Chapter II

Review of Relevant Literature

“Helping the young soul to draw out that is in itself.”
- Aravinda
2.1 INTRODUCTION

Literature is filled with images of school children joyfully hurrying away from school. A long line of writers, including such notables as Black and Shakespeare, have frequently described unhappy students at their desks and vividly portrayed their delight at escaping the boredom of the classroom. Fiction, poetry, and other forms of art provide us with literally hundreds of other similar images that, taken together, establish a long cultural tradition: learning is profoundly boring activity.

Fortunately, our received opinion about education as reflected in our cultural tradition can differ greatly from our actual experience of classroom learning. Anyone who has participated in or closely observed the educational process has doubtlessly experienced and witnessed first hand the excitement and joy that can be derived from learning or discovering something new. While we cannot expect these experiences to occur every day, they are nevertheless meaningful and powerful experiences, and they provide us with a basis for our conviction that education can, on the whole, be a valuable, interesting, and pleasurable activity. Ultimately, because we know from experience that such moments exist, we can acquire a strong motivation to learn, a trait that offers infelongs rewards.

Perhaps the primary job of principals, teachers, parents, and other educational stakeholders is to help students experience these moments as
frequently as possible in an atmosphere where they can discover for themselves the pleasure of acquiring new knowledge. The goal of helping students acquire the self-motivation that leads to a perpetual desire to learn should be foremost in every educator's mind.

The motivation at the school level and reviews some recent developments in this area. It begins with a discussion of the influence of school culture on student motivation. Recent work in this area indicates that a school's culture has a powerful effect on students' attitudes and levels of academic achievements under different types of management. If educational leaders can find ways to create an environment that motivates students to learn, it is logical to assume that improved academic performance will soon follow.

The relationships among student motivation, current educational practices, and school restructuring. Research on motivation in educational settings indicates that many of our present pedagogical practices effectively crush most students' desire to learn. A number of individuals working in the field of educational motivation have called for radical change in the way we teach students, and with the restructuring movement gaining momentum, there are among the most persuasive voices arguing for new educational policies and practices.

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It provides a brief overview of some current theories of motivation and the way it functions in various individuals. If superintendents and principals are to be successful in achieving their goals of strengthening student motivation and improving academic performances, they need at least a general understanding of the theories that help explain how motivation works.

Faced with the complexity of the subject and the difficulty of knowing how to generate higher levels of motivation among students in their schools, principles and other educational administrators might be forgiven if they feel daunted at the prospect of tackling this particular educational problem. In fact, it is perhaps fittingly ironic that principals should feel discouraged, which is precisely the way students might feel when their teachers ask them to summon up their motivation and improve their academic performances.

Perhaps the most obvious place for principals to begin addressing the problem of inadequate student motivation is to examine the role of motivation in their own lives. What is it that motivates an educational leader to desire better academic performance on the part of his or her students? Does it stem from the sense of self-eastern gained from knowing that one is doing one’s job
well? Does it originate in a desire to be successful professionally, to win greater respect from one's colleagues, to command a higher salary, to establish a reputation in the community as a first-rate educational administrator?

All of these are possible explanations for wanting to see improved educational performance, and all of them are acceptable, legitimate reasons for desiring greater motivation and better academic achievement at one's school. However, the most important lesson to be learned from a self-analysis of the role of motivation in one's life is in the discovery that the reasons for the presence or absence of motivation among students may be as infinitely varied and complex as the reasons for its presence or absence among school leaders.

One another point should be kept in mind when considering student motivation. It may be just as difficult for students to sustain motivation in their educational lives as it is for principles to sustain motivation in their professional careers. Students face many of the same difficulties, real or perceived, that principals face. If school leaders are equipped with the wisdom that comes from humility, sensitivity, and a constant reflection on the way that motivation functions in their own lives, it will probably be much easier for them to find ways to motivate their students.

2.2. MOTIVATION AND SCHOOL CULTURE

An atmosphere or environment that natures the motivation to learn can be cultivated in the home, in the classroom, or, at a broader level, throughout an entire school. Much of the recent research on educational motivation has
rightly centered on the classroom, where the majority of learning takes place and where students are most likely to acquire a strong motivation to gain new knowledge (Ames 1987, Brophy 1987, Grossnickle 1989, Wlodkowski and Jaynes 1990).

But achieving the goal of making the individual classroom a place that naturally motivates students to learn is much easier if students and teachers function in a school culture where academic success and the motivation to learn is expected, respected and rewarded. An atmosphere where students learn to love learning for learning's sake, especially in so far as it evolves into academic achievement, is a chief characteristic of an effective school.

The recent work on school culture and its relationship to student motivation.

2.3. CORPORATE CULTURES AND SCHOOL CULTURES

Much of the literature on school culture draws on and extends several descriptive studies of organizational culture in the corporate workplace (Deal and Kennedy 1982; Hickman and Silva 1984; Jelinek, Smircich, and Hirsch 1983; Maehr 1990; Peters and Waterman 1982; Schein 1984, 1985; and Wilkins 1983). Educational researchers such as Davis (1989), Deal (1987), Deal and Peterson (1990) and Sergiovanni (1987) have found very close parallels between the ways effectively managed businesses operate and the ways effectively managed schools function.

Although no single, universally accepted definition of school culture has been established, there is general agreement that school culture involves, in the
words of Deal and Peterson (1990), "deep patterns of values, beliefs and
traditions that have formed over the course of (the school's) history." Over
time, a school leader can, in conjunction with other stakeholders in the school,
change its culture by discarding old values and beliefs, establishing new ones,
or modifying elements that need to be changed.

Maehr and Fyans (1989), describing culture-building in organization in
general, characterize it as a fluid process:

Groups tend to work out ways of getting along among themselves. They
arrive at certain shared understandings regarding how, when, and where
activities are to occur. Above all, they specify the meaning, the value, and the
purpose of these activities. In particular, thoughts and perceptions about what is
worth striving for are a critical feature of any culture.

Thus, a principal interested in establishing the motivation to learn and
academic achievement as central features of a school's culture must first
persuade everyone-students, teachers, parents, staff, and school board-that
goals related to those areas are desirable, achievable, and sustainable.

The goals can ultimately become important enough to take on a life of
their own, to become invested with meaning that reflects the basic purpose of
the school and its reason for being. They can become part of the value system
in which each participant in the school willingly and enthusiastically
participates.
2.4. SHAPING A SCHOOL’S CULTURE

School leaders have a number of channels through which they can shape a school’s culture or climate. Good communication is, of course, central to successfully achieving goals. But actions must demonstrate what the words convey. Deal (1987) prescribes a few simple guidelines to bring about a reshaping of the school’s culture:

- Old practices and other losses need to be buried and commemorated. Meaningless practices and symbols need to be analyzed and revitalized. Emerging visions, dreams, and hopes need to be articulated and celebrated.

- The culture can be embodied and transformed, Deal says, through such channels as the school’s shared values, heroes, rituals, ceremonies, and cultural networks. If motivation and academic achievement are to be a definitive part of a school’s culture, they must be communicated and celebrated in as many forums as possible.

- There are a variety of practical ways that goals related to motivation and academic achievement can be communicated. In his review of studies focusing on organizational culture in effective schools, John Davis (1989) cites several studies that indicate that school leaders can communicate their goals by using a wide variety of concrete and symbolic tools:

  - An extremely important component of the climate of the effective school is the presence of visible symbols, which illustrate and confirm what is considered to be important in the school. The visible symbols manifest the
school’s underlying values and assumptions school news letters, statements of goals, behavior codes, rituals symbols, and legends are all part of the culture of the organization and convey messages of what the school really values.

Johnston (1987) echoes this point when he says, “Values are the bedrock of any institution. They articulate the essence of the organization’s philosophy about how it does about achieving success”. He, too, point out that a school’s values are communicated and disseminated through familiar means: leaders and heroes, the cultural network, and rituals and ceremonies.

