorical organization of different genre, and (f) general content information (F. Smith, 1971, 1985).

When a reader reads, the long-term memory is activated; and the speed at which the brain recognizes the incoming information depends upon the number of alternatives in the information. It takes approximately two tenths of a second for the brain to process information that has one alternative (e.g. to determine if the light is on). It takes three thirds of a second for it to determine two alternatives such as determining if a light is red or green (F. Smith, 1985).

To demonstrate how the long-term memory speeds up the process of reading, F. Smith (1985) used the following experiment with a vast number of fluent readers. When he

showed a string of 25 unrelated letters for a split second
(a very quick flash), the readers could only recognize four
or five letters. When he showed 25 letters in unrelated
words (e.g. Sneeze fury horses when again) for the same
amount of time, most readers could recognize two words or
eight letters. When he showed 25 letters in a sentence
(e.g. Early frost harm the crops) for the same amount of
time, most readers could read the entire sentence. F. Smith
concluded that one's prior knowledge plays a major part in
reading since each time the reader had the same amount of
information and the same amount of time to process it;
however, they were able to process four times the amount of
information when it was displayed in a recognizable
sequence.

It is the redundancy in the cueing systems, the
semantic, syntactic, and phonographemic systems, which aids
the brain to quickly process the information (Goodman, 1982;
F. Smith, 1985). The English language has a set of rules
about how letters are combined to make words, how words are
constructed to make sentences, and how different genres have
their own unique organizational structure. For example, in
the English spelling, q is always followed by u. Three
consonants must be followed by a vowel or y. A reader can
predict that a letter following thr or str must be a vowel.
Because of this redundancy and the ability of a reader to
predict, a reader does not need to attend to every letter as

he/she reads (F. Smith, 1971, 1985).

English sentences also follow a set system so the fluent reader can easily complete a sentence without seeing the last part of the last word. For example, a fluent reader can predict the ending of the sentence "The captain ordered the mate to drop the an_____" because they know a noun and not a verb follows <u>the</u>, they know an object is needed to complete the infinitive <u>to drop</u>, and they get a cue from the first two letters <u>an</u>. The reader also relies on his/her background knowledge about the topic of the sentence (F. Smith, 1971).

The longer the passage, the greater the redundancy; and the more redundancy there is, the less visual information is needed for the fluent reader (Goodman, 1982; Holdaway, 1979; F. Smith, 1971; Weaver, 1988). The following example of "The Kingdom of Kay Oss" shows how redundancy found in longer English texts, aids in comprehending the text.

"The kindom of Kay Oss

"Once in the land of Serenity there ruled a king called Kay Oss. The king wanted to be liked by all his people.

"So onx day thx bxnxvxlxnt dxspot dxcidxd that no onx in thx country would bx rxsponsiblx for anything. Xll of thx workxrs rxstxd from thxir dxily lxborx. 'Blxss Kxy Oss,' thxy xxclzimxd. Now, thx lzw mzkxrs wxrx vxry wvsx. But zs wvsx zs thzy wxrx, thxy dxcixd

thzt thx bxst form of govxrnmxnt wxs nonx zt zll.

"Zs tvmx exxnxt qn, thx kvngdqm og Kzy qss bxgzn

tq splvt zt thx sxzmx znd xt lqqkxd lvkx thvs: Bcx

dqufghj klzm nqxp qqt rqst vqxwxxz bqxc dqf ghzj

kqlxmnxp" (Vacca & Vacca, 1989, p. 14).

The end of the passage may be more difficult to read than

the beginning. However, the reader's knowledge of word

construction, sentence patterns, and story lines help the

reader to comprehend the passage.

Goodman's (1982) studies revealed what fluent readers

do when they are attempting to comprehend a text or passage.

He found that fluent readers often make errors, but the

errors do not affect comprehension because the fluent reader

regresses (or rereads) so he/she can make sense.

Goodman (1982) developed a system, called Miscue

Analysis, to describe how readers construct meaning from

print. The reader orally reads into a tape recorder a

passage that is somewhat difficult for him/her. The reader

receives no help. Later the tape is transcribed above the

written passage. A miscue is when the observed response

does not match the expected response. The miscues can be

omissions, substitutions, insertions, regressions, and/or

reversals. All miscues are recorded; however, the following

miscues are subtracted from the total number of miscues

made:

1. Miscues which were shifts to the reader's dialect

2.   Miscues that resulted in acceptable meaning

3.   Miscues that were successfully corrected

After these miscues are subtracted from the total number of miscues, Goodman found that fluent readers do not have many miscues that affect comprehension because they regress (or reread) when comprehension is lost.

Through miscue analysis, researchers have found other facts about reading. First, short language sequences are harder to comprehend than longer ones. Sentences are easier to read than words, paragraphs are easier that sentences, and entire passages are the easiest. The redundancy found in good literature makes this possible. The fluent reader's brain makes maximum use of redundancy (Goodman, 1982; Smith, 1971).

Second, miscue analysis has shown that readers can only learn to read through materials and activities that make sense to the reader. When the brain is overloaded with material that does not fit the cueing system with which their brain is familiar, the short-term memory gets bottle-necked, and the brain cannot process the incoming information fast enough for it to be correctly categorized. F. Smith (1985) used the following experiment to illustrate how this works. When he gave fluent readers a relatively long sentence that was written backwards, they stumbled over the words. However, the same readers could easily read the same words when written in the correct sentence sequence.

Third, readers cannot comprehend the text when they do not have the relevant background knowledge to process the passage (Carrell & Eisterhold, 1987; F. Smith, 1985). Sometimes the reader may lack content knowledge and other times the reader may lack knowledge about the genre's rhetorical organization. Both cause the material to be incomprehensible to the reader. Since the reader's brain is a network of his/her knowledge, everything he/she knows is related to something else. When a reader encounters new material, he/she must be able to either incorporate it into his/her already existing network or must be able to modify the already existing network to accept the new material. The material must be only a little bit novel or have enough clues in the context in order for the reader to comprehend it (Goodman, 1982; F. Smith, 1985; Tompkins & Hoskisson, 1991; Vacca & Vacca, 1989).

Whole language advocates recognize that reading throughout the elementary years must be enjoyable, easy, frequent, meaningful, and useful. Students should have a choice of materials so they can read materials that interest them, that are on their reading level, that match their background knowledge, and that are useful to them (Atwell, 1987; Goodman, 1986; Hansen, 1987; Holdaway, 1979; F. Smith, 1985).

Since the readers bring meaning to the text, each reader extracts individual meaning from a text. Therefore,

teachers should not be concerned if all readers extract the same meaning or if they can recall all the minor details. Instead, teachers must encourage students to relate and discuss with other students their interpretations and findings in the text. The end of a reading experience should bring enjoyment and lively discussions rather than a test (Atwell, 1987; Goodman, 1986; Hansen, 1987; F. Smith, 1985).

Writing. Students learn to write just like they learn to read--by being in an environment where they see others engaged in meaningful writing experiences and by participating in writing meaningful messages. The reading/writing/speaking/listening processes are interrelated. They are developmental processes, which means that the child needs to engage in each process in order to acquire the skill. The processes cannot be taught by breaking them into separate skills (Atwell, 1987; Calkins, 1986; Gentry, 1981; Goodman, 1986; Graves, 1983; Holdaway, 1979; Read, 1971; F. Smith, 1971).

Since writing is a natural developmental process, students must be in an environment where writing has a meaningful purpose. They learn the mechanics of writing when they need them to make a message clear to the reader. They do not learn how to write by memorizing grammar and punctuation rules (Atwell, 1987; Calkins, 1980, 1986; Calkins & Harwayne, 1987; Graves, 1983; Hansen, 1987;

Harste, Woodward & Burke, 1984). Whole language advocates recognize the importance of formal and informal writing experiences which enhance the development of students' writing skills.

Formal writing experiences include end products such as books, reports, essays, poems, articles, etc. which are shared with a general audience. In order for students, including early adolescents, to be effective in formal writing experiences, they need opportunities to write like a real author writes (Atwell, 1987; Calkins, 1986; Calkins & Harwayne, 1987; Graves, 1983). Graves identified the process that real authors use when they write.

The process includes five steps--prewriting, drafting, revising, editing, and publishing. These steps are not locksteps; the writer repeats some of the steps as he/she completes a passage. Throughout all the steps, the writer considers the audience, purpose, and the most appropriate form (Atwell, 1987; Calkins, 1986; Graves, 1983; Hansen, 1987).

The prewriting stage includes a variety of activities. Prewriting can be mediating, reading, discussing, researching, observing, or any other act that may motivate the individual to write a message or passage. Some writers during this stage may actually write down ideas in the form of lists, clusters, outlines, charts, journals, logs, etc. in order to formulate and organize ideas. The teacher must

realize the importance of this stage so he/she must give ample time for this step and not require any particular prewriting exercise (Graves, 1983).

In the second stage the writers write the first draft. The focus is on content and not on organization or mechanics. The important aspect is to get all of the ideas down on paper (Atwell, 1987; Calkins, 1986; Graves, 1983; Hansen, 1987).

After students have written the first draft, they will read the passage and begin to revise it. The revisions usually are big changes. They may delete small sections, rearrange paragraphs, or add long passages. After the writers make big revisions, they may want to read the passage to a peer or teacher so they can point out the strengths and weaknesses of the passage. With the feedback, students decide how to make more revisions so the passage is clear to the reader. The revision stage may include many peer critiques. As writers become more accomplished, they will make big changes; changes that will end in a piece that they know clearly conveys the message that they wanted to express to the reader (Atwell, 1987; Calkins, 1986; Graves, 1983).

After the revisions (which emphasized content), the writers edit their work with emphasis on the mechanics. As writers read other authors' works, they realize writers use conventional spelling, punctuation, and organization as a

courtesy to the reader. In the editing stage, writers again seek the help of peers and the teacher after the writers have edited the piece to the best of their ability (Atwell, 1987; Calkins, 1980, 1986; Graves, 1983).

When completed, the work is published and shared. A real author desires to share the passage with a real audience. The audience for students must be more than the teacher. When they write for a real audience, they are more conscious of content, style, tone, and mechanics (Atwell, 1987; Calkins, 1986; Graves, 1983). The published work may be in a variety of forms such as books, reports, letters, newspaper articles, or bulletin board posters. As children gain experience with writing, they discover very unique ways to share their writing.

Students become good writers by writing, not by doing endless worksheets on a subscale which includes exercises in usage or punctuation. Being able to put correct words in a blank and add necessary punctuation is not writing (Atwell, 1987; Calkins, 1980, 1986; Goodman, 1986; Graves, 1983; F. Smith, 1971). Research shows that formal instruction on mechanics does not transfer to the students' writing. They need realistic experiences with real audiences to become writers (Eistenstein, 1987) For the students to become effective writers, they need ample time in the classroom to write, need personal choices on topic and genre, and need lots of responses from peers and teachers (Atwell, 1987;

Calkins, 1986; Hansen, 1987). They learn to write by writing (F. Smith, 1971).

Much of the early adolescents' writing is informal writing which does not pass through all the five steps of the writing process (Tompkins & Hoskisson, 1991). However, their informal writing must also be meaningful, have a purpose, and have a real audience. The audience is usually one particular person instead of the general public (Atwell, 1987; Tompkins & Hoskisson, 1991). Informal writing also includes a wide variety of forms. Note writing is one form. Note writing is a favorite pastime for early adolescents. It has a direct purpose and the audience is known. Students know that the writing is very informal much like oral language (Freeman & Freeman, 1989).

Note writing leads to letter writing, first friendly letters and later business letters. In either type, the letters must be authentic, written to a real person for a real reason. They should not be exercises in letter writing. Students become aware of the correct format of letters when they need to use it (Atwell, 1987; Freeman & Freeman, 1989).

Another type of informal writing is journal writing. Personal journals are much like a diary, where the students reflect on all aspects of their lives. Privacy must be respected in these journals since students express private reflections. Dialogue journals, another type of journal,

are written dialogues between student and teacher. The student is the one who gives direction to the dialogue and the teacher responds in a meaningful way. Teachers can learn much about early adolescents' likes, dislikes, fears, and aspirations through their dialogue journals (Tompkins & Hoskisson, 1991).

Learning or content journals can also be used in all subjects. In these journals students reflect on what they have learned, on what problems they still have, or on other important things they want to remember in a certain subject. In science they can record lab experiments, in math they can write out the steps they consider when solving a certain type of problem, in their language arts journals, they can keep a record of mechanical aspects such as usage, spelling, and punctuation they learned while editing. The learning journal must be a personal, meaningful tool for the student (Atwell, 1990; Tompkins & Hoskisson, 1991).

Some other informal writing includes taking notes from observations, generating questions for an interview, writing class announcements, and posting announcements on the bulletin board. Through all of the informal and formal writing experiences, students realize that writing is meaningful and functional (Atwell, 1987; Calkins, 1986; Graves, 1983).

<u>Main Characteristics of Whole Language</u>

Throughout the past decade, many educators across the United States, Canada, New Zealand, and Australia have promoted whole language. Since whole language is child-centered, there is no one "set" method of teaching whole language. However, the following tenets are accepted by all whole language educators:

1. Language is for making meaning (personal) and for communicating (social).

2. The goal of reading is comprehension, not decoding (Goodman, 1982; F. Smith, 1971).

3. The process of learning is more important than the product.

4. One learns to read and write whole, authentic texts by reading and writing, not by studying fragmented skills (Atwell, 1987; Goodman, 1982; Graves, 1983; Hansen, 1987; F. Smith, 1985).

5. All the systems of language (phonology, orthography, morphology, syntax, semantics, and pragmatic) are learned simultaneously (Goodman, 1986; Holdaway, 1979; F. Smith, 1985).

6. "Every child's language is adequate for his present needs in communication" (Goodman, 1982, p. 49).