The dynamics and logistics of most schools are such that the principal cannot possibly over-see the motivational needs of each and every student. But groups of people can affected by the culture in which they participate, and this domain is under the control and stewardship of the principal.

2.5. CULTURE AND CLIMATE IN ACADEMICALLY EFFECTIVE SCHOOLS

The literature on school culture makes it clear that effective schools, that is, schools that demonstrate high standards of achievement in academics, have a culture characterized by a well-defined set of goals that all members of the school administration, faculty, and students value and promote. If a principal can establish and clearly communicate goals that define the expectations of the school with regard to academic achievement, and if the principal can rally a constituency of teachers and students to support those goals, then the motivation to achieve the goals is likely to follow.
Most reviews of the effective school literature point to the consensus that school culture and climate are central to academic success (Mackenzie 1983). Typical of the findings is the summary of Purkey and Smith (1983), who in their review of the literature on effective schools found a close correlation between positive school culture and academic quality:

The literature indicates that a student’s chance for success in learning cognitive skills is heavily influenced by the climate of the school. A school-level culture press in the direction of academic achievement helps shape the environment (and climate) in which the student learns. An academically effective school would be likely to have clear goals related to student achievement, teachers and parents with high expectations, and a structure designed to maximize opportunities for students to learn. A press for academic success is more likely to realize that goal than would a climate that emphasizes affective growth or social development.

2.6. THE EFFECT OF SCHOOL LEADERSHIP ON MOTIVATION AND ACHIEVEMENT

The work of Leithwood and Montgomery (1984) is especially helpful in understanding the relationship of motivation to effective leadership and school goals because it addresses the principal’s motivation to become a more effective leader as well as the student’s motivation to learn. They describe four stages that principals go through in the process of becoming more and more effective as school leaders.
The first, and least effective, stage, administrator, is characterized by the principal’s desire simply to run “a smooth ship.” At the second stage, humanitarian, principals focus primarily on goals that cultivate good interpersonal relations, especially among school staff. Principals at the third stage, program manager, perceive interpersonal relations as an avenue for achieving school-level goals that stress educational achievement. At the fourth and highest stage, systematic problem solver, principals become devoted to “a legitimate, comprehensive set of goals for students, and seek out the most effective means for their achievement”.

One of the chief characteristics of highly effective principals at the systematic problem-solver stage is the ability to transfer their own desire and motivation to achieve valued goals to the other participants in the educational process. As Leithwood and Montgomery comment:

Highly effective principals to seek out opportunities to clarify goals with staff, students, parents and other relevant members of the school community. They strive toward consensus about these goals and actively encourage the use of such goals in departmental and divisional planning. Such behaviour can be explained by the principal’s knowledge of human functioning and the actions consistent with such knowledge. Highly effective principals appear to understand that school improvement goals will only direct the actions of staff, students and others to the extent that these people also adopt them as their own. Increases in principal effectiveness can be explained as increases in
opportunities, provided by the principal, for all relevant others to agree upon and internalize approximately the same set of school improvement goals.

According to Leithwood and Montgomery, as principals become more and more effective, they come to understand that people will not be motivated unless they believe in the value of acting to achieve a particular goal:

People are normally motivated to engage in behaviours which they believe will contribute to goal achievement. The strength of one’s motivation to act depends on the importance attached to the goal in question and one’s judgement about its achievability; motivational strength also depends on one’s judgement about how successful a particular behavior will be in moving towards goal achievement.

Motivation on the part of the principal translates into motivation among students and staff through the functioning of goals, according to Leithwood and Montgomery. “Personally valued goals,” they say, “are a central element in the principal’s motivational structure – stimulus for action”.

In a related study, Klug (1989) describes a measurement based approach for analyzing the effectiveness of instructional leaders and provides a convenient model for understanding the principal’s influence on student achievement and motivation.

Klug notes that school leaders can have both direct impact on the level of motivation and achievement without two of the three areas shown in figure-1. Although the personal factors-differences in ability levels and
personalities of individuals students – usually fall outside a school leader’s domain of influence, the other two categories, situational factors and motivational factors, are to some degree within a school leader’s power to control. Klug’s summary of the model describes how these two areas can be a source of influence:

School leaders enter the achievement equation both directly and indirectly. By exercising certain behaviors that facilitate learning, they directly control situational (S) factors in which learning occurs. By shaping the school’s instructional climate, thereby influencing the attitudes of teachers, students, parents, and the community at large towards education, they increase both student and teacher motivation and indirectly impact learning gains.

There are many strategies school leaders can use to reward motivation and promote academic achievement. For example, Huddle (1984), in a review of literature on effective leadership, cites a study in which principals in effective different management of schools used a variety of methods to publicize the school goals and achievements in the areas of academics.

Figure 1: A conceptual Model for Understanding Classroom Learning and Achievement

![Figure 1](image-url)
2.7. MAEHR'S PSYCHOLOGICAL ENVIRONMENT

The Motivation Factor: Maehr and Braskamp (1986). The factors focus extensively on motivation, or personal investment, as they term it, in organizational settings, especially as it functions among adults in the workplace. They conclude "that there is a relationship between organizational culture and personal investment—that knowing something about the cultural facets of an organization allows us to predict employee's job satisfaction and organizational commitment".

Recently, Maehr (1990) has turned his attention to the relationship between motivation and the organizational culture of schools. His work centers on what he terms the "psychological environment" of the school. School administrators, he asserts, are in the best position to shape a school's psychological environment. Drawing parallels between the school environment and the classroom environment, Maehr points to the similarities between teachers'.

The dimensions Maehr includes in his model of the psychological environment of the school include:

Accomplishment: Emphasis on excellence and pursuit of academic challenges.

Power: Emphasis on interpersonal competition, social comparison, achievement.
Recognition: Emphasis on social recognition for achievement and the importance of school for attaining future goals and rewards.

Affiliation: Perceived sense of community, good interpersonal relations among teachers and students.

Strength/Saliency: The perception that the school knows what it is about and those students know what is expected. Maehr describes how the school's psychological environment:

- Shapes a student's motivation

Motivation can be characterized by a student's personal investment in a given task. The magnitude of motivation is influenced by the psychological environment of a school, that is, by the meaning given to the overall education experiences.

To test the effectiveness of his model, Maehr conducted an analysis of a data set collected from more than 16,000 students in the fourth, sixth, eighth, and tenth grades in 800 public schools in Illinois. He attempted to determine whether several variables, including psychological environment and school leadership, had an impact on student motivation. His findings indicated that goals that stressed motivation and achievement did have an impact, and that school leadership qualities did have an influence on a school's psychological environment.

Maehr concluded that "goal stresses associated with the school environment seem to relate systematically to student motivation and
achievement” and he reported that “the psychological environment of the school is a measurable variable, a variable of some importance in predicting motivation and achievement of students”.

The influence of school culture as a conduit for motivating students towards academic excellence has perhaps been underestimated. Teachers have traditionally shouldered most of the burden of motivating students towards academic achievement. However, because research continues to demonstrate the powerful effect of school culture and climate on students’ attitudes towards education, principals now must share that responsibility. They must given increased attention to the fact that they, too, are key players in the complex formula that shapes student motivation.

Figure 2: Parallel leadership roles extent in schools

- **Teacher**
  
  (Goals $\rightarrow$ Behavior) $\rightarrow$ Classroom Context $\rightarrow$ Student Motivation & Personal Investment.

- **Principal/Headmaster**
  
  (Goals $\rightarrow$ Behavior) $\rightarrow$ School Context $\rightarrow$ Student/Staff Motivation & Personal Investment.

A Principal/Headmaster shape a school’s culture so that is reflects the importance of motivation directed towards academic success and achievement under different types of Management.
2.8. MOTIVATION AND SCHOOL RESTRUCTURING

The findings reported in the literature on educational motivation have placed many school leaders in a different position. Much of the research indicates that our present instructional practices tend to diminish motivation for academic achievement rather than increase it. According to many of the researchers who conduct motivation studies in educational settings, teachers and school leaders are being asked to place their faith in educational policies and instructional practices that have already been shown to be detrimental to developing motivation. Simply put, they claim that our educational system is as much to blame for student apathy as the students themselves.

The relevant literature and reports on the recommendations these researchers have made for improving student motivation. It concludes with some discussion of the need for change as it relates to the school restructuring movement.

2.9. GRADE-RELATED AND AGE-RELATED CHANGES IN LEVELS OF MOTIVATION

It is generally recognized that motivation and academic achievement among younger children are contingent to some degree on grade and age-related factors. Research on the relationship between a student’s age and his or her achievement beliefs and motivational orientation indicates that children’s confidence in their achievement generally declines as they grow older (Stipek 1984). This decline is most pronounced at the age of 12 or 13.
Eccles, Midgeley and Adler (1984) have sought to measure the impact of school environment on these changes. Although the results of their studies were confounded by age-related changes among their student subjects, they reported "a casual link between grade-related changes in educational environments and age-related student attitudes". Their suggestions for managing these changes include some criticism of current school environment practices and some suggestions for school restructuring to eliminate these weakness:

As children mature they become more skillful, knowledgeable, and competent; they become better able to take responsibility, make decision, control their lives. They also feel more able to take responsibility and to make academic decisions. One would hope that with increasing grade level, students would assume greater autonomy and control over their lives and learning. In addition, one would hope that schools would provide an environment that would facilitate task involvement rather than ego involvement, particularly as children enter early adolescence.

Unfortunately there is evidence that just the opposite is true. As students proceed through the grades, the classroom is characterized by a decrease in student autonomy and an increase in processes, which enhance ego involvement at the expense of task involvement.

Eccles and her colleagues are not alone in their criticism of current educational practices that have a negative influence on student motivation. Another proponent of school reform for the purpose of revitalizing student
motivation in Raffini (1988). Basing his arguments on Covington's (1983, 1984) construct of the self-worth motive, Raffini argues that students caught up in system that dooms them to failure channel their motivation into behaviors that cover up that failure and thus protect their sense of self-worth:

Apathy is a way for many students to avoid a sense of failure. Those behaving from this motive approach each new learning experience with apprehension and fear & often masked with apathy, aloofness, or indifference. Their Philosophy toward schools becomes “Nothing ventured, nothing failed”. Teachers and parents worry that they are unmotivated. In reality, they are highly motivated to protect their sense of self-worth. As they get older they begin to reject education completely. If they state publicly that school is a valueless, boring waste of time, then their self-worth is protected when they receive a failing grade. These students have discovered that it is less painful to reject themselves.

Raffini proposes a four-fold approach that would remove motivational barriers and help students redirect their behaviors away from failure-avoiding activities towards academic applications. He describes how these four strategies can aid in promoting the rediscovery of an interest in learning:

1. Individual goal-setting structures allow students to define their own criteria for success.
2. Outcome-based instruction evaluation make it possible for slower students to experience success without having to complete with faster students.
3. Attribution retraining can help apathetic students view failure as a lack of effort rather than a lack of ability.

4. Cooperative learning activities help students realize that personal effort can contribute to group as well as individual goals.

2.10. THE IMPORTANCE OF IMPLICIT MOTIVATION

Stipek (1988) makes a strong case for strengthening the degree of intrinsic motivation students feel for learning. While she does not argue for the complete elimination of extrinsic reward systems, she believes that “there are many benefits to maximizing intrinsic motivation and many ways to foster it”. She identifies four perspectives from which intrinsic motivation can be viewed; Competency motivation, curiosity, autonomy and internalized motivation.

Competency motivation assumes “that individuals engage in tasks, in part, for the purpose of developing competence and experiencing the positive feeling of efficacy associated with successful mastery attempts”. The second perspective, curiosity, assumes “that individuals are innately curious about novel events and activities that are somewhat discrepant with their expectations”, a natural need to feel self-determining. They want to believe that they are engaging in activities by their own volition vacates they want to rather than to achieve some external reward or to avoid punishment”. Internalized motivation “assumes that some children engage in tasks in the absence of external reinforcement because they learn to value academic work”.

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Stipek describes some techniques that promote intrinsic motivation but suggests that they are rarely found in today's classrooms or schools:

Students are intrinsically motivated to work when the threat of negative external evaluation is not salient and when their attention is not focused on extrinsic reasons for completing tasks. They will also feel more competent and proud, and thus more intrinsically interested in tasks, when they can take responsibility for their success.

Allowing some student choice enhances intrinsic interest in school tasks, and it teaches self-management skills that are essential for success in higher grades and the work place. It is impossible for children to develop autonomy and a sense of responsibility if they are always told what to do, and how, and when to do it.

She recommends challenging but fair task assignments, the use of positive classroom language, mastery-based evaluation systems, and cooperative learning structures to foster intrinsic motivation towards academic learning.

Another voice in matters related to student motivation belongs to Glasser (1980), who theorizes that all motivation springs from an individual's desire to fulfill one of five basic needs: survival, love, power, fun, and freedom. Glasser condemns what he calls "boss management" in educational systems, which are behaviors that assume that students can be coerced into becoming motivated:
Boss-managers firmly believe that people can be motivated from the outside; they fail to understand that all of our motivation comes from within ourselves.

Boss-teachers and administrators constantly lament that students are not motivated, but what they are actually saying is that they do not know how to persuade students to work. And as long as they continue to believe in coercion.

Glasser argues in favour of “lead management”, which involves empowering students to be responsible for their own needs and accomplishments, teaching them in cooperative groups, and eliminating grades.

2.11. THE CHALLENGE OF SCHOOL RESTRUCTURING

Maehr (1991) has argued persuasively that school administrators should seize the opportunity offered by the school restructuring movement to effect changes in the entire school environment as well as in the individual classroom environment. His argument goes hand in hand with the findings of motivation research. “Few have seriously considered motivation vis-à-vis the current restructuring movement, “he says, and few have considered that the school as an entity in its own right, may have effects that supersede those of individual classrooms and the acts of individual teachers. And so it is that we wish to make the argument that now is the time to consider school as well as instructional curricular, and classroom change.
He notes that because school leaders can establish, promote, or ignore policies, they may have more effect on education than that generated at the classroom level.

Maehr provides an outline that identifies areas where schoolwide policies and procedures might well have an impact on the psychological environment of the school and thus lead to increased motivation. He identifies six target areas and provides examples of goals and strategies for bringing about change in a restricted environment.

- **Tasks**

  Tasks refer to the nature of the work undertaken by students in the school. Such tasks should help students focus on the intrinsic value of learning. Goals in this area should reduce reliance on extrinsic incentives, emphasize the fun of learning, and be challenging to all students. Strategies for accomplishing these goals include initiating programs that take advantage of the student’s background, that stress goal setting and self-regulation/management, and that take students to non-school settings for learning experiences.

- **Authority**

  Schools should delegate responsibility by focusing on student participation in learning/school decisions. Goals include providing opportunities for developing independence and leadership skills among students. Strategies include offering students choices in their instructional
settings and supporting their participation in co-curricular and extracurricular activities.

- **Recognition**

  There should be extensive use of recognition and rewards in the school setting. Goals should be established that will provide opportunities for all students to be recognized, recognize progress in goal attainment, and emphasize a broad array of learning activities. Strategies include "personal best" awards and recognition of a wide range of school-related achievements.