7. In order to get meaning from a text, the reader needs the content and formal background (Carrell & Eisterhole, 1987; Goodman, 1982; F. Smith, 1985; Vacca &

Vacca, 1989).

8.   The purpose of language is to use it to learn, not to learn about it (Goodman, 1986; Holdaway, 1979).

Because the whole language classroom is child-centered, not all whole language classrooms look the same; however, most of the following activities can be observed in whole language classrooms:

1.   Students are active participants, not passive recipients.

2.   Students choose their writing topics and genre.

3.   Teachers are co-learners and facilitators (Atwell, 1987; Calkins, 1986; Goodman, 1986; Graves, 1983; Hansen, 1987).

4.   Students choose their reading materials from a large selection of tradebooks, magazines, and newspapers (Fader & McNeil, 1966; Goodman, 1986; F. Smith, 1985).

5.   There is much social interaction between students of all cognitive levels as they share information, tutor one another, and share projects (Atwell, 1986; Calkins, 1986; Goodman, 1986; Graves, 1983; Hansen, 1987; Johnson & Johnson, 1987).

6.   Portfolios, observations, interviews, and conferences are used as a part of evaluation; self-evaluation is stressed (Atwell, 1987; Calkins, 1986; Goodman, Goodman & Hood, 1989; Graves, 1983; Hansen, 1987).

7.   Students are unhurried; they take as much time as

needed to study a topic in depth (Graves, 1983; Duckworth, 1987).

8.   Students are encouraged to take risks (Atwell, 1987; Goodman, 1986).

9.   Students engage in frequent periods of sustained silent reading (Atwell, 1987; Hansen, 1987).

Whole Language in the Middle School

Whole language teachers in the middle school recognize the diversity in their students' cognitive ability and in their personal interests. Therefore, all students do not spend their time attempting to learn (or relearn) the same concept, nor do they all read the same book (Atwell, 1987; Goodman, 1986; Hansen, 1987; Tompkins & Hoskisson, 1991).

The middle school whole language teacher also recognizes the importance of early adolescents' social lives, the need to interact, and the importance of dealing with social issues of the day. Therefore, whole language teachers engage their students in reading and discussing realistic fiction (Atwell, 1987), and in role playing social situations (Tompkins & Hoskisson, 1991). As students read about fictitious characters who encounter anxieties, frustrations, hopes, disappointments, failures, and successes in similar manners that they encounter these problems, early adolescents learn to "solve a personal problem, develop skills needed for living and/or bolster

self-image" (White, 1989, p. 1).

Whole language middle school teachers also encourage students to conduct research together and do experiments together on topics that interest them, rather than on assigned topics. Their resources may include interviews with people in the community, tradebooks, magazines, videos, or observations of the natural phenomenon in their environment. Their topics are often on current social issues that may plague their community such as ecology problems, prejudice, and other social injustices.

Previous Research

Little quantitative research has been conducted on the effectiveness of the whole language approach. The main reason for this is that whole language advocates believe that most standardized achievement tests focus on isolated skills which do not measure a student's effective use of language (Goodman, 1986). Most quantitative research that has been conducted is with subjects in the lower elementary grades.

There are, however, a few longitudinal studies that indicate that students in a whole language classroom have gains in reading and language usage. Calkins (1980) reported that over a seven-year period one group of students had a 27-point gain in scores on the Iowa Test of Basic Skills. However, there was no comparison with a control

group. Phinney (1986) also reported that one group of students over a three-year period had significant gains on the Canadian Test of Basic Skills.

Tunnell and Jacobs (1989) reviewed 12 different studies that were done in the elementary grades that compared academic achievement in the literature-based approach to literacy (the whole language approach) to the basal approach. These studies were done with low socioeconomic groups, with middle class students, with "at risk" students, with rural students, with "stalled" readers from a middle class suburban community, and with juvenile delinquents. All the studies revealed that the whole language approach was as successful as the basal approach.

Stahl and Miller (1989) reviewed 46 independent studies which compared the basal approach to the whole language approach with the beginning reader. They reviewed studies that used miscue analysis and attitude measures (whole language approach to evaluation) as well as standardized tests (the basal approach to evaluation). The results of the review showed that 26 studies favored whole language, 16 favored the basal approach, and 58 did not indicate any significant difference between the two approaches.

However, there is a concern with this meta analysis because Stahl and Miller (1989) considered whole language and the language experience approach as similar approaches. However, there are two major differences between the two

approaches. First, the whole language approach has students reading more than the student-generated texts that the language experience approach uses; whole language classrooms have students reading good children's literature. The second major difference is that whole language classroom students have first-hand experience with alphabetic principles by generating their own writing through pictures, scribbles, and inventive spelling; in the language experience the teacher writes as the students dictate a passage.

Another concern with this meta-analysis is that basal readers from the sixties, seventies, and eighties were used in the studies; and there is a big difference in the basals. The basals in the sixties were not as skilled-oriented as the ones from the seventies and eighties.

Stahl and Miller (1989) also reviewed the United States Office of Education's studies which compared the basal approach to the whole language approach. They observed the students after first, third, and sixth grades. The results showed that academically 17 studies favored whole language, six favored basal, and 57 showed no significant difference. From this meta-analysis, one would conclude that there is no significant difference between the two approaches.

Besides Stahl and Miller's (1989) meta analysis, there have been a few experimental studies conducted to compare the effectiveness of the whole language approach with the

traditional approach. Klesius, Griffith, and Zielonka (1991) conducted an extensive study in six intact classrooms in a semi-rural area in Florida. They compared three first-grade whole language classrooms with three first-grade traditional classrooms. At the end of the year, they found no significant difference (alpha at .05 level) between the two approaches on reading comprehension, vocabulary, phonemic awareness, decoding, spelling, and writing as measured on the Gates-MacGinitie Reading Test, The Gough-Kasiter-Roper Phonemic Awareness Test, and the Features Spelling test (designed by the researchers). This study, however, was significant because it indicated that students in a whole language classroom who did not receive direct instruction in isolated skills still performed as well on isolated skills as students who did receive such instruction. They found the whole language approach to be as effective as the traditional approach.

Ribowsky (1985) conducted a study to compare the Share-book-experience, a whole language approach, to the Lippincott's Beginning to Read, Write and Listen Program, a code-emphasis approach. The mean post-test scores on the Test of Language Development showed a significant main effect, using the ANCOVA; $F(1,50) = 86.392$, $p < .001$. The mean post-test scores on the Book Handling Knowledge Task showed a significant effect, using the ANCOVA; $F(1,50) = 65.549$, $p < .001$. The mean post-test scores on the

Metropolitan Reading Test also showed a significant main effect, using ANCOVA; $F(1,50) = 6.56$, $p < .01$. The whole language group obtained higher post-test scores than did the code-emphasis group.

Reutzel and Cooter's (1990) study also revealed a significant difference between the two approaches. They conducted a study in four first-grade classrooms, located in two different states, to compare the effectiveness of the whole language approach to the traditional basal approach. Two classrooms (one in each state) used the whole language approach; and two classrooms (one in each state) used the traditional basal approach. Throughout the year, the classrooms were closely monitored to insure that the students did receive the designated approach. At the outset of the study the results of the ANOVA showed no significant difference between the two groups; $F(1,90) = 2.40$, $p > .05$. At the end of the year, there were significant differences, favoring the whole language classes over the traditional classes, on the total reading scores, vocabulary scores, and comprehension scores as measured on the Gates-MacGinitie Reading Test. ANCOVA showed $F(1,87) = 5.07$, $p < .05$.

Dully (1989) conducted a study on the effectiveness of sustained silent reading on students' reading achievement and on their self-esteem. Sustained silent reading is one aspect of whole language. He conducted the study with 19 at-risk fifth graders. Ten students received 15 minutes of

sustained silent reading at least four times a week in
addition to a developmental reading class using a basal
reader. They were involved in the program for the entire
year. The control group, nine at-risk fifth graders, had no
sustained silent reading; they only had the developmental
reading class. For the extra 15 minutes, they continued
reading in the basal reader.

At the beginning of the school year, there was no
significant difference between the two groups as measured on
the Coopersmith Self-Esteem Inventory, California
Achievement Reading Test, and the Peabody Picture Vocabulary
Test. At the end of the year, there was no significant
difference between the two groups' mean scores on the
California Achievement Reading Test. However, the mean gain
of the group that received the sustained silent reading was
1.38 years, while the other group made only a mean gain of
.33 years.

There was, however, a significant difference (on the
t-test with alpha set at .05) on the Coopersmith Self-Esteem
Inventory. The group that had sustained silent reading did
better than the group who did not have any sustained silent
reading time. Dully (1989) concluded that sustained silent
reading was effective with at-risk fifth-graders. He also
suggested that more research be done to see how different
methods of teaching affect all students' self-esteem.

Summary

The physical, intellectual, social, and emotional development and needs of early adolescents (ages 11 through 14) are diverse and personal. How a significant other responds to their needs affects their self-esteem. Studies show that there is a correlation between self-esteem and academic success and that student-directed classrooms enhance the students' self-esteem. Literature indicates that there are various self-esteem tests that are appropriate for early adolescents. However, not all are appropriate for classroom research because some demand much time for testing, others have awkward wording for early adolescents, and others demand specialized training to administer and analyze. The Coopersmith Self-Esteem Inventory was found to be most used by educational researchers and most appropriate for classroom use (Handsford & Hattie, 1982).

Studies of Piaget and Inhelder (1969), Kamii (1982), Vygotsky (1962), and others show how individuals construct knowledge. Goodman's, F. Smith's, Halliday's, Holdaway's and Vygotsky's theories reveal how individuals learn language. The theory and practices of whole language are based on all these studies. Some basic beliefs of all whole language educators are (a) that language is learned as a whole, not in fragmented parts, (b) that learners' needs must be personalized because individuals construct knowledge

based on their past experiences, (c) that learners learn by being actively involved in activities, and (d) that learners need to control their learning in order to have a high self-esteem.

Finally, previous research indicates that there is a positive correlation between self-esteem and academic success. Previous research studies also indicate that the whole language approach to teaching reading is just as effective as the traditional approach. Other research indicated that sustained silent reading, one aspect of whole language, did enhance the self-esteem of "at-risk" students.

The procedures used in this study to evaluate self-esteem and to collect data for analysis are reported in chapter three.

CHAPTER III

METHODOLOGY

The primary purposes of this study were (a) to
determine if there was a significant difference between the
self-esteem of early adolescents in a traditional classroom
and the self-esteem of early adolescents in a whole language
classroom, and (b) to determine if there was a significant
difference in the self-esteem of various subgroups (based on
sex and reading ability) within each group.

The study was conducted with 87 subjects who were
sixth- and seventh-grade students enrolled in three
different schools in three different counties in a south
central state. The subjects were in six intact classrooms
(a whole language and a traditional classroom at each
school). The Questionnaire Concerning Teaching Method (see
Appendix A), which was designed by the researcher, was used
to help identify the teachers who used the whole language or
the traditional approach. The Coopersmith Self-Esteem
Inventory (School Form) was used as a pre-test and post-test
to measure the self-esteem of the students. To analyze the
data, one way analyses of variance were used.

The initial step for conducting this research was to

identify schools that had at least two language arts
teachers at the sixth, seventh, or eighth grade level with
one teacher using the traditional approach and the other
teacher using the whole language approach. In order to
identify a school that had both a whole language teacher and
a traditional teacher at the same grade level, curriculum
directors in central administration offices, principals,
college professors who advocate whole language, and other
whole language advocates were contacted. It was found that
most schools in this south central state have endorsed
either the whole language or the traditional approach at a
particular grade level so there is consistency within the
school. Most central administration offices reported that
whole language is used more in the lower elementary grades
than in the upper elementary grades or middle school grades.

Three schools in three different counties (identified
in this research as School X, School Y, and School Z) were
identified that had at least two sections of language arts
at the sixth- or seventh-grade level with one teacher using
the traditional approach and the other teacher using the
whole language approach. To assure the researcher that the
teacher really used the approach that he/she professed
he/she used, an informal interview was conducted with each
teacher at the beginning of the study to learn of his/her
philosophy and practices. Each teacher then completed the
Questionnaire Concerning Teaching Method (see Appendix A).

Finally, each classroom was visited three to five times to confirm that the teacher used either a traditional approach or a whole language approach to teaching.

Subjects

<u>Teachers</u>

The traditional teacher in School X had a Master's Degree, had taught 16 years, and had 15 years of experience teaching seventh grade. On the questionnaire, she favored the statements that support the traditional philosophy and activities rather than the statements that support the whole language philosophy and activities.

The whole language teacher in School X had a Bachelor's Degree and had taught a total of six and a half years. This was her first year teaching seventh grade, but she had used the whole language approach for four years in a lower grade. On the questionnaire, she strongly favored the statements that support the whole language philosophy and activities rather than the statements that support the traditional philosophy and activities.

The traditional teacher in School Y had a Bachelor's Degree, had taught 14 years, had taught the seventh grade 13 years, and had used the traditional approach all 14 years. On the questionnaire, she strongly favored the statements that support the traditional philosophy and activities rather than the statements that support the whole language

philosophy and activities.

The whole language teacher in School Y had a Master's Degree, had taught four years, had taught seventh grade all four years, and had used the whole language approach two years. On the questionnaire, she strongly favored the statements that support the whole language philosophy and activities rather than the statements that support the traditional philosophy and activities.

The traditional teacher in School Z had a Master's Degree, had taught 18 years, had taught sixth grade 16 years, and had used the traditional approach 16 years. On the questionnaire, she favored the statements that support the traditional philosophy and activities rather than the whole language philosophy and activities.

The whole language teacher in School Z had a Bachelor's Degree, had taught 20 years, had taught the sixth grade 19 years, and had used the whole language approach long before anyone called it whole language. On the questionnaire, she strongly favored the statements that support the whole language philosophy and activities rather than the traditional philosophy and activities.