- **Grouping**

  Grouping refers to student interaction, social skills, and values. There should be goals that bring about an environment of acceptance and appreciation of all students, that broaden the range of social interaction among students, including at risk groups, and that enhance social skills and humane values. Strategies should include programs that provide occasions for group learning and problem solving and that foster development of subgroups (teams, schools within schools, and so forth).

- **Evaluation**

  Goals regarding the nature and use of evaluation and assessment procedures includes increasing students' sense of competence and self-efficacy, increasing their awareness of their unique sets of talents, and encouraging them to understand failure as a natural part of learning and life.
Strategies to accomplish these goals include a reduction in the emphasis on social comparisons of achievement by minimizing public reference to normative evaluation standards such as grades and test scores. It is also important to create opportunities for students to assess progress towards goals they have set.

- **Time**

  Time must be effectively managed to carry out plans and reach goals. Goals include improving the rate of work completion, improving skills in planning and organization, and improving self-management ability. Strategies include developing programs that teach time management skills and offering students the opportunity to progress at their own rate when possible.

  Maehr acknowledges that the successful implementation of new educational policies and practices depends upon school leaders who have the courage and motivation to seize the opportunity that restructuring offers. As Maehr puts it, "The time is right for restructuring, and that restructuring will indeed take place. The question is will it take place is such a way that motivation and the investment in learning of students will be enhanced".

  With the current trend towards restructuring gaining momentum (Conley 1991), educators at all levels inevitably face some changes in the ways schools function. Principle will be asked to demonstrate even higher levels of effective leadership as changes occur. The time has come for them to analyze their own
level of motivation as it relates to their role in a restructuring process that will affect the motivation students feel towards learning for many years to come.

2.12. MOTIVATION AS A PERSONAL TRAIT

According to Maehr and Braskamp (1986), MaClelland and his colleagues set out to systematize the study of motivation by designing assessment procedures that would help identify the characteristics associated with highly motivated personalities. One stream of McClelland’s research sought to identify the motives related to achievement behavior. Certain individuals, he found, could be characterized by their desire to be successful. These individuals demonstrated specific behaviors that identified them as “achievers” (McClelland 1961, 1985).

The source of this trait was the subjects of a second, broader area of McClelland’s research, one that is of special importance to educators, McClelland investigated the possibility that differences in child-rearing practices in various societies and cultures accounted for differences in the development of motivation in individuals. He found that “child-rearing practices that emphasize independence training and mastery produce people who are high in achievement motivation” (Maehr and Braskamp 1986).

McClelland also studied the strength of power motivation and affiliation motivation that individuals exhibit within groups or organizations. Power motivation might be displayed in educational settings by students who are extremely competitive, who gain a sense of power by being recognized as the brightest student or as the student most likely to succeed. Affiliation motivation
is exhibited in response to a desire for approval in social contexts, for example, in situations where a student receives praise for doing well from family or friends.

2.13. MOTIVATION IN RESPONSE TO SITUATIONS

In a review of research on motivation as it is exhibited in specific contexts or situations, Maehr and Braskamp (1986) offer a "counterbalancing perspective" to MaClelland's "focus on personality as a cause a motivation". Maehr and Braskamp conclude that "perhaps more than we realize, we are what we are expected to be and we do what the task and our significant others allow and demand".

A useful taxonomy for the study of situations that affect motivation is shown in figure 3.

Several of the sectors in the taxonomy are especially important in school settings. Normative expectations apply to all group members; each member is expected to adhere to the established norms of the group. Such expectations can exist in very basic social units, including the family, clubs, and schools. Because individuals are influenced by these social groups quite early in life, they can acquire at young ages basic attitudes about what is worth achieving and how it can be achieved.

Another important category is individualized expectations, that is, what significant people, such as teachers and principals, believe about a specific student. Some research in this area as it relates to the work place indicated that
an employer’s belief about the effectiveness of an employee influences the productivity of that worker (Steers 1981).

Inherent task characteristics are especially important in the educational arena. Maehr and Braskamp (1986) describe the characteristics of this category:

Research on intrinsic motivation has suggested that a task that possesses a certain optimum level of uncertainty and unpredictability tends to be generally attractive. Although social experiences can reduce the search for novelty, new information, and challenge, it appears that from the start, human beings have a built-in attraction to these features in tasks.

Thus, it is likely that schools where the students feel appropriately challenged to be academically successful and where the rewards of learning take the form of problem solving or successfully meeting challenges will have a higher level of motivation among its students.

Socio-cultural definition involves the degree to which an individual’s social or cultural group supports a particular task or goal. In this context, schools where academic achievement is emphasized and rewarded might logically be expected to have more highly motivated students.

The category of interpersonal demands in the taxonomy is also important. Research on cooperative learning has frequently demonstrated that individuals react differently to different educational settings. Some students thrive in group learning situations where cooperation and personal interaction are operative, while others seem to do best working alone. Schools in which
opportunities exist for all students to participate in ways that are best suited to their personal needs and preferences are probably more likely to have a large number of motivated students.

One other category, incentives, is central to the study of motivation in schools. Grades are obviously an incentive of great importance to most students, but the use of grades as an incentive or as a form of punishment can have long term impact on student motivation. As Maehr and Braskamp point out, “Different incentives are likely to be associated with different tasks, and the manner in which these incentives are designed, presented, or make available is importance”.

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**Figure 3 : Model of Situational / Contextual Factors that Influence Motivation**

![Diagram showing the model of situational/contextual factors influencing motivation.](image-url)
2.14. MOTIVATION AND THE CONCEPT OF SELF

One final area of study that has influenced recent theory on motivation is its relationship to cognition, or the through processes an individual goes through when placed in situations where motivation comes into play (Ames 1986, Salancik and Pfeffer 1978). The way a person responds to a task and his or her decision to invest the time and energy necessary succeed in accomplishing it is dependent upon a complex blend of present thoughts and previous experiences.

This line of study involves two areas of focus: thoughts about self and thoughts about situation. In reviewing the research literature on the topic of self as it relates to motivation, Maehr and Braskamp (1986) have identified three areas in which self-concept plays an important role. The three areas are self-consistency, self-confidence and self-determination.

2.15 SELF-CONSISTENCY

This concept involves an individual's proclivity to behave in a manner consistent with his or her self-image. Once a self-image has been formed, an individual begins to perceive circumstances and respond to them in a way that reinforces that self-image.

Because the opinions of significant others are especially powerful at various critical stages in a person's life, self-image is often formed during the early stages of an individual's development and can be very difficult to
overcome. This plays an obvious role in educational settings, where a student might well appear to be unmotivated in order to maintain a sense of consistency with a self-image shaped by the experience of having been labeled as a "failure". As Maehr and Braskamp conclude.

People do try to square their thoughts with what they see happening to them. Inconsistencies in thought are motivating. We can tolerate some inconsistency some of the time, but apparently we can tolerate only so much.

2.16 SELF-CONFIDENCE

Researchers have often confirmed the notion that a person's sense of self-confidence is a critical variables in achieving success and in becoming motivation to attempt certain tasks (Atkinson and Feather 1966, Vroom 1964). Like the "little train that could", individuals develop pre-conceived notions about their chances for success or failure based upon their level of self-confidence.

Experiments by Weiner (1979, 1983, 1984) demonstrated that often individuals with a low sense of self-confidence succeeded in carrying out a task, they often attributed their achievement to luck or to the lack of difficulty of the task rather than to their own skill. On the other hand, individuals with a high level of self-confidence usually took full credit for accomplishing the task successfully.

As an extension of self-image, levels of self-confidence are often established in the early stages of a person's development. Studies have shown
that significant others also play an extremely important role in shaping an individual’s self-confidence (Hass and Maehr 1965; Maehr, Mensing and Nafzinger 1962).