It was discovered throughout the study that the teachers who used the traditional approach have incorporated a few whole language practices such as small group discussions or peer reviews, while teachers who use the whole language approach are required by the school to engage

in some activities that are usually associated with the traditional approach such as traditional semester exams or weekly spelling tests.

Students

There were a total of 87 subjects used in this study. The subjects were from intact classrooms. There were 45 subjects in the traditional classrooms and 42 subjects in the whole language classrooms. The subjects used in this study were sixth- and seventh-grade students in three different schools which were located in three different counties in a south central state. The schools were selected because they had at least two sections of the sixth- or seventh-grade level with one teacher using the whole language approach and the other teacher using the traditional approach.

The subjects from School X were seventh graders. In the traditional classroom there were 25 students with 24% being minority. In the whole language classroom there were also 25 students with 36% being minority. Complete sets of data were collected from only 15 subjects in each classroom; some parents did not give their consent for their child to participate, some students had no reading scores available, and some students moved before the study was completed.

School X is one of three junior high schools (grades seven through nine) located in a medium-sized city. This

city is located near an army base with many students'
parents enlisted in the army; therefore, the students are
highly mobile. This accounted for no reading scores for
students and for students dropping out of the study. The
total enrollment of School X was 1,363 students, of which
approximately one third were seventh graders. Of the
school's total population 5.65% were Spanish American,
26.05% were Black, 3.60% were American Indian, 3.23% were
Oriental, and 61.48% were Caucasian and others. In this
school, 21% qualified for free lunches and 11% qualified for
reduced lunches.

The subjects in School Y were also seventh graders. In
the traditional classroom there were 18 students with one
student being a minority. In the whole language classroom
there were 20 students with 20% being minority. Complete
sets of data were collected from only 12 subjects in the
traditional classroom and from 16 subjects in the whole
language classroom. Some parents did not give their consent
and other students moved during the study.

School Y is one of three middle schools (grades six
through eight) located in a medium-sized university town.
The population of this middle school was 874, of which
approximately one third were seventh graders. Of this
middle school's total population, 2.10% were Spanish
American, 3.77% were Black, 7.30% were American Indian,
2.24% were Oriental, and 84.50% were Caucasian and other.

In this school, 14% qualified for free lunches, and 3% qualified for reduced lunches.

The subjects in School Z were sixth graders. The traditional classroom was designated as the sixth-grade "Gifted" classroom. Based on the national norm, the mean Reading Score on the Iowa Test of Basic Skills was 95.22% for this group. There were 23 students in this classroom, but only 18 were involved in the study. Of the eighteen students, one was a minority. The subjects in the whole language classroom were classified as students with low self-confidence, with low reading scores, or with some other "problem." They were placed in this classroom because in previous years other students with similar "problems" did well in that particular setting. In this whole language classroom, there were 20 students, but only 11 were involved in the study. In the whole language classroom 35% of all the students were minorities.

School Z is the only upper elementary center (grades five and six) in a semi-rural town. The town is located near a large metropolitan area. The total enrollment of the school was 558 students, of which approximately one half were sixth graders. Of the school's total population, 3.76% were Spanish Americans, 13.62% were Black, 1.97% were American Indian, .35% were Oriental and 80.28% were Caucasian and others. In this school 24.91% qualified for free lunches, and 3.58% qualified for reduced lunches.

Summary of the population and characteristics of the population of each school is found in Table 1.

Instruments

Questionnaire

The Questionnaire Concerning Teaching Method (See Appendix A) which was used to help identify the teachers' teaching method is based on four sources: (a) Reutzel and Hollingsworth's (1988) checklist of "Contrasting the Whole Language Approach with the Traditional Approach," (b) Bergeron's (1990) "Whole Language Approach vs. Traditional Approach Analysis Checklist," (c) Heald-Taylor's (1989) "Whole Language Progress Indicator," and (d) Goodman's (1986) book What's Whole in Whole Language? Reutzel and Hollingsworth reviewed much of the whole language literature and studied whole language classrooms to develop a checklist of whole language's philosophy about children, language learning, classroom environment, teacher behavior, and evaluation. Bergeron complied her list after she analyzed 64 articles pertaining to whole language instruction. Heald-Taylor conducted research to determine how whole language can best be implemented in schools and then compiled checklists that administrators can use to determine if teachers are really using the whole language approach. Goodman is the researcher who gave whole language its name. In each of the above mentioned checklists, the authors

Table 1

Description of Enrollment at the Three Schools

	School X	School Y	School Z
Grades in school	7-9	6-8	5-6
Grade used in study	7	7	6
School Enrollment	1,363	874	558
Spanish Americans	05.65%	02.10%	03.76%
Blacks	26.05%	03.77%	13.62%
American Indians	03.60%	07.30%	01.97%
Orientals	03.23%	02.24%	00.35%
Caucasians/Others	61.48%	84.50%	80.28%
Free Lunches	21.00%	14.00%	24.91%
Reduced Lunches	11.00%	03.00%	03.58%

compiled two lists, one list of activities and beliefs found in traditional classrooms and another list of activities and beliefs found in whole language classrooms.

The researcher designed the Questionnaire Concerning Teaching Method (see Appendix A) by taking items from the checklists such as, "Inward forces motivate learning. No extrinsic rewards are given" (Reutzel & Hollingsworth, 1988, p. 414) and changing it to, "Students respond to intrinsic motivation rather than respond to outside enticements" (Part II, No. 15 of questionnaire). Another example taken from Reutzel and Hollingsworth, "Brainstorming is used to build background experiences for instruction" (p. 415), was changed to, "Building background for reading is done through students brainstorming, predicting, and sharing their knowledge about a particular topic" (Part III, No. 16 of questionnaire). One item from Heald-Taylor's traditional list, "emphasizes knowledge of isolated skills" (p.15), was changed to, "Language learning is based on a hierarchy of skills" (Part II, No. 17 of questionnaire).

The Questionnaire Concerning Teaching Method uses a Likert scale to determine the teacher's teaching beliefs and a semantic differential scale to determine the teacher's teaching practices. On the Likert scale, the teacher was asked to respond to a series of statements about his/her teaching beliefs by indicating whether he/she "Strongly Agrees" or "Strongly Disagrees" with the statements. For

example, if a teacher marked "Strongly Agrees" to the statement, "Teachers must teach institutional knowledge and skills (e.g., the basics)," he/she favored the traditional approach. If a teacher marked "Strongly Disagrees" to that statement, he/she favored the whole language approach.

On the semantic differential scale, the teacher was asked to respond to a series of statements about his/her teaching practices by indicating whether he/she "Never" or "Usually" practiced the activity mentioned in the statement. For example, if a teacher marked "Usually" to the statement, "Students choose their writing topics," he/she favored the whole language activities. However, if a teacher marked "Never" to that statement, he/she favored the traditional approach.

Twenty items on the questionnaire described the whole language approach, while 18 items described the traditional approach. The items were randomly mixed so the teachers would be less likely to detect a pattern.

To test the reliability of the questionnaire, the questionnaire was given to a group of 50 college students enrolled in a Language Arts Methods course. The retest was given three weeks later to the same students. The calculation of the Pearson r for the test-retest of the questionnaire was $r = .82$, which is significantly different from 0 at the .05 level.

The face validity was determined by an expert in whole

language. When given the questionnaire, the expert was in total agreement with what the researcher had intended each item to describe. The expert determined that the whole language statements were representative of the whole language approach, while the traditional statements were representative of the traditional approach. The statements on the questionnaire were compiled from lists established by well-known whole language researchers and theorists. The lists included items from (a) Reutzel and Hollingsworth's (1988) checklist, (b) Bergeron's (1990) "Whole Language Approach vs. Traditional Approach Analysis Checklists," (c) Goodman's (1986) statements in What's Whole in Whole Language?, and (d) Heald-Taylor's (1989) "Whole Language Progress Indicator."

Self-Esteem Inventory

The instrument used to test the self-esteem of the students was the School Form of the Coopersmith Self-Esteem Inventory (CSEI), which was designed to measure self-esteem of students, ages 5 to 15. This form consists of 50 items which are easy for students to understand (e.g. "I often feel upset in school" and "I like to be called on in class"). This form is also easy for children to take; they only have to mark a box "Like Me" or "Unlike Me" for each item. It takes no longer than 15 minutes to complete, and can easily be administered by the classroom teacher. This

instrument was also chosen because nowhere on the inventory is its real purpose stated.

In 1978, Kokenes conducted a study to test the construct validity of the Coopersmith School Form. The study included over 7,600 students in grades four through eight. The study was designed "to observe the comparative importance of the home, peers, and school to the global self-esteem of preadolescents and adolescents. Her study 'confirmed the construct validity of the subscales proposed by Coopersmith as measuring sources of self-esteem'" (Coopersmith, 1981, p. 13).

According to Adair (1984), Donaldson estimated the predictive validity of the School Form of the CSEI in 1974, by correlating subscale scores of the Inventory through regression analysis. Donaldson, using 643 subjects, found that a General Self subscale multiple r of .53 (p < .01) was quite high.

The Inventory's reliability was tested in 1973 by Spatz and Johnson (Adair, 1984). The School Form was given to 600 students in grades 5, 9, and 12. Using the Kuder-Richardson reliability formula, they found that at all three levels, the coefficients were in excess of .80, which was considered adequate for the instrument.

Classroom Visits

Three to five classroom visits were made to each

classroom to assure the researcher that each teacher was indeed using the teaching approach they said they were using. There were noticeable differences in the physical arrangement and the organizational structure between the traditional classrooms and the whole language classrooms.

In all three traditional classrooms, the students were sitting at individual desks which were arranged in straight rows. The teacher did most of the talking and the students did not interact with one another. All three traditional teachers were very concerned with keeping the classroom quiet. Throughout the class period, the teacher presented some concept, demonstrated how to apply the concept in the assignment, and then the students did some worksheet or assignment by themselves. All students did the same work. Some of the assignments included (a) alphabetizing a list of 30 spelling words, (b) reading a short, three paragraph article about an author and then listing some main ideas, (c) supplying the middle names to a list of 25 authors (e.g. John _____Whittier), (d) reading a one-page story and describing the main character, (e) writing the principal parts to a list of 25 verbs, (f) reading one ditto sheet and circling important words that were the main ideas, and (g) reading an essay written by a publishing company and then proofreading it and making corrections.

In all the whole language classrooms, the students were sitting in groups around tables or around desks clustered

together. There was structure to the classrooms because all students knew what they had to accomplish; however, not every student was doing the exact same activity. Only during sustained silent reading were all students reading; however, they were reading books of their choice. For example, during one visit to a whole language classroom, the class was beginning a thematic unit on "Winter Holidays in Different Countries." Students were deciding which country they would like to research, and then students who had chosen the same country formed groups to do the research together. They were responsible for formulating questions that they wanted to answer, for gathering the information, and for choosing a way to share the information with the class. They could use any format to share their information such as slides, newspapers, plays, puppet shows, etc.

In another whole language classroom, students shared a novel that they had read in the nine-week period. Some presentations included posters, bookmarks, models of the setting made from cardboard, puppets, and retellings of the plot. This same whole language class used dialogue journals each week to share their reading experiences with the teacher.

In another whole language classroom, a teacher had read The Pinballs by Betsy Byars to the class. The teacher had a list of critical thinking questions about the social issues presented in the book. The students were in groups

discussing these questions. Each group had their own discussion leader who was responsible for including all members in the discussion and for making sure the group stayed with the topic. The students had to "prove" their stance by using quotations and page numbers from the book. During another visit to this same class, students were discussing the characteristics that they found to be unique in the fables that they had read. Prior to the researcher's visit, the students had read a variety of different fables; not all students had read the same ones. During the visit, the teacher was writing the list as the students dictated the characteristics to her. After the students agreed on the list of characteristics, the students formed groups of three and began to write a fable which they were going to make into Big Books and then share with a preschool classroom.

In all the whole language classrooms the students were reading authentic texts for enjoyment or to obtain information, and then they were writing in response to their reading. Students were reading books of their choice which made them books at their reading level and of their interest.

Design

One way analysis of variance was used on the pre-test to determine if there was any significant difference in the

self-esteem of students in the three schools at the onset of the study. The results of one way analysis of variance indicated that there was a significant difference between the three schools' mean scores on the Coopersmith Self-Esteem Inventory. The mean score for School X (N = 30) was 66.40 with a standard deviation of 12.41. The mean score for School Y (N = 28) was 64.21 with a standard deviation of 16.70. The mean score for School Z (N = 29) was 74.21 with a standard deviation of 15.78. Since the effect size was slight (only .0728 as measured by eta square), the scores from the three schools were combined. There was a total of 87 subjects with 45 in the traditional group and 42 in the whole language group. There was no significant difference between these two groups at the onset of the study.

One way analyses of variance were used to analyze the post-test scores of the Coopersmith Self-Esteem Inventory and to test the eight hypotheses.

Procedure

The researcher contacted curriculum directors, principals, whole language advocates, and teachers to identify schools that had at least two sections of either a sixth-, seventh-, or eighth-grade level, with one language arts teacher using the whole language approach and the other language arts teacher using the traditional, teacher-directed approach. Three schools throughout this south

central state were identified. After obtaining permission from the three central administration offices and the building principals, teachers were telephoned to see if they were interested in being involved in this study. In one school one teacher did not want to participate so another teacher was asked to participate. The second teacher did want to participate. The six teachers were interviewed by the researcher to determine their teaching philosophy and their teaching approach. The Questionnaire Concerning Teaching Method, designed by the researcher, was given to the six teachers to determine their philosophy and teaching method. The researcher also visited each classroom three to five times to confirm that each teacher was using the teaching method that they professed they used.

In School X, a departmentalized school, the whole language teacher had six sections of the seventh grade, but the traditional teacher had only one section of the seventh grade. Reading scores of students in all seven sections were obtained from the students' records, and the Coopersmith Self-Esteem Inventory was given to all seven sections. The whole language section whose mean reading score on the Iowa Tests of Basic Skills and whose mean score on the pre-test of the Coopersmith Self-Esteem Inventory most closely matched the traditional classroom's mean reading score and self-esteem score was used in the study.

In School Y, a departmentalized school, the whole

language teacher had more than one section of the seventh grade, but the traditional teacher had only one section of seventh graders. The whole language section that had a mean reading score closest to the mean reading score of the traditional group was used in the study. The Coopersmith Self-Esteem Inventory was given to both groups as a pre-test.

In School Z, which had self-contained classrooms, several teachers used the whole language approach and several used the traditional approach, but only one whole language teacher and one traditional teacher were interested in being involved in the study. The reading scores were obtained from the students' permanent files and the Coopersmith Self-Esteem Inventory was given as a pre-test.

Intact classrooms were used. In School X and School Y, the two seventh grade classrooms, the students were randomly assigned to teachers and sections by the building administrators. In School Z, the whole language classroom was designated as the classroom for children with some self-esteem problems, reading problems, or other personal problems. The traditional classroom in School Z was designated as the school's "Gifted" sixth-grade classroom.

Permission to test the students in the six intact classrooms and to have their reading scores released was obtained from the administrators, teachers, and parents (see Appendix B for the letter and the consent form).

The reading scores were taken from the students'
permanent files. School X and School Z had given the Iowa
Test of Basic Skills in the spring of the previous school
year. The National Percentile Score was used to classify
the student as a reader with low reading ability (49% and
below) or a reader with high reading ability (50% and
above). School Y had given the Gates-MacGinitie Reading
Test at the beginning of the school year. Students with a
score of 6.9 and above were classified as readers with high
reading ability, and students with a score of 6.8 and below
were classified as readers with low reading ability. The
researcher was encouraged by the teachers to set 6.9 and
above as readers with high ability because that is the
desired reading level for seventh graders at the beginning
of the school year.

The researcher explained to the participating teachers
how to administer the School Form of the Coopersmith Self-
Esteem Inventory. The text booklet that accompanied the
inventories suggested that the classroom teacher administer
the inventory so the test setting was as normal as possible.
The teachers administered the inventory at the beginning of
the school year and at the end of the first semester to
determine if the hypotheses were to be rejected or were not
to be rejected.

Chronology of Procedure

Following is a step-by-step chronology of the procedure:

Step 1 - Identified schools (contacted curriculum directors, principals, whole language advocates, and teachers)

Step 2 - Interviewed principals (established building and district policies)

Step 3 - Telephoned teachers to determine their method of teaching and their interest in being involved in the study

Step 4 - Interviewed teachers (gave them the questionnaire, set pre-test and post-test dates, explained observation procedures, explained administration of tests, and reviewed the parent permission letter)

Step 5 - Sent permission letters to parents through classroom teachers

Step 6 - Collected permission cards through teachers

Step 7 - Obtained students' reading scores

Step 8 - Administered pre-tests and scored them

Step 9 - Conducted three to five classroom observations

Step 10 - Gave post-tests

Step 11 - Analyzed the data

Proposed Data Analysis

One way analyses of variance (alpha level = .05) were used to test each of the eight hypotheses. One way analyses of variance were used so that the effect size could also be calculated. MacDonald (1992), Ferrell (1992), and Thompson (1988) suggest that tests of significance are not adequate to report the importance of a result; an estimate of the strength of the difference between the two groups is also important. The effect size estimates the strength of the difference between the two groups; it answers the following question: "What proportion of the variance in the dependent variable is explained by this effect?" (Thompson, 1988, p. 147). Bartz (1988) suggests that an alpha level of .05 is adequate and most commonly used in research that involves the behavioral sciences.

The hypotheses compared the self-esteem of the following groups:

1. Traditional group with the whole language group

2. High reading ability group with the low reading ability group

3. High readers in the traditional group with the high readers in the whole language group

4. Low readers in the traditional group with the low readers in the whole language group

5. The boys in the whole language group with the girls in the whole language group

6. The boys in the traditional group with the girls in the traditional group

7. Boys in the traditional group with boys in the whole language group

8. Girls in the traditional group with girls in the whole language group

The results of different F-tests on the pre-test scores on the School Form of the Coopersmith Self-Esteem Inventory determined if there was any significant difference between the traditional group and the whole language group and between the various subgroups at the onset of the study. The results of different F-tests on the post-test determined if the researcher rejected or failed to reject each hypothesis. Eta square was used to measure the effect size for each hypothesis.

Informal analysis included a summary of the information obtained from the Questionnaire Concerning Teaching Method such as the number of years of experience, and scores from the whole language items and traditional items on the questionnaire.

Summary

The subjects used in this study were sixth and seventh graders from intact classrooms in three different schools in a south central state. A total of 87 students participated in the study. There were 42 students in the whole language

classrooms and 45 students in the traditional classrooms. The selection of the schools was based on the availability of a school having at least two sections of one grade level, with one teacher using the whole language approach and the other teacher using the traditional approach. The Questionnaire Concerning Teaching Method, designed by the researcher, was used to help establish the teachers' method of teaching. The Coopersmith Self-Esteem Inventory (School Form) was given as a pre-test and post-test to measure the students' self-esteem. The scores for each of the three schools were analyzed jointly since the effect size was slight at the onset of the study.

The next chapter, chapter four, includes the analysis of the data.

CHAPTER IV

ANALYSIS AND INTERPRETATION

OF THE DATA

Included in this chapter is a summary of the data collected from the Questionnaire Concerning Teaching Method and a statistical interpretation of the data collected from the School Form of the Coopersmith Self-Esteem Inventory. The information from the questionnaires is summarized in the following categories: (a) the number of years of teaching experience, (b) the number of years using the current teaching method, (c) the scores from the questionnaire items that support the traditional approach, and (d) the scores from the questionnaire items that support the whole language approach.

The correlation between the method of teaching and self-esteem as measured by the School Form of the Coopersmith Self-Esteem Inventories is also reported. Through statistical analysis, an F Ratio between mean scores was established to determine if the difference between the two teaching methods was significant.

The effect size was also calculated to estimate the strength of the difference between the two groups. Eta square was used to estimate the strength of the difference

between the two groups named in each hypothesis. Eta square
is computed by dividing the sum of squares for an effect by
the total sum of squares. In 1980, Cohen suggested that a
correlation ratio of 25% ($r = 0.5$) should be considered
large (Cutrer, 1992).

The Questionnaire Concerning Teaching Method was used
in conjunction with interviews and classroom visits to
verify the teaching method of each teacher. The
questionnaire had 20 items that supported the whole language
philosophy and 18 items that supported the traditional
philosophy. The items that supported the whole language
philosophy were from Part Two, numbers 1, 2, 3, 5, 9, 10,
14, 15, and 19, and from Part Three, numbers 5, 6, 7, 8, 10,
11, 12, 13, 16, 17, and 18. The items that supported the
traditional philosophy were from Part Two, numbers 4, 6, 7,
8, 11, 12, 13, 16, 17, and 18, and from Part Three, numbers
1, 2, 3, 4, 9, 14, 15, and 19.

The scale from Part Two went from "Strongly Disagree"
(zero points) to "Strongly Agree" (four points). The scale
for Part Three went from "Never" (zero points) to "Usually"
(four points). The items that supported whole language
were calculated separately with a perfect score being 80.
The items that supported the traditional approach were also
calculated separately with a perfect score being 72. Each
of the six teachers had a higher score on the items which
coincided with their philosophy. Table 2 summarizes the

school (SCH), the teaching method (TEACH), the teachers'
years of teaching experience (YRS OF EXP), the number of
years using the current approach (YRS CUR APP), the score of
the whole language (WL) items, and the score of the
traditional (TRAD) items. The traditional teachers had
higher scores on the whole language items than the whole
language teachers had on the traditional items. This may
have occurred because the traditional teachers had read
literature about whole language and accepted some of the
ideas of the whole language approach.

The results of one way analysis of variance indicated
that at the onset of the study there was a significant
difference among the schools as measured on the School Form
of the Coopersmith Self-Esteem Inventory; $F(2,84) = 3.2997$,
$p < .05$ alpha level (see Table 3). The mean for School X
(N = 30) was 66.40 with a standard deviation of 12.41. The
mean for School Y (N = 28) was 64.21 with a standard
deviation of 16.70. The Mean for School Z (N = 29) was
74.21 with a standard deviation of 15.78 (see Table 4). The
results of eta square which equaled .0728 indicated that the
effect size was very slight. In 1988, Cohen suggested that
eta square of approximately .50 should be considered large
(Cutrer, 1992). Since the effect size was less than 1%, the
three schools were combined to make one study of 87 subjects
(45 in the traditional group and 42 in the whole language
group).

Table 2

Summary of Data from the Questionnaire

SCH	TEACH	YRS OF EXP	YRS CUR APP	WL	TRAD
X	WL	6	4	77	8
X	Trad	16	16	38	52
Y	WL	4	2	74	16
Y	Trad	14	14	30	59
Z	WL	20	15	72	18
Z	Trad	18	18	32	55

Note. Perfect score for the whole language section is 80;
perfect score for the traditional section is 72.

Table 3

ANOVA Summary Table for the Pre-test of the CSEI of the

Three Schools

SOURCE	DF	SS	MS	F
BETWEEN	2	1552.34	776.17	3.30*
WITHIN	84	19758.59	235.22	
TOTAL	86	21310.94		

* significant <.05

Table 4

Mean and Standard Deviation on the Pre-test of the CSEI of

the Three Schools

Group	N	Mean	SD
School X	30	66.40	12.41
School Y	28	64.21	16.70
School Z	29	74.21	15.78

Table 5 summarizes the results of one way analyses of variance on the post-test for the various groups. The only significant difference found in any group was in the self-esteem of the students in the two reading groups; $F(1,86) = 5.12$, $p = .027$.

Hypothesis Number One

The first hypothesis stated that there was no significant difference between the mean score on the School Form of the Coopersmith Self-Esteem Inventory of the middle school students who experience a whole language classroom and the mean score of middle school students who experience a traditional classroom.

Pre-Test. The results of one way analysis of variance on the pre-test of the School Form of the Coopersmith Self-Esteem Inventory indicated that at the onset of the study there was no significant difference between the whole language group and the traditional group, $F(1,85) = 3.76$, $p = .06$ (see Table 6). The mean for the traditional group (N = 45) was 71.38 with a standard deviation of 14.38, while the mean for the whole language group (N = 42) was 64.93 with a standard deviation of 16.61 (see table 7). The effect size as measured by eta square was .0424.

Post-test. The results of one way analysis of variance did support the first hypothesis; $F(1,85) = .59$, $p = .44$

Table 5

ANWA Summary Table for Post-test on the CSEI for Whole Language Group and Traditional Group for All Variables

Source	DF	SS	MS	F	P
Treatment	1	17.99	17.99	.084	.772
Sex	1	.19	.19	.001	.976
Read	1	1093.07	1093.07	5.122	.027*
School	2	983.44	491.72	2.304	.107
Treat - Sex	1	493.98	493.98	2.315	.133
Treat - Read	1	4.63	4.63	.022	.883
Treat - Sch	2	114.70	57.35	.269	.765
Residual	72	15365.50	213.41		
Total	86	19060.23	221.63		

* significant < .05

Table 6

ANOVA Summary Table for Pre-test Scores of the CSEI for

Traditional and Whole Language Groups

SOURCE	DF	SS	MS	F	P
BETWEEN	1	903.56	903.56	3.76	.0557
WITHIN	85	20407.36	240.09		
TOTAL	86	21310.92			

Table 7

Mean and Standard Deviation of Pre-test Scores on the CSEI

of the Traditional and Whole Language Groups

Group	N	Mean	SD
Traditional	45	71.38	14.38
Whole Language	42	64.93	16.61

(see Table 8). The mean for the whole language group (N = 42) was 74.43 with a standard deviation of 15.13, while the mean for the traditional group (N = 45) was 76.89 with a standard deviation of 14.73 (see Table 9). The effect size as measured by eta square was .0069.

Hypothesis Number Two

The second hypothesis stated that there was no significant difference between the mean score on the School Form of the Coopersmith Self-Esteem Inventory of middle school students with high reading ability and the mean score of middle school students with low reading ability.

Pre-test. The results of one way analysis of variance on the pre-test of the School Form of the Coopersmith Self-Esteem Inventory indicated that at the onset of the study there was a significant difference between the high reading group and the low reading group; $F(1,85) = 17.72$, $p = .0001$ (see Table 10). The mean for the low reading group (N = 36) was 60.53 with a standard deviation of 15.60, while the mean for the high reading group (N = 51) was 73.73 with a standard deviation of 13.51 (see Table 11). The effect size as measured by eta square was .1752 (approximately 3%).

Post-test. The results of one way analysis of variance on the post-test did not support this hypothesis; there was a significant difference between the self-esteem of high

Table 8

ANOVA Summary Table for Post-test Scores on the CSEI of the Traditional and Whole Language Groups

SOURCE	DF	SS	MS	F	P
BETWEEN	1	131.50	131.50	.59	.4444
WITHIN	85	18928.73	222.69		
TOTAL	86	19060.23			

Table 9

Mean and Standard Deviation for the Post-test Scores on the CSEI of the Traditional and Whole Language Groups

Group	N	Mean	SD
Traditional	45	76.89	14.73
Whole Language	42	74.43	15.13

Table 10

ANONA Summary Table for Pre-test Scores on the CSEI of High
and Low Reading Groups

SOURCE	DF	SS	MS	F	P
BETWEEN	1	3675.79	3675.79	17.72	.0001
WITHIN	85	17635.13	207.47		
TOTAL	86	21310.92			

Table 11

Mean and Standard Deviation for the Pre-test Scores on the
CSEI of the Low and High Reading Groups

Group	N	Mean	SD
Low Readers	36	60.53	15.60
High Readers	51	73.73	13.51

readers and the self-esteem of low readers; $\underline{F}(1,85) = 8.12$, $\underline{p} = .01$ (see Table 12). The mean for the low reading group ($N = 36$) was 70.50 with a standard deviation of 16.72, while the mean for the high reading group ($N = 51$) was 79.37 with a standard deviation of 12.35 (see Table 13). The effect size as measured by eta square was .0872 (less than 1%).