2.17 SELF-DETERMINATION

Recent work on self-determination has pointed to the importance of cultivating a sense of ownership or of control over a situation before individuals will become motivated to act (deCharme 1984, Deci 1980, Hackman and Oldham 1980). In a school setting, a sense of self-determination could well be a critical element in engendering motivation among students.

2.18 THE COMPLEXITY OF MOTIVATION

The various theories that have sprung from research on motivation indicate the complexity of the problem of determining the possible interactions among the money components-individual differences, situational differences, social and cultural factors, and cognition. In concluding their review of motivation theory, Maehr and Braskamp (1986) suggest how an individual’s level of motivation can be derived from one or more of these sources:

When we boil down the antecedents of motivation and personal investment to their simplest form, we are inclined to suggest that people do what they believe they can do and what they believe is worth doing. Judgements of opportunity to perform and the value to the person in performing sum up most of what we need to consider in discussing motivation.
The former involves not only the personal sense of competence but also perceptions of options. The latter involves not only the norms people live by us the result of socio-cultural groups in which they participate but the individualized goal they hold for themselves—what they are and what they hope to become.

Maehr and Braskamp go on to explore the components of motivation from a perspective that is reflected in their use of the term personal investment. They outline the following five points that define their approach to the problem of theorizing motivation:

Figure 4: Antecedents of Meaning and Personal Investment
1. The study of motivation begins and ends with the study of behavior. The behavioral patterns associated with motivation are collectively referred to as personal investment.

2. The direction of behavior is of primary significance; thus, the focus is on the apparent choices and decisions made by people.

3. It is the meaning of the situation to the person that determines personal investment.

4. The meaning of a situation can be assessed, and its origins can be determined.

5. Motivation is a process that is embedded in the ongoing stream of behavior.

Maehr and Braskamp's graphic representation of the antecedents of motivation and meaning is shown in figure 4.

- **The theory of personal investment centers on two basic ideas**
  1. People invest themselves in certain activities depending on the meaning these activities have for them.
  2. Meaning involves three interrelated categories of cognition: personal incentives, sense of self, and perceived options.

Although the focus of Maehr and Braskamp's theory as it is developed in The Motivation Factor is on how motivation functions in the workplace, it has direct applications to the concept of motivation in educational settings. Students, like individual workers, must derive some sense of personal reward from specific tasks before they can be expected to generate any significant
motivation to carry out the task. In their role as educational managers, principals bear some of the responsibility for helping students to generate a feeling of value and reward when they engage in and complete academic work. This feeling can occur at both the individual level and at the different school level under different types of management.

The various theories that have been proposed to explain how motivation operates in people's lives can perhaps help principals understand not only the different levels of motivation that exist among students in a school but also the different levels of motivation that exist across school. And hopefully such theories can also help principals understand the importance of analyzing the role that motivation plays in their own lives as they seek a happy fit between their own set of values and the values being shaped at the schools where they serve as educational leaders.

2.19 TEACHING & LEARNING STYLE

The review of the literature for this study focus on procedures used to identify teaching and learning styles and what effect a match between the two has on student learning outcomes and evaluation of instructors. The review focuses on number of different instruments used to identify teaching and learning styles, and matching, followed by the findings of researchers using various instruments to measure learning and teaching styles. The research outcomes germane to learning styles, teaching styles, and a match between the two in relation to course grades, final exam scores, and instructor evaluations are discussed.
Learning and teaching styles

Many researchers have proclaimed the significance of identifying preferred teaching styles and preferred learning styles. Claxton and Ralston (1978, in Miller, 1982) alluded to this significance:

The research findings on learning styles offer substantial promise to teachers, counselors, and the students themselves in terms of finding better ways for students to learn. But while matching learning style with instructional mode apparently facilities positive interpersonal relations, and while it would seem to point the way for increased learning, the empirical data that support this idea are rather scarce. Such a significant gap in the research must be filled if knowledge about learning styles is to become a significant force in improving Govt., Aided and Govt. sponsored school teaching.

However, identifying and defining the vast number of learning styles can become an enormous task. According to Cornett (1983), the myriad of labels and categories used in identifying the different areas of style can be overwhelming for educators. Corbett and Smith (1984) stated:

Learning style is a complex construct involving the interaction of numerous elements; thus, at the outset, the experimenter is faced with the difficult task of having to decide which dimensions of learning style to elucidate and which interactions might be meaningful, in a practical sense, in understanding their contribution to achievement.

There are many definitions of learning styles in the literature. For example, Cornett defined learning style as “a consistent pattern of behavior but
with a certain range of individual variability”. Hunt (1979) thought that learning style “describes a student in terms of those educational conditions under which he is not likely to learn. Learning style describes how a student learns, not what he has learned”. From a phenomenological viewpoint, Gregorc and Ward (1977) stated that learning style “consists of distinctive and observable behaviors that provide clues about the mediation abilities of individuals. In operational terms, people through their characteristic sets of behavior “tell” us how their minds relate to the world, and therefore, how they learn”. Keefe and Languis, (1983) contended that “learning style is the composite of characteristic cognitive, effective, and physiological factors that serve as relatively stable indicators of how a learner perceives, interacts with, and responds to the learning environment”. They suggested that it is within these domains that instructors identify learning styles and try to match them with an appropriate teaching style. Cross (1976) defined learning styles as the characteristic ways those individuals collect, organize, and transform information into useful knowledge. Learning style is consistent across a wide variety of tasks. It has a broad influence on how information is processed and problems are solved, and it remains stable over many years.

Teaching style was defined by Fischer and Fischer (1979) as “a pervasive way of approaching the learners that might be consistent with several methods of teaching”. Conti (1989) contended that “the overall traits and qualities that a teacher displays in the classroom and that are consistent for
various situations can be described as teaching style”. The instructors’ philosophical beliefs are portrayed in classroom through their teaching style (Brookfield, 1988). Knowles (1970) asserted that “the behavior of the teacher probably influences the character of the learning climate more than any other single factor”. Teaching style consists of an instructor’s personal behavior and the media used to transmit or receive data to or from the learner (Gregorc, 1979).

Matching is defined in terms of compatibility, the interactive effects of person and environment (Hunt, 1979) suggested that “matching students with selected learning environments is an efficacious means of increasing student achievement, particularly when the matching is conducted on the basis of a student’s learning style”. Matching teaching style with learning style produces an environment wherein students learn best (Gregorc & Butler, 1984).

- **Learning and teaching styles instruments**

Various instruments have been used to study learning styles and examples are those developed by Canfield, Kolb, and Gregorc. Warren (1974, in Raines, 1978) stated that “New means of accommodating student diversity are clearly needed, and one approach is to assess the personal preferences or learning styles of the student and adopt instructional procedures accordingly”. Warren also contended that a complex method for assessing and analyzing student preferences throughout an institution, a program, or a department would indicate the proportion of students strongly inclined towards one
instructional approach or the other”. For this study, the Canfield Learning Styles Inventory were selected for reasons indicated by Warren. They measure preferences in learning styles and instructional styles. The instructional styles inventory parallels the learning styles inventory which provides a comparative analysis between the two. The Canfield instruments are relatively easy to administer with administration time averaging approximately 30 minutes.

Following is a summary of research that used various instruments to investigate the notice of teaching styles and learning styles. A review of literature revealed several main themes to which researchers have alluded. Researchers have attempted to:

1. determine if preferred teaching styles of instructors and preferred learning styles of students existed,
2. determine if a match between learning styles and teaching styles existed,
3. determine if a match between learning styles and teaching styles produced higher academic achievement as indicated by grades and exam scores,
4. determine if students’ evaluations of instructors were higher if there was a match between students’ learning styles and instructors’ teaching styles.