Hypothesis Number Three

The third hypothesis stated that there was no significant difference between the mean score on the School Form of the Coopersmith Self-Esteem Inventory of middle school students with high reading ability who experience a whole language classroom and the mean score of middle school students with high reading ability who experience a traditional classroom.

Pre-Test. The results of one way analysis of variance on the pre-test scores indicated that at the onset of the study there was no significant difference between the students with high reading ability who were in the whole language classroom and those in the traditional classroom; $\underline{F}(1,49) = .95$, $\underline{p} = .33$ (see Table 14). The mean for the high readers in the whole language classroom ($N = 18$) was 71.22 with a standard deviation of 14.26, while the mean for the high readers in the traditional group ($N = 33$) was 75.09 with a standard deviation of 13.10 (see Table 15). The effect size as measured by eta square was .0191.

Table 12

ANOVA Summary Table for Post-test Scores on the CSEI of High
and Low Reading Groups

SOURCE	DF	SS	MS	F	P
BETWEEN	1	1661.31	1661.31	8.12	.0055
WITHIN	85	17398.92	204.69		
TOTAL	86	19060.23			

Table 13

Mean and Standard Deviation for the Post-test Scores on the
CSEI of Low and High Reading Groups

Group	N	Mean	SD
Low Reading	36	70.50	16.72
High Reading	51	79.37	12.35

Table 14

ANOVA Summary Table for the Pre-test Scores on the CSEI of

High Readers in the Traditional and Whole Language Groups

SOURCE	DF	SS	MS	F	P
BETWEEN	1	174.32	174.32	.95	.3333
WITHIN	49	8945.84	182.57		
TOTAL	50	9120.16			

Table 15

Mean and Standard Deviation for the Pre-test Scores on the

CSEI of High Readers in Traditional and Whole Language

Groups

Group	N	Mean	SD
Traditional	33	75.09	13.10
Whole Language	18	71.22	14.26

Post-test. The results of one way analysis of variance
on the post-test scores did support this third hypothesis,
$F(1,49) = .40$, $p = .53$ (see Table 16). Table 17 indicates
that the mean for the high readers in the whole language
group (N = 18) was 77.89 with a standard deviation of 10.77,
while the mean for the high readers in the traditional group
(N = 33) was 80.18 with a standard deviation of 13.21. The
effect size as measured by eta square was .0080.

Hypothesis Number Four

The fourth hypothesis stated that there was no
significant difference between the mean score on the School
Form of the Coopersmith Self-Esteem Inventory of the middle
school students with low reading ability who experience a
whole language classroom and the mean score of middle school
students with low reading ability who experience a
traditional classroom.

Pre-test. The results of one way analysis of variance
on the pre-test indicated that there was no significant
difference between the low readers in the two groups at the
onset of the study; $F(1,34) = .03$, $p = .87$ (see Table 18).
The mean score for the low readers in the whole language
group (N = 24) was 60.21 with a standard deviation of 16.94,
while the mean score for the low readers in the traditional
group (N = 12) was 61.17 with a standard deviation of 13.17
(see Table 19). The effect size as measured by eta square

Table 16

ANOVA Summary Table for the Post-test Scores on the CSEI of
High Readers in Traditional and Whole Language Groups

SOURCE	DF	SS	MS	F	P
BETWEEN	1	61.23	61.23	.40	.5316
WITHIN	49	7558.69	154.26		
TOTAL	50	7619.92			

Table 17

Mean and Standard Deviation for the Post-test Scores on the
CSEI of High Readers in Traditional and Whole Language
Groups

Group	N	Mean	SD
Traditional	33	80.18	13.21
Whole Language	18	77.89	10.77

Table 18

ANOVA Summary Table for the Pre-test Scores on the CSEI of
Low Readers in Traditional and Whole Language Groups

SOURCE	DF	SS	MS	F	P
BETWEEN	1	7.35	7.35	.03	.8650
WITHIN	34	8507.63	250.22		
TOTAL	35	8514.97			

Table 19

Mean and Standard Deviation for the Pre-test Scores on the
CSEI of Low Readers in Traditional and Whole Language Groups

Group	N	Mean	SD
Traditional	12	61.17	13.17
Whole Language	24	60.21	16.94

was .0009.

Post-test. The results of one way analysis of variance did support this hypothesis; $F(1,34) = .45$, $p = .51$ (see Table 20). Table 21 indicates that the mean for the low readers in the whole language group (N = 24) was 71.83 with a standard deviation of 17.49, while the mean for the low readers in the traditional group (N = 12) was 67.83 with a standard deviation of 15.41. The effect size as measured by eta square was .0131 (far less than 1%).

Hypothesis Number Five

The fifth hypothesis stated that there was no significant difference between the mean score on the School Form of the Coopersmith Self-Esteem Inventory of the boys and the mean score of the girls in the whole language classroom.

Pre-test. The results of one way analysis of variance indicated that at the onset of the study there was no significant difference between the boys' self-esteem and the girls' self-esteem in the whole language group; $F(1,40) = 2.84$, $p = .10$ (see Table 22). The mean score for the boys in the whole language group (N = 20) was 60.50 with a standard deviation of 17.45, while the mean score for the girls in the whole language group (N = 22) was 68.95 with a standard deviation of 15.08 (see Table 23). The effect

Table 20

ANOVA Summary Table for Post-test Scores on the CSEI of Low
Readers in Traditional and Whole Language Groups

SOURCE	DF	SS	MS	F	P
BETWEEN	1	128.00	128.00	.45	.51
WITHIN	34	9651.00	283.85		
TOTAL	35	9779.00			

Table 21

Mean and Standard Deviation for the Post-test Scores on the
CSEI of Low Readers in Traditional and Whole Language Groups

Group	N	Mean	SD
Traditional	12	67.83	15.41
Whole Language	24	71.83	17.49

Table 22

ANOVA Summary Table for the Pre-test Scores on the CSEI of
Boys and Girls in Whole Language Group

SOURCE	DF	SS	MS	F	P
BETWEEN	1	748.83	748.83	2.84	.0999
WITHIN	40	10555.95	263.90		
TOTAL	41	11304.79			

Table 23

Mean and Standard Deviation for the Pre-test Scores on the
CSEI of Boys and Girls in the Whole Language Group

Group	N	Mean	SD
Boys	20	60.50	17.45
Girls	22	68.95	15.08

size as measured by eta square was .0662 (less than 1%).

Post-test. The results of one way analysis of variance did support this hypothesis; $F(1,40) = 1.89$, $p = .18$ (see Table 24). Table 25 indicates that the mean score for the boys in the whole language group (N = 20) was 71.10 with a standard deviation of 16.52, while the mean score of the girls in the whole language group (N = 22) was 77.45 with a standard deviation of 13.41. The effect size as measured by eta square was .0451 (less than 1%).

Hypothesis Number Six

The sixth hypothesis stated that there was no significant difference between the mean score on the School Form of the Coopersmith Self-Esteem Inventory of the boys and the mean score of the girls in the traditional classroom.

Pre-test. The results of one way analysis of variance indicated that at the onset of the study there was no significant difference between the boys' self-esteem and the girls' self-esteem in the traditional group; $F(1,43) = 1.34$, $p = .25$ (see Table 26). The mean score for the boys (N = 22) was 73.91 with a standard deviation of 14.90, while the mean score for the girls (N = 23) was 68.96 with a standard deviation of 13.76 (see Table 27). The effect size as measured by eta square was .0303 (less than 1%).

Table 24

ANOVA Summary Table for the Post-test Scores on the CSEI of Boys and Girls in Whole Language Group

SOURCE	DF	SS	MS	F	P
BETWEEN	1	423.03	423.03	1.89	.1771
WITHIN	40	8965.25	224.13		
TOTAL	41	9388.29			

Table 25

Mean and Standard Deviation for the Post-test Scores on the CSEI of Boys and Girls in the Whole Language Group

Group	N	Mean	SD
Boys	20	71.10	16.52
Girls	22	77.45	13.41

Table 26

ANOVA Summary Table for Pre-test Scores on the CSEI of Boys
and Girls in Traditional Group

SOURCE	DF	SS	MS	F	P
BETWEEN	1	275.80	275.80	1.34	.2528
WITHIN	43	8826.77	205.27		
TOTAL	44	9102.58			

Table 27

Mean and Standard Deviation for Pre-test Scores on the CSEI
of Boys and Girls in Traditional Group

Group	N	Mean	SD
Boys	22	73.91	14.90
Girls	23	68.96	13.76

Post-test. The results of one way analysis of variance on the post-test did support this hypothesis; $F(1,43)$ = 1.96, p = .17 (see Table 28). Table 29 indicates that the mean score of the boys in the traditional group (N = 22) was 80.00 with a standard deviation of 11.13, while the mean score of the girls in the traditional group (N = 23) was 73.91 with a standard deviation of 17.22. The effect size as measured by eta square was .0437 (less than 1%).

Hypothesis Number Seven

The seventh hypothesis stated that there was no significant difference between the mean score on the School Form of the Coopersmith Self-Esteem Inventory of the boys in the traditional classroom and the mean score of the boys in the whole language classroom.

Pre-test. The results of one way analysis of variance indicated that there was a significant difference in the boys' self-esteem in the traditional group and the boys' self-esteem in the whole language group; $F(1,40)$ = 7.22, p = .01 (see Table 30). The mean for the boys in the whole language group (N = 20) was 60.50 with a standard deviation of 17.45, while the mean for the boys in the traditional group (N = 22) was 73.91 with a standard deviation of 14.90 (see Table 31). The effect size as measured by eta square was .1528 (approximately 2%).

Table 28

ANOVA Summary Table for Post-test Scores on the CSEI of Boys
and Girls in Traditional Group

SOURCE	DF	SS	MS	F	P
BETWEEN	1	416.62	416.62	1.96	.1683
WITHIN	43	9123.83	212.18		
TOTAL	44	9540.44			

Table 29

Mean and Standard Deviation for Post-test Scores on the CSEI
of Boys and Girls in Traditional Group

Group	N	Mean	SD
Boys	22	80.00	11.13
Girls	23	73.91	17.22

Table 30

ANOVA Summary Table for the Pre-test Scores on the CSEI of Boys in the Traditional and Whole Language Groups

SOURCE	DF	SS	MS	F	P
BETWEEN	1	1883.66	1883.66	7.22	.0105
WITHIN	40	10442.82	261.07		
TOTAL	41	12326.48			

Table 31

Mean and Standard Deviation for the Pre-Test Scores on the CSEI of Boys in the Traditional and Whole Language Groups

Group	N	Mean	SD
Traditional	22	73.91	14.90
Whole Language	20	60.50	17.45

Post-test. The results of one way analysis of variance on the post-test scores did not support this hypothesis; $F(1,40) = 4.26$, $p = .05$ (see Table 32). Table 33 indicates that the mean score for the boys in the whole language group (N = 20) was 71.10 with a standard deviation of 16.52, while the mean score for the boys in the traditional group (N = 22) was 80.00 with a standard deviation of 11.13. The effect size as measured by eta square was .0963 (approximately .9%).

Hypothesis Number Eight

The eighth hypothesis stated that there was no significant difference between the mean score on the School Form of the Coopersmith Self-Esteem Inventory of the girls in the traditional classroom and the mean score of the girls in the whole language classroom.

Pre-test. The results of one way analysis of variance on the pre-test scores indicated that at the onset of the study there was no significant difference in the self-esteem of the girls in the traditional group and the self-esteem of the girls in the whole language group; $F(1,43) = .00$, $p = .10$ (see Table 34). The mean score of the girls in the whole language group (N = 22) was 68.95 with a standard deviation of 15.08, while the mean score of the girls in the traditional group (N = 23) was 68.96 with a standard deviation of 13.76 (see Table 35).

Table 32

ANOVA Summary Table for the Post-test Scores on the CSEI of
Boys in the Traditional and Whole Language Groups

SOURCE	DF	SS	MS	F	P
BETWEEN	1	829.82	829.82	4.26	.05*
WITHIN	40	7787.80	194.70		
TOTAL	41	8617.62			

* significant < .05

Table 33

Mean and Standard Deviation for the Post-test Scores on the
CSEI of Boys in the Traditional and Whole Language Groups

Group	N	Mean	SD
Traditional	22	80.00	11.13
Whole Language	20	71.10	16.52

Table 34

ANOVA Summary Table for the Pre-test Scores on the CSEI of
Girls in the Traditional and Whole Language Groups

SOURCE	DF	SS	MS	F	P
BETWEEN	1	.00	.00	.00	.9996
WITHIN	43	8939.91	207.90		
TOTAL	44	8939.91			

Table 35

Mean and Standard Deviation for the Pre-test Scores on the
CSEI of Girls in the Traditional and Whole Language Groups

Group	N	Mean	SD
Traditional	23	68.96	13.76
Whole Language	22	68.95	15.08

Post-test. The results of one way analysis of variance did support this hypothesis; $F(1,43) = .59$, $p = .45$ (see Table 36). Table 37 indicates that the mean score for the girls in the whole language group (N = 22) was 77.45 with a standard deviation of 13.41, while the mean score for the girls in the traditional group (N = 23) was 73.91 with a standard deviation of 17.22. The effect size as measured by eta square was .0135 (less than 1%).