Canfield (1977) reported findings from research on student major conducted at an eastern community school as well as two classes of physical therapy students and faculty members from schools. Several statistically significant differences were found between all pairs of the following groups;
1. 52 criminal justice students (44 males and 8 females)
2. 208 business students (128 males and 80 females)
3. 109 education students (35 males and 74 females)
4. 63 physical therapy students (18 males and 45 females)
5. 42 physical therapy faculty (14 males and 28 females)

Canfield's outcomes revealed that "students enrolled in a pre-education curriculum were more like that of the criminal justice students than any of the other groups, despite the difference in concentration of males and females in the two groups. The criminal justice group evidenced considerably preferences for organization and the business majors evidenced generally lower interest in people".

Comparison studies were conducted by Brainard and Ommen (1976, in Canfield, 1977) at Longview Community School which lended credence to the belief that preferred learning styles can be identified. The Canfield Learning Styles Inventory and Canfield Instructional Styles Inventory were used to obtain the following group comparisons:

1. A group of 230 female secretarial students were compared to a general group of 1150 female students. The secretarial students were found to have significantly:
   a. Less preference for organization (.05 level).
   b. More preference for competition (.01 level).
   c. More interest in Inanimate (.05 level).
   d. Less interest in the people area (.01 level).
2. A group of 24 data processing students, when compared to a general group of 3,114 students, were significantly:
   a. Less desirous of peer affiliation (.01 level) and teacher affiliation (.05 level).
   b. More concerned about detail and organization (well beyond the .01 level).
   c. More interested in numbers (.01 level) and less interested in the people content area (.05 level).
   d. More expectant of doing well (.01 level).

3. A group of 161 female community schoolteachers were compared to a sample of 1,208 female community school students. The teachers were significantly:
   a. More concerned with peer affiliation (.01 level) and teacher affiliation (.05 level).
   b. More desirous of organization (.05 level).
   c. Less concerned about competition (.01 level) and detail (.01 level).
   d. Less interested in numerics (.01 level) and more interested in qualitative and people areas (.01 level).
   e. Less desirous of reading (.01 level) and more iconic (.01 level).
   f. More expectant of doing well (0.1 level).

Existence of Learning Style and Teaching Style Preferences
Researchers Heikkinen, Pattigrew, and Zakrajsek (1985), through use of the Canfield Learning Styles Inventory, found that learning style preferences exist
among education majors. They suggested that if there is a link between learning styles and program selection and/or teaching styles then it is appropriate to conduct an analysis of learning styles among education majors. The sample consisted of students enrolled in a junior level roster. "The inventories were grouped according to gender (96 females, 46 males), level of teaching (47 elementary, 94 secondary), and subject matter (36 elementary, 12 special education, 19 physical education, 15 vocational education, 12 art/music, 20 science/math, 15 English/communication/language, 15 social science).... when subjects of this study were grouped by subject matter majors, 10 of the 16 learning style variables were significant". These variables were organization, authority, goal setting, detail, people, inanimate, qualitative, numeric, listening, and direct experience. Vocational education majors consisting of business education, industrial arts, and distribute education demonstrated a preference for the inanimate (working with things - building, repairing, designing, and operating) and detail (specific information on assignments, requirements, rules etc.) variables.

Heikkinen, Pettigrew, and Zakrajsek found that there was a correlation between the nature of the subject matter and the preferred learning style of students across majors. They questioned whether or not students selected a major based on preferred learning styles or whether students' learning styles evolved as a result of the subject matter. Additionally, strong preferences for some learning variables were evident in each group of subject matter majors.
There research report suggested “the need for a broader understanding of individual learning styles or preferred conditions of learning”.

Payton, Hunter, and McDonald (1979) used the Canfield Learning Styles Inventory to determine the preferred learning styles of first-year physical therapy students. There were a total of 1,099 students and 42 school represented in the study. A subsequent study by Payton, Hunter, McDonald, and Hirt (1980) identified the preferred instructional style of 311 physical therapy faculty in 51 basic professional programs within the United States. These studies revealed that there was a high level of agreement between students and faculty with regard to modes of teaching and learning. There was a low-level of agreement with regard to the areas of competition and reading.

Matthews (1995), using the Canfield Learning Styles Inventory, investigated the learning styles characteristics as related to conditions of learning, area of interest, and mode of learning; the types of learner typologies that existed among students. The sample consisted of 971 students (475 males and 496 females) from a population of approximately 8,000 students in South Carolina during the 1989-90 academic school year. The students were enrolled in English and biology classes. They were selected randomly.

Matthews found that the students “preferred a personal relationship with the instructor, clearly organized course work, and specific assignments and requirements over other conditions of learning, such as studying alone, being highly competitive with peers, or relying on authority”. Additionally, the
area of interest revealed that working with people was first choice, second choice was working with inanimate objects, numerics was third choice, and qualitative was fourth choice. Direct experience and visuals were the preferred modes of learning as opposed to listening and reading. With reference to gender, "males relied more on peers, working independently, use of numbers, and manipulation of concrete objects than did females. Females liked organization, detail, language activities, other people, and listening more than males did". The learner typology indicated that high categories for students were social and social/conceptual. The low categories were independent/applied, independent. Students in the disciplines of mathematics, science and education selected the applied or combination applied styles. Students in humanities, business, and social science selected conceptual or combination conceptual styles. All major areas had students who preferred the social or combination social categories as opposed to independent or independent combination categories.

Grosse (1985) examined the relationship between parallel aspects of teaching and learning styles. The Canfield Learning Styles Inventory and the Canfield Instructional Styles Inventory were used to assess the teaching and learning styles of 60 students from five English Speakers of other Languages (ESOL) teacher training classes. This study suggested that teaching styles are not closely related to learning styles as is generally assumed. The findings imply that the group of sixty English as a Second Language (ESL) student teachers use different behaviors to react to similar teaching and learning
situations. Although some similarities did exist, the differences in over half the assessed preferences for conditions and modes of instruction were significant.

Although there were some similarities, there were significant differences in over half of the assessed preferences for conditions and modes.

Simon (1987) conducted research to determine the relationship between the preferred learning styles of students and preferred teaching styles of instructors. He administered the Canfield Learning Styles Inventory to 4,020 entering students from fall quarter 1979 through fall quarter 1982. Subject areas studied were business, engineering, general studies, health, natural resources, and public service. He administered the Canfield Instructional Styles inventory to 49 full-time instructors in fall quarter 1983-84. His concentration of the study was with three areas of the Canfield instruments: condition, content and mode.

Simen’s study revealed that students indicated a preference for less lecture and more direct experience; they preferred less authority from faculty and more student independence, goal setting, and planning, and, they preferred peer and instructor affiliation. Implications for this study were that instructors should increase the direct experience method and decrease the lecture method, students should be involved more in course and program direction, and more instructor affiliation should be provided to students. The researcher suggested that in-service training be done to acquaint faculty with students’ learning styles and to assist them in evaluating their own preferred teaching style.
Hunter (1980) cited studies conducted by Hunter and McCouts. Using the Canfield Learning Styles Inventory, they collected data from 1,000 students at Sinclair in Dayton, Ohio. Important learning style differences were shown on 12 of 16 profile scales with respect to age group. Older students preferred reading, organization, detail, qualitative and listening. Younger students preferred affiliation with peers and teachers, iconics, direct experience, and inanimate. Some studies were effective in identifying significant interactions between preferred learning styles and preferred teaching styles while others were not.

Hunter (1979) conducted research in the North Central Accreditation Region. Subjects consisted of 5 teachers and 285 students within 15 courses. Using the Canfield Learning Styles Inventory and Canfield Instructional Styles Inventory, Hunter found that students preferred listening and direct experience as opposed to reading.

Zippert (1985) conducted research to investigate whether teaching strategies that matched assessed learning styles of students produced a higher level of achievement. The Productivity Environmental Preference Survey was used to assess learning style preferences. Subjects consisted of 30 students. Fifteen students were randomly assigned to the experimental group and 15 were assigned to the control group. Students in the control group received instruction through conventional methods, whereas instruction was modified to correspond to the learning style preferences of students in the experimental...
Zippert concluded "students can identify their individual learning preferences and tend to respond positively to teaching methods which are consonant with their preferred mode of learning".

In summary, through use of the Canfield inventories as well as other inventory instruments, researchers have concluded that preferred learning styles and preferred teaching styles exist. Students have shown preference for the following conditions of learning. Peer, organization, Goal Setting, Instructor, Detail, and Independence. Low preference was shown for Authority and Competition. For areas of interest, students preferred people, and Inanimate. Lower preference was shown for Qualitative and Numeric. The mode of learning preferred by students included Direct Experience and Iconic. There was low preference for Listening and Reading.

These findings in the literature are important to my study. Through use of the Canfield instruments, I should be able to identify existing learning style and teaching style preferences as it pertains to the items within the Canfield instrumentation.

Lyon (1991) conducted a study to determine if a relationship existed between styles and learning styles in a real-life adult learning situation. Lyon investigated the assumption that "adults whose learning style matched the instructor's teaching style would gain more knowledge than others with a different learning style". The Kolb Learning Style Inventory was used to determine learning style preferences. A pretest before the beginning of the MS
Word Course taught was administered to determine the participants’ present level of knowledge and familiarity with the microcomputer. A posttest was administered at the completion of the course to help estimate the acquisition of new knowledge. The subjects were 35 individuals who had enrolled in four, four-hour-sessions of beginning IBM/MS Word Courses. The use of a variety of teaching techniques by the instructor led to a significant increase in knowledge gain for all participants. “The participant’s achievement associated with style-flexing supported the theory that if an instructor’s teaching style matches the participant’s learning style then participants would more likely gain knowledge and master skills”. However, no significant difference was found between knowledge gain and a match of the teaching styles of the instructor and the learning styles of the participants. Furthermore, no significant correlations were found between knowledge gain and the ratings of instruction.

Charkins, O’Toole, and Watzel (1985) conducted research to determine if there was a link between teaching styles and learning styles and the effect of any link on student learning. This study included 600 students, 20 instructors, and 3 teaching/learning styles. The Grasha-Riechmann Learning Styles, the lower the student’s gain in achievement”. Implications for education as a result of their study are that students’ achievement should improve by matching students and instructors who possess similar learning and teaching styles. Because students react variously to different methods of teaching as a
result of their varied learning styles, "some students may gain, but others may lose, from using a new teaching method. Researchers may be able to discover which types of students gain (or lose) from different types of teaching methods" (Charkins, O'Tools, & Qetzel, 1985).

In summary, researchers differed in their findings. Lyon (1991) determined that while there was no significant difference in achievement when there was a match between teaching and learning styles, style-flexing by the instructor supported the theory that students gain knowledge when there is a style match. Charkins, O'Toole, and Wetzel (1985) contended that there should be an improvement in student achievement when there is a match between the instructor's teaching style and the students' learning style. This study will try to lend support to the theory that student achievement improves when there is a match between learning styles and teaching styles through studying business instructors and their students.

- Students achievement as indicated by course grades

Battle (1982) conducted research to "investigate the extent to which variations in grade achievement corresponded with variations in total divergent measures of instructional/learning styles in Principles of Accounting, what significant differences existed between selected factors of instructional/learning style and grade achievement". The Canfield Learning Styles Inventory and the Canfield Instructional Styles Inventory were used. The study included 758 students and 11 instructors. Battle found those differences between instructor
teaching styles and student learning style preferences “were not clearly indicative of success or failure”. Battle suggested that “the prediction of expected grades should be discouraged because the impact of instructional/learning differences on educational outcomes were not sufficiently strong”.

Matthews (1995) studied the effect learning style had on grade point average of first year students in colleges and universities. The association of learning style with achievement as measured by grade point average showed that “Students with the social/applied, independent/applied and social styles had higher grades than did students with other styles. Students with neutral preference had the lowest grade point averages when compared with students in other categories. Grade point average in six categories (social/applied, independent/applied, social, applied, social/conceptual, and conceptual) differed significantly from the averages in the low category (neutral preference)”.

Raines (1978) conducted research using the Canfield Instructional Styles Inventory and the Canfield Learning Styles Inventory to determine if significant differences existed between the teaching styles of math instructors and the learning styles of their students. Raines also compared the learning styles inventories of students with varying levels of grade achievement. Subjects consisted of six math instructors and 575 mathematics students at Manatee Junior College. Results revealed that “students with higher grade
levels of achievement had 'learning styles' more closely related to instructor 'teaching styles' than the students achieving the lower grade levels'. Raines concluded that grade achievement levels would likely improve as a result of matching learning styles and teaching styles between students and instructors. By being able to identify individual learning style preferences, an educational delivery system in mathematics could be developed which recognizes individual needs. This recognition could possibly help alleviate the low success rate of students enrolled in mathematics.

Results of research conducted by Hunter (1979) revealed that only the organization method was related to grade. To obtain this result, Hunter investigated the relationship between preferred learning style and grades in 15 courses in the North Central Accreditation Region. Subjects consisted of five teachers and 285 students. The Canfield Learning Styles Inventory and Canfield Instructional Styles Inventory were used.

Scerba (1979) determined that there was no significant interaction between learning styles, teaching styles, and course grade. Scerba used the Canfield Instructional Styles Inventory and the Canfield Learning Styles Inventory, a posttest achievement measure for Mathematics and English, and McKeachie's teacher/course evaluation instrument. Subjects included 500 subjects, who were placed in one of five teaching style settings as determined by the results of their Learning Styles Inventory. Scerba concluded that due to the limitations of his study, the trait-treatment interaction model that was used to predict interaction effects was ineffective.
Carthey (1993) conducted research to determine the relationship between learning styles and grade performance. The Kolb Learning Style Inventory was used to determine their learning styles. Students' final grade point averages earned. The learning style variables was reduced to four styles: Divergers-information was perceived abstractly and processed reflectively; Convergers-information is perceived abstractly and processed actively; and Accommodators—experience is perceived concretely and processed actively. The study showed a relationship between students with the Converger learning style and high academic achievement in all courses under study. According to Carthey, "Individuals with learning styles (Convergers and Assimilators) that employ abstract perception received the greatest percentage of A grades in all courses when their results were combined and compared to those learning styles (Divergers and Accommodators) which perceived concretely".

Miglietti (1994) conducted the researches to investigate the relationship between "grade, sense of accomplishment, overall course satisfaction, and combinations of teaching styles, classroom environment, and learning styles". Subjects consisted of 10 remedial mathematics or remedial English instructors and 156 students. The variables in this study were comprised of faculty self-descriptions of teaching style, students' age, reports of preferred classroom environments, learning styles, course grades sense of accomplishment, and overall satisfaction with course. The Principals of Adult Learning Scale (PALS) developed by Conti (1979, in Miglietti, 1994) was used to determine
the preferred teaching styles of faculty. The Classroom Environment Scale (ACES) developed by Darkenwald and Valentine (1986, in Miglietti, 1994) was used to measure students' perceptions of the classroom environment. The Adaptive Style Inventory (ASI) developed by Kolb (1984, in Miglietti, 1994) was used to determine the preferred learning styles of students. Results of this study indicated that two teaching style variables, learner-centered activities and flexibility for personal development produced significant differences in that "students in the learner-centered classes had higher grades, reported a greater sense of accomplishment, and overall satisfaction than those in teacher-centered classes".