Post Hoc Analyses

Table 38 summarizes the pre-test and post-test mean scores for many of the subgroups. Some observations concerning the increase between some pre-test mean scores and post-test mean scores are noteworthy.

First, there was a larger increase in the mean score of the whole language group (64.93 to 74.43) than in the traditional group (71.38 to 76.89). This indicated that the self-esteem of students in the whole language group increased more than the self-esteem of students in the traditional group.

The results of one way analysis of variance indicated that there was a significant difference between the whole language pre-test mean score (64.93, SD = 16.61) and the whole language post-test mean score (74.43, SD = 15.13); $F(1,82) = 7.29$ (see Table 39). The effect size as measured by eta square was .0816 (.67%).

Table 36

ANOVA Summary Table for the Post-test Scores on the CSEI for
Girls in the Traditional and Whole Language Groups

SOURCE	DF	SS	MS	F	P
BETWEEN	1	141.03	141.03	.59	.4471
WITHIN	43	10301.28	239.56		
TOTAL	44	10442.31			

Table 37

Mean and Standard Deviation for the Post-test Scores on the
CSEI of Girls in Traditional and Whole Language Groups

Group	N	Mean	SD
Traditional	23	73.91	17.22
Whole Language	22	77.45	13.41

Table 38

Summary Table of Means for Pre-test and Post-test Scores

on the CSEI

GROUP	PRE-TEST X	POST-TEST X
Total	68.26	75.70
Traditional (T)	71.38	76.89
Whole language (WL)	64.93	74.43
Boys (B)	67.52	75.76
Girls (G)	68.96	75.04
Low Reading (LR)	60.53	70.50
High Reading (HR)	73.73	79.37
LR, B	55.33	68.44
LR, G	65.72	72.56
HR, B	76.67	81.25
HR, G	71.11	77.70
LR, T, B	58.00	71.00
LR, WL, B	54.00	67.17
LR, T, G	64.33	64.67
LR, WL, G	66.42	76.50
HR, T, B	79.88	83.38
HR, WL, B	70.25	77.00
HR, T, G	70.59	77.18

Table 38 (Continued)

Group	Pre-Test X	Post-Test X
HR, WL, G	72.00	78.60
T, B	73.91	80.00
T, G	68.96	73.91
WL, B	60.21	71.10
WL, G	68.95	77.45
T, LR	61.17	67.83
WL, LR	60.21	71.33
T, HR	75.09	80.18
WL, HR	71.22	77.89

Table 39

ANOVA Summary Table for the Pre-test and Post-test Scores on the CSEI of the Whole Language Group

SOURCE	DF	SS	MS	F
BETWEEN	1	1838.69	1838.69	7.2888*
WITHIN	82	20685.38	252.26	
TOTAL	83	22524.06		

* significant < .05

The results of one way analysis of variance indicated, however, that there was no significant difference between the traditional pre-test mean score (71.38, SD = 14.38) and the traditional post-test mean score (76.89, SD = 14.73); $F(1,88)$ = 3.23 (see Table 40). The effect size as measured by eta square was .0354 (.13%).

Second, the results of one way analysis of variance indicated that there was a significant difference between the whole language low readers' pre-test mean score (60.21, SD = 16.10) and their post-test mean score (71.33, SD = 17.08); $F(1,48)$ = 5.53 (see Table 41). The effect size as measured by eta square was .1033 (1.07%).

The results of one way analysis of variance indicated, however, that there was no significant difference between the traditional low readers' pre-test mean score (61.17, SD = 12.61) and their post-test mean score (67.83, SD = 14.75); $F(1,22)$ = 1.30 (see Table 42). The effect size as measured by eta square was .0557 (.31%).

Third, the difference between the pre-test mean score and the post-test mean score of the boys with low reading ability in the whole language group appears to be great. However, the results of one way analysis of variance indicated that there was no significant difference between the pre-test mean score (54.00, SD = 17.30) and the post-test mean score (67.17, SD = 18.79); $F(1,22)$ = 2.74 (see Table 43). The effect size as measured by eta square was

Table 40

ANOVA Summary Table for the Pre-test and Post-test Scores on
the CSEI of the Traditional Group

SOURCE	DF	SS	MS	F
BETWEEN	1	683.41	683.41	3.2259
WITHIN	88	18643.00	211.85	
TOTAL	89	19326.41		

Table 41

ANOVA Summary Table for the Pre-test and Post-test Scores on
the CSEI of the Low Readers in the Whole Language Group

SOURCE	DF	SS	MS	F
BETWEEN	1	1624.50	1624.50	5.5310*
WITHIN	48	13097.92	293.71	
TOTAL	49	15722.42		

* significant < .05

Table 42

ANOVA Summary Table for the Pre-test and Post-test Scores on
the CSEI of the Low Readers in the Traditional Group

SOURCE	DF	SS	MS	F
BETWEEN	1	266.66	266.66	1.2981
WITHIN	22	4519.34	205.42	
TOTAL	23	4786.00		

Table 43

ANOVA Summary Table for the Pre-test and Post-test Scores on
the CSEI of the Boys with Low Reading Ability in the Whole
Language Group

SOURCE	DF	SS	MS	F
BETWEEN	1	962.66	962.66	2.7396
WITHIN	22	7730.67	351.39	
TOTAL	23	8693.34		

.1107 (1.23%).

Fourth, the difference between the pre-test mean score and the post-test mean score of the boys with low reading ability in the traditional group also appears to be great. However, the results of one way analysis of variance indicated that there was no significant difference between the pre-test mean score (58.00, SD = 11.78) and the post-test mean score (71.00, SD = 7.64); $F(1,10)$ = 4.29 (see Table 44). The effect size as measured by eta square was .3002 (9.01%).

Finally, the difference between the pre-test mean score and the post-test mean score of the girls with low reading ability in the whole language group also appears to be great. However, the results of one way analysis of variance indicated that there was no significant difference between the pre-test mean score (66.42, SD = 12.91) and the post-test mean score (76.50, SD = 13.59); $F(1,24)$ = 3.57 (see Table 45). The effect size as measured by eta square was .1296 (1.68%).

Two hypotheses were rejected based on the results of one way analyses of variance. The first hypothesis that was rejected was hypothesis number two. Results of one way analysis of variance indicated that on the post-test scores there was a significant difference between the students with high reading ability and those with low reading ability. Since the results of one way analysis of variance indicated

Table 44

ANOVA Summary Table for the Pre-test and Post-test Scores on the CSEI of the Boys with Low Reading Ability in the Traditional Group

SOURCE	DF	SS	MS	F
BETWEEN	1	507.00	507.00	4.2893
WITHIN	10	1182.00	118.20	
TOTAL	11	1689.00		

Table 45

ANOVA Summary Table for the Pre-test and Post-test Scores on the CSEI of the Girls with Low Reading Ability in the Whole Language Group

SOURCE	DF	SS	MS	F
BETWEEN	1	680.34	680.34	3.5723
WITHIN	24	4570.77	190.45	
TOTAL	25	5251.11		

that on the pre-test scores there was a significant difference, one way analysis of co-variance was conducted to determine if there was a significant difference when the post-test scores were adjusted for initial differences. The results of one way analysis of co-variance indicated that there was no significant difference between the high reading group and the low reading group; $F(1,84) = .00$, $p = .99$ (see Table 46). The mean score for the low reading group (N = 36) was 70.50 with a standard deviation of 16.72, while the mean score for the high reading group (N = 51) was 79.37 with a standard deviation of 12.35.

The second hypothesis that was rejected was hypothesis number seven. Results of one way analysis of variance indicated that on the post-test scores there was a significant difference between the boys in the traditional group and the boys in the whole language group. Since the results of one way analysis of variance indicated that on the pre-test scores there was a significant difference, one way analysis of co-variance was conducted to determine if there was a significant difference when post-test scores were adjusted for initial differences. Table 47 shows the results of one way analysis of co-variance which indicates that there was no significant difference between the boys in the whole language group and the boys in the traditional group; $F(1,39) = .15$, $p = .70$. The mean score for the boys in the whole language group (N = 20) was 71.10 with a

Table 46

ANCOVA Summary Table for the Post-test Scores on the CSEI of
the High Reading Group and the Low Reading Group

SOURCE	DF	SS	MS	F	P
Covariates	1	9696.30	9696.30	86.98	.0000
Read	1	.02	.02	.00	.9890
Residual	84	9363.91	111.48		
Total	86	19060.23	221.63		

Table 47

ANCOVA Summary Table for the Post-test Scores on the CSEI of
the Boys in the Traditional Group and the Boys in the Whole
Language Group

SOURCE	DF	SS	MS	F	P
Covariates	1	4088.69	4088.69	35.34	.0000
Treat	1	17.14	17.14	.15	.7020
Residual	39	4511.79	115.69		
Total	41	8617.62	210.19		

ability who experience a whole language classroom and mean score of the middle school students with low reading ability who experience a traditional language arts classroom.

4. There is no significant difference between the mean score on the School Form of the Coopersmith Self-Esteem Inventory of the boys and the mean score of the girls in the whole language classroom.

5. There is no significant difference between the mean score on the School Form of the Coopersmith Self-Esteem Inventory of the boys and the mean score of the girls in the traditional classroom.

6. There is no significant difference between the mean score on the School Form of the Coopersmith Self-Esteem Inventory of the girls in the traditional classroom and the mean score of the girls in the whole language classroom.

The only two hypotheses that were rejected when using one way analyses of variance were hypothesis number two and hypothesis number seven. Hypothesis number two stated that there was no significant difference between the mean score on the School Form of the Coopersmith Self-Esteem Inventory of middle school students with high reading ability and the mean score of middle school students with low reading ability. Since there was a significant difference between these two groups at the onset of the study, a post hoc analysis using one way analysis of co-variance was conducted. The results of this analysis indicated that

there was no significant difference between the two groups after the post-test scores were adjusted for initial differences.

Hypothesis number seven stated that there was no significant difference between the mean score on the School Form of the Coopersmith Self-Esteem Inventory of the boys in the traditional classroom and the mean score of the boys in the whole language classroom. The results of one way analysis of variance indicated that there was a significant difference between the self-esteem of the boys in the traditional classroom and the self-esteem of the boys in the whole language classroom. Since there was a significant difference between these two groups at the onset of the study, a post hoc analysis using one way analysis of co-variance was conducted. The results of this analysis indicated that there was no significant difference between the two groups after the post-test scores were adjusted for initial differences.

Some observations between the pre-test mean scores and post-test mean scores were noted. There was a significant difference between the pre-test mean score and the post-test mean score of the whole language group; however, there was no significant difference between the pre-test mean score and the post-test mean score of the traditional group. There was also significant difference between the pre-test mean score and the post-test mean score of the low readers

in the whole language group; however, there was no
significant difference between the pre-test mean score and
the post-test mean score of the low readers in the
traditional group.

Although the difference was not statistically
significant, the girls with low reading ability in the whole
language group had a larger increase from the pre-test score
to the post-test score than did the girls with low reading
ability in the traditional group.

CHAPTER V

SUMMARY, DISCUSSION, CONCLUSIONS

AND RECOMMENDATIONS

Summary of the Study

This study was conducted to compare the self-esteem of early adolescents in a traditional (skills approach) classroom with the self-esteem of early adolescents in a whole language classroom. Included was a comparison of the self-esteem of the following subgroups: (a) high readers with low readers, (b) high readers in the traditional group with high readers in the whole language group, (c) low readers in the traditional group with low readers in the whole language group, (d) boys in the whole language group with girls in the whole language group, (e) boys in the traditional group with girls in the traditional group, (f) boys in the traditional group with boys in the whole language group, and (g) girls in the traditional group with girls in the whole language group.

The study was conducted with sixth- and seventh-grade students in three different school systems in a south central state. In the six classrooms (one whole language and one traditional classroom in each school), complete data

from 87 subjects were collected.

A review of the literature indicated (a) that positive self-esteem is related to academic achievement, (b) that students who experience control over their learning have a higher self-esteem than students who experience no control over their learning, and (c) that the whole language approach is student-directed; therefore, students do experience control over their learning in a whole language classroom.

This study was based on the assumption that if early adolescents were in a whole language classroom where they had control over their learning, their self-esteem would be higher than the self-esteem of students in a traditional classroom where they did not have any control over their learning. The first task of the study was to find schools where the two methods (the whole language approach and the traditional approach) were being used at the sixth- or seventh-grade level.

Three schools in three different counties were identified that had one teacher in the sixth or seventh grade using the traditional approach and another teacher using the whole language approach. Interviews, a questionnaire, and classroom visits were used to establish the teaching philosophy and teaching method of the six teachers. The School Form of the Coopersmith Self-Esteem Inventory was used as the pre-test and post-test. Reading

scores were obtained from the students' permanent files. The study lasted one semester.

At the beginning of the fall semester, letters and consent forms were sent to the parents through the teachers. Reading scores from the subjects' permanent records were obtained, and the students were classified as high readers or low readers. The School Form of the Coopersmith Self-Esteem Inventory was given to all the students whose parents had signed the consent form. Complete data were collected from 87 subjects, 45 in the traditional group and 42 in the whole language group.

The results of one way analysis of variance on the pre-test scores indicated that there was significant difference in the self-esteem among the three schools at the onset of the study; however, since the effect size was slight, the scores from the three schools were combined to form one study. Once the scores from the three schools were combined, the results of one way analysis of variance on the pre-test scores on the Coopersmith Self-Esteem Inventory indicated that there was no significant difference in the self-esteem of students in the whole language group and the self-esteem of students in the traditional group at the onset of the study.

Near the end of the first semester, the School Form of the Coopersmith Self-Esteem inventory was given as the post-test. The results of one way analysis of variance indicated

that there was no significant difference in the self-esteem
of students in a whole language classroom and students in a
traditional classroom. Therefore, the following hypothesis
was not rejected: There is no significant difference
between the mean score on the School Form of the Coopersmith
Self-Esteem Inventory of middle school students who
experience a whole language classroom and the mean score of
students who experience a traditional classroom.

The results of one way analyses of variance also
indicated that there was no significant difference between
the following subgroups: (a) high readers in the
traditional group with high readers in the whole language
group, (b) low readers in traditional group with low readers
in the whole language group, (c) boys in the whole language
group with girls in the whole language group, (d) boys in
the traditional group with girls in the traditional group,
and (e) girls in the traditional group with girls in the
whole language group. Therefore, the following hypotheses
were not rejected:

1. There is no significant difference between the mean
score on the School Form of the Coopersmith Self-Esteem
Inventory of middle school students with high reading
ability who experience a whole language classroom and the
mean score of middle school students with high reading
ability who experience a traditional classroom.

2. There is no significant difference between the mean

score on the School Form of the Coopersmith Self-Esteem
Inventory of the middle school students with low reading
ability who experience a whole language classroom and mean
score of the middle school students with low reading ability
who experience a traditional language arts classroom.

3. There is no significant difference between the mean
score on the School Form of the Coopersmith Self-Esteem
Inventory of the boys and the mean score of the girls in the
whole language classroom.

4. There is no significant difference between the mean
score on the School Form on the Coopersmith Self-Esteem
Inventory of the boys and the mean score of the girls in the
traditional classroom.

5. There is no significant difference between the mean
score on the School Form of the Coopersmith Self-Esteem
Inventory of the girls in the traditional classroom and the
mean score of the girls in the whole language classroom.

The results of one way analyses of variance did not
support two hypotheses, hypothesis number two and hypothesis
number seven. The results of one way analysis of variance
did indicate a significant difference in the self-esteem of
students with high reading ability and students with low
reading ability; therefore the following hypothesis was
rejected: There is no significant difference in the mean
score on the School Form of the Coopersmith Self-Esteem
Inventory of middle school students with high reading

ability and the mean score of middle school students with low reading ability. Since there was a significant difference between these two groups at the onset of the study, a post hoc analysis of co-variance was conducted. The results of this analysis indicated that there was no significant difference between the two groups after the post-test scores were adjusted for initial differences.

The results of one way analysis of variance also indicated a significant difference between the boys in the traditional group with the boys in the whole language group; therefore, the researcher rejected the following hypothesis: There is no significant difference between the mean score on the School Form of the Coopersmith Self-Esteem Inventory of the boys in the traditional classroom and mean score of the boys in the whole language classroom. Since there was a significant difference between these two groups at the onset of the study, a post hoc analysis using one way analysis of co-variance was conducted. The results of this analysis indicated that there was no significant difference between these two groups after the post-test scores were adjusted for initial differences.

Although no hypotheses were stated to test the difference between the pre-test and the post-test mean scores, one way analyses of variance were conducted on the sets of pre-test and post-test mean scores that had a noticeable increase. The results of one way analysis of

variance did indicate that there was a significant difference between the pre-test mean score and the post-test mean score of the whole language group. However, the results of one way analysis of variance indicated that there was no significant difference between the pre-test mean score and the post-test mean score of the traditional group.

The results of one way analyses of variance also indicated that the low readers in the whole language group experienced a significant increase in their self-esteem during the semester; however, the low readers in the traditional group did not experience a significant increase in their self-esteem.

Discussion

A review of the literature indicated some unique attributes concerning (a) the self-esteem of early adolescents and (b) the differences between the self-esteem of boys and girls during early adolescence. Some of the attributes explained in the literature were not supported in this study.

First, the literature indicated that usually self-esteem declines for both girls and boys through the sixth grade. School Z which was the sixth-grade group showed no decline on the Coopersmith Self-Esteem Inventory. The pre-test mean score for all the students at School Z was 74.10, while the post-test score rose to 80.90.

Second, the literature indicated that the self-esteem of boys begins to increase during the seventh grade, while the self-esteem of the girls continues to decrease. The data collected from the boys and girls in School Z and School Y (the two seventh-grade classes) did not support the findings reported in previous literature. In School X, the boys' mean score increased from 64.77 on the pre-test to 76.92 on the post-test, while the girls' means score increased from 67.65 on the pre-test to 74.35 on the post-test. In School Y, the boys' mean score increased from 60.31 on the pre-test to 69.00 on the post-test, and the girls' mean score increased from 67.60 on the pre-test to 72.27 on the post-test.

One attribute concerning self-esteem that was reported in previous studies was supported in this study. A review of the literature indicated that students with high academic ability (including reading) have a higher self-esteem than students with low academic ability. This study did support previous findings. On the pre-test, the high readers had a higher mean score (73.73) on the Coopersmith Self-Esteem Inventory than did the low readers (60.53). The same was true on the post-test. The students classified as high readers had a higher mean score (79.37) on the Coopersmith Self-Esteem Inventory than did the students who were classified as low readers (70.50). The results of one way analysis of variance indicated that the difference on the

pre-test and on the post-test was significant; however, the results of one way analysis of co-variance indicated no significant difference between these two groups.

A review of the literature also indicated sharp differences in the environment of a whole language classroom which is student-centered and a traditional classroom which is teacher-centered. While visiting the classrooms, the researcher did observe sharp differences between the two types of classrooms. The whole language teachers engaged their students in whole language activities as described by the whole language advocates in the literature. The researcher also observed that the traditional teachers taught the basic skills and engaged the students in activities that follow the traditional approach as described in the literature. While visiting the classrooms, the researcher made the following observations about the classrooms:

1. The traditional classrooms were involved in activities that emphasized one skill. The teacher taught the skill and then the students did a worksheet emphasizing the skill.

2. The whole language classrooms were involved in reading whole authentic texts or writing authentic passages. They were given choices from a broad theme such as "Biography" or "Fables".

3. In the traditional classrooms, the students were

encouraged to be quiet, to work by themselves, and to ask the teacher any question that they had.

4. In the whole language classrooms the students were encouraged to work together in their small groups and to help each other when they had questions.

5. In the whole language classrooms, the teachers would help individuals or a small group on a strategy when the strategy would aid the students with the task at hand.

6. In the traditional classroom, one concept was taught to the entire group at the beginning of the class period. Then the students completed a worksheet by themselves.

7. The whole language classrooms had bulletin boards displaying the students' work.

8. The traditional classrooms had teacher-constructed bulletin boards.

9. In the traditional classrooms all students were involved in the same activities at the same time. For example, they were all doing identical worksheets at the same time and then waiting until all finished it so they could correct them.

10. In the whole language classrooms, the students were busy working on a variety of activities at the same time. Only during silent reading were all students reading a book of their choice.

11. The traditional classrooms included a few whole

language activities such as small group critiques and small group discussions. However, these were organized and structured by the teacher.

One factor that was similar in all six classrooms was the teachers' great concern for each individual student. All the teachers were caring, helpful, energetic and enthusiastic. Teachers never belittled students in front of their peers. All six teachers appeared to enjoy working with early adolescents. In the interviews all indicated that they loved this age group and all their idiosyncrasies.

Not only were there observable differences in the environment of the whole language classrooms and the traditional classrooms, but there was a difference in the increase of students' self-esteem in the two classrooms. In the whole language group there was a significant difference between the pre-test mean score (64.93) and the post-test mean score (74.43), while there was no significant difference between the pre-test mean score (71.38) and the post-test mean score (76.89) in the traditional group. One can infer from these results that a whole language classroom better nurtures early adolescents' self-esteem than does a traditional classroom.

The review of literature indicated that high self-esteem is correlated with academic achievement. Therefore, if the whole language approach can significantly raise self-esteem of early adolescents, then one can assume that the

whole language approach would also increase the students'

academic ability such as their reading ability.

There was also a significant difference between the

pre-test mean score (60.21) and the post-test mean score

(71.33) of the low readers in the whole language group;

however, there was no significant difference between the

pre-test mean score (61.17) and the post-test mean score

(67.83) of the low readers in the traditional group.

The girls with low reading ability had a greater

increase in self-esteem in the whole language classroom

(pre-test = 66.42, post-test = 76.50) than in the

traditional classroom (pre-test = 64.33, post-test = 64.67).

One can infer from these results that low readers especially

benefit from the whole language classroom.

These results have great implication for educators

because in many school systems low readers are assigned to

special "pull-out" programs with special materials and a

special reading teacher. These special programs cost school

districts money. The whole language approach keeps all

readers in the same room with the regular classroom teacher.

Thus, whole language is a cost-effective program because no

special staff or materials are required.

Another factor to consider is that in a whole language

classroom early adolescents with low reading ability are not

singled out as needing special help; this can also affect

their self-esteem. Early adolescents are sensitive about

what their peers think of them. If low readers can have
their reading needs met while remaining in the classroom
with all their classmates, they will not need to be
concerned that their peers know that they are poor readers
who need "special" help.

The implications of these results can go beyond the
whole language classroom which is student-centered.
Students in the whole language classroom experience control
over their learning by having a choice of reading materials,
research topics, and writing assignments, and by having
control over the amount of time they spend on each activity.
Since the results of the one way analyses of variance
indicated a significant growth in the self-esteem of
students in a student-centered whole language classroom, but
no significant growth in the self-esteem of students in a
traditional classroom, which is teacher-directed, teachers
who teach other subjects should also consider a classroom
that is student-centered. If an entire school system would
adopt a student-centered approach so the students had
control over their learning in all classes, early
adolescents might experience even greater growth in their
self-esteem and in their academic abilities.

Conclusions from the Study

After an in-depth study of early adolescents with their
unique needs and the self-esteem of early adolescents, the

researcher assumed that the self-concept of early
adolescents would be higher in a whole language classroom
where students experience some control over their learning
than in a traditional classroom where the teacher controls
the learning environment. However, the analysis of the data
did not support this assumption; there was no significant
difference in the self-esteem of early adolescents in a
whole language classroom and the self-esteem of early
adolescents in a traditional classroom and there was no
significant difference in the self-esteem in the subgroups
(male/female and low/high reading) of these two main groups.
None of the following hypotheses were rejected:

    1. There is no significant difference between the mean
score on the School Form of the Coopersmith Self-Esteem
Inventory of middle school students who experience a whole
language classroom and the mean score of students who
experience a traditional classroom.

    2. There is no significant difference between the mean
score on the School Form of the Coopersmith Self-Esteem
Inventory of middle school students with high reading
ability who experience a whole language classroom and the
mean score of middle school students with high reading
ability who experience a traditional classroom.

    3. There is no significant difference between the mean
score on the School Form of the Coopersmith Self-Esteem
Inventory of the middle school students with low reading

ability who experience a whole language classroom and mean score of the middle school students with low reading ability who experience a traditional language arts classroom.

4. There is no significant difference between the mean score on the School Form of the Coopersmith Self-Esteem Inventory of the boys and the mean score of the girls in the whole language classroom.

5. There is no significant difference between the mean score on the School Form on the Coopersmith Self-Esteem Inventory of the boys and the mean score of the girls in the traditional classroom.

6. There is no significant difference between the mean score on the School Form of the Coopersmith Self-Esteem Inventory of the girls in the traditional classroom and the mean score of the girls in the whole language classroom.

The researcher surmises that the results of this study showed no significant difference between the whole language and traditional groups for the following reason. The study lasted only one semester, which may not have been sufficient time for there to be a significant difference between the two groups.

It is important to note, however, that the data did indicate that the mean score in the whole language group had a significant increase (pre-test 64.93, post-test = 74.43), while the mean score in the traditional group (pre-test = 71.38, post-test = 76.89) did not have a significant

increase. There was also an significant increase in the self-esteem of students with low reading ability who were in the whole language group, while there was no significant increase in the self-esteem of students with low reading ability who were in the traditional group. These results indicate that the whole language classroom nurtures the self-esteem of early adolescents more than the traditional classroom does. If this trend would continue, there might be a significant difference between the two groups at the end of the year.

Recommendations for Further Research

On the basis of the conclusions derived from the findings of this study, the following possibilities for future research are recommended.

First, this study should be replicated over an entire school year or possibly two years. Since the whole language group had a significant increase in the mean score at the end of one semester, there may have been a significant difference between the two groups with a stronger effect size at the end of the year.

Second, this study should be replicated in a number of schools which have self-contained classrooms so that the students are exposed to the whole language (student-centered) classroom or the traditional (teacher-directed) classroom all day. In this study two schools were

departmentalized; therefore, the students were not exposed to whole language for the entire day. The students may not have felt any real control over their learning since they had a student-centered class for only one period of the day.

Third, this study should be replicated with a pre-test and post-test that includes an essay on the following topics: (a) "What Subject I Like Most and Why," (b) "What I Like Most About This Class," and (c) "What I Would Like to Change in This Class." This type of essay might indicate whether students feel they have control over their learning at least in the reading class.

Fourth, this study should be replicated for an entire year with the reading ability tested at the end of the year. Using that type of study, the researcher could see if there was any significant difference between the whole language group and the traditional group in their reading ability and self-esteem.

Fifth, this study should be replicated, using a number of different self-esteem inventories. If the results were the same on all the tests, the results would be more convincing.

Finally, this exact study should be replicated in more than three schools for an entire school year. More schools with the same three organizational structures (self-contained classrooms in fifth-sixth-grade centers, departmentalized classrooms in junior high schools [grades

seven through nine], and departmentalized classrooms in
middle schools [grades six through eight]) should be used to
see if any differences appear among the three types of
organizational structure or if the results are similar to
this study.

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APPENDIX A

QUESTIONNAIRE CONCERNING TEACHING METHOD

I. General Data

Name_____Degree(s)_____

Years of experience (including this current year)_____

Grade level now teaching _____

Years of experience teaching current grade level _____

Indicate which of the following teaching approaches you use
(1) the traditional approach, (2) the whole language approach,
(3) other (please name it) _____

Number of years using this approach _____

Indicate where you learned about the teaching approach that
you are using (1) college training, (2) workshops/conferences,
(3) journals and books, (4) other (please name it) _____
_____

II. Indicate on the continuum to what extent you agree or
disagree with the statement. If you strongly agree with the
statement, put an X toward the right end of the continuum. If
you strongly disagree with the statement, put an X on the left
end of the continuum.

1. Children and their needs are the heart of schooling.

_____   _____   _____   _____   _____
Strongly disagree   strongly agree

2. Students should be active participants in the design and
direction of the schooling process.

_____   _____   _____   _____   _____
Strongly disagree   strongly agree

APPENDIX A (Continued)

3. Reading and writing instruction should begin with whole and connected language.

_____   _____   _____   _____   _____
Strongly disagree   strongly agree

4. Teachers must teach institutional knowledge and skills (e.g., the basics).

_____   _____   _____   _____   _____
Strongly disagree   strongly agree

5. Language is naturally learned from exposure and use rather than from instruction.

_____   _____   _____   _____   _____
Strongly disagree   strongly agree

6. Grouping students for instruction is based on their measured ability on a standardized test of reading achievement.

_____   _____   _____   _____   _____
Strongly disagree   strongly agree

7. Reading is a process of decoding and extracting main ideas.

_____   _____   _____   _____   _____
Strongly disagree   strongly agree

8. Reading, writing, spelling, and vocabulary-building instruction must be scheduled and taught as separate subjects.

_____   _____   _____   _____   _____
Strongly disagree   strongly agree

9. Reading is a process of prediction and confirmation.

_____   _____   _____   _____   _____
Strongly disagree   strongly agree

10. To risk and make mistakes is a natural consequence of learning.

_____   _____   _____   _____   _____
Strongly disagree   strongly agree

APPENDIX A (Continued)

11. Students learn best when they work quietly by themselves.

_____ _____ _____ _____ _____
Strongly disagree   strongly agree

12. The best way to assess students' achievement is through standardized tests.

_____ _____ _____ _____ _____
Strongly disagree   strongly agree

13. The teacher's main role during class time is to be a lecturer and demonstrator.

_____ _____ _____ _____ _____
Strongly disagree   strongly agree

14. Classmates are mentors, sounding boards, sources of knowledge, and supporters.

_____ _____ _____ _____ _____
Strongly disagree   strongly agree

15. Students respond to an intrinsic motivation rather than respond to outside enticements.

_____ _____ _____ _____ _____
Strongly disagree   strongly agree

16. Students learn best when they compete with each other for the best grade.

_____ _____ _____ _____ _____
Strongly disagree   strongly agree

17. Language learning is based on a hierarchy of skills.

_____ _____ _____ _____ _____
Strongly disagree   strongly agree

18. Language is learned through imitation and shaping.

_____ _____ _____ _____ _____
Strongly disagree   strongly agree

19. The process of learning is just as important as the products.

_____ _____ _____ _____ _____
Strongly disagree   strongly agree

APPENDIX A (Continued)

III. Indicate on the continuum if and when you practice the following activities. If the statement is never a part of your classroom routine, put an X toward the left end of the continuum; if the statement is usually a part of your routine, put an X toward the right end of the continuum. Omit any statements that are not applicable to your situation.

1. The teacher selects the reading material for the class.

_____ _____ _____ _____ _____
Never   Usually

2. The students hand in the completed compositions and the teacher corrects errors, writes comments, and gives a letter grade only on the completed product.

_____ _____ _____ _____ _____
Never   Usually

3. The teacher explains or demonstrates a concept and then has the students master the concept by completing a worksheet or by writing sentences, paragraphs, or short essays.

_____ _____ _____ _____ _____
Never   Usually

4. The students read books from a required reading list, selected by the teacher or taken from the district's curriculum guide.

_____ _____ _____ _____ _____
Never   Usually

5. Students collaboratively engage in in-depth studies of a topic of their choice and collaboratively share their findings.

_____ _____ _____ _____ _____
Never   Usually

6. Students choose their writing topics.

_____ _____ _____ _____ _____
Never   Usually

7. Students choose the genre that they think is most appropriate for their composition.

_____ _____ _____ _____ _____
Never   Usually

APPENDIX A (Continued)

8. One of the students' goal of writing is to share it with classmates and others through some form of publication.

_____ _____ _____ _____ _____
Never   Usually

9. Students first learn to write sentences, then paragraphs, and finally short compositions.

_____ _____ _____ _____ _____
Never   Usually

10. Reading, writing, spelling, and vocabulary-building instruction are integrated as one.

_____ _____ _____ _____ _____
Never   Usually

11. Student evaluation is done through portfolios, student-teacher conferences, and observations.

_____ _____ _____ _____ _____
Never   Usually

12. Students engage in peer conferences.

_____ _____ _____ _____ _____
Never   Usually

13. Students are permitted to skim, abandon, or reread stories and novels.

_____ _____ _____ _____ _____
Never   Usually

14. Assigned spelling and vocabulary lists are assigned each week to the entire class.

_____ _____ _____ _____ _____
Never   Usually

15. Much of the class period is spent with a teacher giving instruction on an isolated skill.

_____ _____ _____ _____ _____
Never   Usually

16. Building background for reading is done through students brainstorming, predicting, and sharing their knowledge about a particular topic.

_____ _____ _____ _____ _____
Never   Usually

APPENDIX A (Continued)

17. Students read trade books and use reference books to gather information for compositions.

_____ _____ _____ _____ _____
Never   Usually

18. Students spend copious amounts of class time in sustained silent reading.

_____ _____ _____ _____ _____
Never   Usually

19. Teachers give students feed-back on their compositions by writing comments on the paper.

_____ _____ _____ _____ _____
Never   Usually

APPENDIX B

LETTER TO PARENT

Dear Parent/Guardian:

(Specific name) Schools are interested in providing the best
language arts instruction possible for your child. In an
effort to determine the strengths and weaknesses of
different methods of language arts instruction on individual
student's self-esteem, we are conducting a study of the
different approaches of language arts instruction. Your
child's 1991-1992 class has been selected to participate in
the study.

Research shows that there is a correlation between academic
achievement and self-esteem. The purpose of this study is
to determine if there is a correlation between the approach
to teaching language arts and self-esteem.

Data from your child's Gates Reading Test and data from a
self-esteem instrument, the Coopersmith Inventory, will be
used. The data from the two instruments will be stored with
the researcher for the duration of the study. After the
study, all the data will be burned.

All data will be reported as grouped data and the
confidentiality of your child's scores is guaranteed by the
researcher. The individual scores from the Coopersmith
Inventory will not be shared with the classroom teacher.

We hope that you will allow your child to be a part of this
important piece of research and that you will allow us to
use your child's tests scores. We want to learn how to
teach language arts in the best possible way. If you have
any questions, now or in the future, please direct them to
the researcher, Beverly DeVries, 3409 Springhill Drive,
Edmond, OK 73013; Telephone 405-341-1954. You may also
contact Leanne Prater, University Research Services, 001
Life Sciences East, Oklahoma State University, Stillwater,
OK 70478; Telephone: 405-744-9992.

Permission may be given by signing the attached card and
having your child return it to his/her teacher. You are

APPENDIX B (Continued)

free to withdraw your permission at any time. Please return
the card by Tuesday, September 8, 1991, as we are working
within a limited time frame. No compensation will be
provided for your participation in this study.

Thank you for your help in learning more about effective
language arts instruction.

Beverly DeVries
Researcher

APPENDIX B (Continued)

CONSENT FORM SIGNED BY PARENTS

You are making a decision whether or not your child and your child's scores may be used for this study. Please indicate whether you give or do not give your permission for your child to participate and for your child's scores to be used (all data will be reported as grouped data and your child's confidentiality is guaranteed by the researcher).

Please put an X on the appropriate line.

_____ I give my permission for my child to participate.

_____ I do not want my child to participate.

_____
Student's Name

_____   _____
Parent/Guardian Signature   Date

APPENDIX B (Continued)

CONSENT FORM SIGNED BY STUDENTS

I_____(name)
understand that my parents have extended permission for me
to participate in a study concerning the correlation between
the approach to teaching language arts and self-esteem. The
study is under the direction of Beverly DeVries, the
researcher.

My involvement in this project is voluntary, and I
understand that I may withdraw from participation in this
study at any time without penalty or loss of benefit to
myself.

_____   _____
   signature   date

APPENDIX B (Continued)

CONSENT FORM SIGNED BY TEACHERS

I_____understand that I
have given my permission to participate in a study
concerning the correlation between the method of teaching
language arts and students' self-esteem. The study is under
the direction of Beverly DeVries, who has assured me that
only she will have access to the information and will store
the information for the duration of the research study.
After the study she will burn the inventories and
questionnaires.

My involvement in this project is voluntary, and I
understand that I may withdraw from participation in this
study at any time without penalty or loss of benefit to
myself.

_____   _____
  signature   date

APPENDIX C

DATA WORKSHEET

Sub-ject	Treat-ment	Sex	Reading level	School	Pre-test	Post-test
01	1	1	2	1	82	86
02	1	2	1	1	78	74
03	1	1	2	1	72	88
04	1	2	2	1	74	78
05	1	2	2	1	60	62
06	1	2	1	1	64	80
07	1	2	1	1	66	52
08	1	1	1	1	64	82
09	1	1	2	1	92	88
10	1	2	2	1	58	74
11	1	1	1	1	56	70
12	1	1	1	1	54	58
13	1	2	2	1	64	62
14	1	2	2	1	82	90
15	1	2	2	1	78	90

APPENDIX C (Continued)

Sub-ject	Treat-ment	Sex	Reading level	School	Pre-test	Post-test
16	2	1	2	1	70	74
17	2	2	2	1	70	72
18	2	2	1	1	70	82
19	2	2	1	1	50	94
20	2	2	2	1	80	86
21	2	1	1	1	36	80
22	2	2	1	1	68	70
23	2	1	1	1	54	58
24	2	2	1	1	70	70
25	2	1	2	1	50	70
26	2	2	1	1	42	44
27	2	1	1	1	78	92
28	2	1	2	1	72	88
29	2	1	1	1	62	66
30	2	2	2	1	76	88
31	1	1	1	2	80	74
32	1	2	2	2	74	72
33	1	1	1	2	52	76
34	1	2	2	2	46	40
35	1	2	1	2	44	30
36	1	2	1	2	54	66

APPENDIX C (Continued)

Sub-ject	Treat-ment	Sex	Reading level	School	Pre-test	Post-test
37	1	2	2	2	84	90
38	1	2	1	2	80	86
39	1	1	2	2	78	80
40	1	1	1	2	42	66
41	1	1	2	2	64	78
42	1	2	2	2	58	70
43	2	1	1	2	48	24
44	2	2	2	2	50	56
45	2	1	2	2	84	80
46	2	2	2	2	96	98
47	2	1	1	2	48	62
48	2	2	1	2	64	70
49	2	2	2	2	92	92
50	2	1	2	2	76	74
51	2	1	1	2	76	88
52	2	1	1	2	46	48
53	2	1	1	2	32	78
54	2	2	2	2	62	70
55	2	2	2	2	86	82
56	2	1	2	2	58	64
57	2	2	1	2	66	86
58	2	2	1	2	58	76

APPENDIX C (Continued)

Sub-ject	Treat-ment	Sex	Reading level	School	Pre-test	Post-test
59	2	1	1	3	86	88
60	2	1	1	3	32	56
61	2	2	1	3	80	84
62	2	1	1	3	50	66
63	2	2	2	3	58	74
64	2	2	1	3	84	92
65	2	1	2	3	82	88
66	2	2	2	3	50	68
67	2	2	1	3	56	70
68	2	2	1	3	88	84
69	2	1	2	3	70	78
70	1	1	2	3	90	90
71	1	1	2	3	54	62
72	1	1	2	3	90	92
73	1	1	2	3	76	86
74	1	2	2	3	46	56
75	1	2	2	3	90	94
76	1	1	2	3	78	82
77	1	1	2	3	88	90
78	1	1	2	3	96	98
79	1	2	2	3	90	84
80	1	2	2	3	72	86

APPENDIX C (Continued)

Sub-ject	Treat-ment	Sex	Reading level	School	Pre-test	Post-test
81	1	2	2	3	66	90
82	1	1	2	3	76	78
83	1	1	2	3	84	92
84	1	2	2	3	74	92
85	1	1	2	3	82	84
86	1	2	2	3	84	82
87	1	1	2	3	76	60

KEY FOR WORKSHEET

Treatment	Sex	Reading	School
1 = Traditional	1 = Boy	1 = Low Readers	1 = School X
2 = Whole Language	2 = Girl	2 = High Readers	2 = School Y
			3 = School Z

VITA

BEVERLY A. DEVRIES

Candidate for the Degree of

Doctor of Education

Thesis: COMPARING THE SELF-ESTEEM OF EARLY ADOLESCENTS IN A TRADITIONAL CLASSROOM WITH THE SELF-ESTEEM OF EARLY ADOLESCENTS IN A WHOLE LANGUAGE CLASSROOM

Major Field: Curriculum and Instruction

Biographical:

Personal Data: Born in Rock Valley, Iowa, August 3, 1947, the daughter of Joe and Marge Gaalswyk.

Education: Received Bachelor of Arts Degree (Major, Music Education; Minor, Speech and Drama) from Northwestern College, Orange City, Iowa, in May, 1968; received Master of Arts degree at Western Michigan University in April, 1980; completed requirements for Doctor of Education degree at Oklahoma State University in May, 1992.

Professional Experience: Teacher of Music Education for three years (junior and senior high music for two years, kindergarten through eighth grade for one year); Teacher of Language Arts for 16 years (senior high for three years, junior high for 13 years); Teaching Assistant, Department of Curriculum and Instruction, Oklahoma State University, September, 1991, to May, 1992.