In summary, researchers were divided in their findings. Two researchers, Battle (1982) and Scerba (1979) found that there was no relationship between style match and an improvement in course grades. However, five researchers found that students whose preferred learning styles matched the instructors' preferred teaching styles received higher course grades than those who did not match (Matthews, 1995; Raines, 1978; Hunter, 1979; Carthey, 1993; Miglietti, 1994). This study will attempt to add to the growing body of research regarding the effect of learning and teaching style match on student achievement as measured by course grade.

- **Student achievement as indicated by exam scores**

Campbell (1989) conducted research to "determine if students with certain learning styles can be expected to achieve higher grades in business
communication classes which are taught on the computer than can students with other learning styles”. The Gregorc Style Delineator was used to define learning styles. Achievement was based on an instructor-developed final examination which measured students’ knowledge about “acceptable business writing and their ability to compose a business letter using correct grammar, spelling, punctuation, format, reader/situation adaptation, proof reading revising”. Study participants of 43 students enrolled. The investigator was the instructor. Results revealed that in the business communication course, there was no relationship between students’ achievement and their preferred learning styles, no relationship when the students’ learning styles matched or did not match the learning style of the instructor, and there was no relationship between students’ achievement and the students’ majors or previous experience with computers or word processing.

Van Vuren (1992) did an experimental investigation to determine the effect of matching learning styles and instruction upon academic achievement of students receiving an interactive learning experience. The experiment included 197 chemistry students enrolled in Inorganic Chemistry 103. Student were divided into one of our learning styles; abstract sequential, abstract random, concrete sequential, and concrete random as specified by the Gregorc Style Delineator. Students received style specific instruction in an interactive learning environment. They were compared to a randomly selected control group. Analysis of variance results “revealed a statistically significant
difference in academic achievement test scores between the treatment groups which received a matched tutorial, and the control group, which received an unmatched tutorial”. This study “provided empirical data which supported the use of interactive learning environments as a facilitator between students’ learning style and instructors’ teaching styles”. This study suggested that students’ academic achievement may improve when information is presented to them in a format that best matches their learning style preferences. Implications of this study were that through the use of an interactive learning environment that utilizes type-specific instruction, academic achievement gains could be obtained. A relationship was demonstrated between the instructional designer and their instructional materials that suggested that “care should be taken to present information to students in a manner that enhanced their learning”. Educators are challenged to provide instruction aimed at accommodating individual differences. It was suggested that curriculum specialists consider incorporating learning style as interactive learning experiences into the curriculum. They were both found to be an effective tools for educators.

As indicated earlier, the results of research conducted by Zippert (1985) revealed that achievement was higher for those instructional style matched their learning style. Zippert used the College Level Examination Program (CLEP) Social Studies and History examination to measure achievement. The results of this study were supported by the writings of James and Galbraith (1985). They asserted that when individuals are placed in a setting that focuses on their
dominant learning style, learning could facilitated. Zippert determined that when learning environments are designed to match the learning preferences of students, achievement could be enhanced. Further, "even in situations where students indicate similar learning styles, achievement gains can be affected when teaching strategies are modified to correspond to student learning preferences".

In summary, researchers were divided in their findings. Campbell (1989) found that there was no relationship between style match and exam scores. However, Van Vuren (1992) and Zippert (1985) found that students whose preferred learning styles matched the instructors' preferred teaching styles received higher exam scores than those who did not match. This will further study the effects of learning style and teaching style match and student achievement as indicated by final exam scores.

- Instructor evaluations and learning style/teaching style match

Hunter (1979) conducted research in the North Central Accreditation Region, which included 285 students in 15 courses. Through use of the Canfield Learning Styles and Instructional Styles inventories, he investigated the relationship between preferred learning style and student ratings of instruction. He found that there was no significant relationship between student/teacher differences and rating of instruction. He found that there was no significant relationship between student/teacher differences and rating of instruction. Hunter (1980) asserted that interaction of preferred learning styles
with preferred teaching styles may affect student rating of instruction by traditional rating instruments.

Through use of the Grasha-Riechmann Learning Styles Questionnaire, Charkins, O’Toole, and Wetzel (1985) conducted research at Purdue University to study the effects of matching teaching and learning style and instructor evaluations. The study included 600 students and 20 instructors. They concluded that teaching and learning styles should be considered when reviewing student evaluations of instructors because student responses may reflect differences in teaching styles as opposed to evaluating the instructor teaching.

Campbell (1989) used of the Gregorc Style Delineator to conduct research in the study participants consisted of 43 students enrolled in two Business Communication classes. He found that there was no relationship between student’s ratings of the instructor when students’ learning styles matched or did not match the instructor’s learning style.

In summary, the above researchers concluded that there was no significant difference between a match of teaching learning/learning style and instructor evaluation. Charkins, O’Toole and Wetzel (1985) warned that when reviewing student evaluations of instructors, teaching and learning styles should be considered. The student’s responses might reflect the difference in teaching style as opposed to the evaluation of the teacher.
2.20 SCHOOLWIDE AND CLASSROOM DISCIPLINE

During most of its twenty-two year existence, the Annual Gallup Poll of the Public's Attitudes toward the Public Schools has identified "lack of discipline" as the most serious problem facing the nation's educational system.

Many educators and students are also gravely concerned about disorder and danger in school environments, and with good reason: Each month approximately three percent of teachers and students in urban schools, and one to two percent in rural schools, are robbed or physically attacked. Nearly 17,000 students per month experience physical injuries serious enough to require medical attention (Harvard Education Letter 1987). School personnel, students, and parents call attention to the high incidence of related problems in school environments – problems such as drug use, cheating, insubordination, truancy, and intimidation – which results in countless school and classroom disruptions and lead to nearly two million suspensions per year (Harvard Education Letter 1987).

In addition to these school discipline issues, American classrooms are frequently plagued by other, more minor kinds of misbehavior, which disrupt the flow of classroom activities and interfere with learning. Approximately one-half of all classroom time is taken up with activities other than instruction, and discipline problems are responsible for a significant portion of this lost instructional time (Cotton 1990). At the same time, however, there are many schools, which regardless of their size, socio-economic influences, student
composition, or geographic setting, have safe and orderly classrooms and grounds. As the research literature makes clear, these well disciplined, smooth-running school environments are not the product of chance. This report offers a synthesis of findings from research studies which have disciplinary practices and student behavioral outcomes. Of these, 27 are studies, 30 are reviews, and 3 report findings from both studies and reviews. Thirty-five of the reports are concerned with classroom-level discipline, 14 with school-wide discipline, 5 with both, and 6 with related subjects, such as home-based reinforcement and corporal punishment.

Looking at the subjects of the research, 33 reports are concerned with students in general, 10 with elementary students, and 17 with secondary students. Teachers, as well as students, are the subjects of 13 of the analysis. Most of the research was conducted with American students, but English, Scottish, Australian, Norwegian, and New Zealand students are also represented.

It is important to note that this review does not encompass the literature on disciplining special education students in either self-contained or mainstreamed settings. The disciplinary practices used with this special population— and the issues involved in applying them — are quite different from those involved in disciplining regular education students, and discussion of these is outside the scope of this report.

The kinds of "treatments" applied in the research include an array of classroom management practices, policy structure, specific programs (such as
Assertive Discipline and Positive Approach to Discipline), counseling programs, the teaching of pro-social behavior, behavioral reinforcement practices, training in classroom management, cooperative learning, peer tutoring, corporal punishment, and in-or out of-school suspension.

The outcome areas of interest to researchers in this analyses include the incidence of on-task behavior, off-task behavior, misbehavior/disruption, delinquency, drug use, suspension, referrals, expulsion, drop outs, attendance, attitudes (towards school, self-as-learner, and school "robustness"), and pro-social behavior (such as helping others and practicing self-discipline).

In addition to the research references, the 17 times cited in the “Other References” section of the bibliography offer description of different philosophies of school discipline, information on the incidence of use of various disciplinary, discipline program descriptions, guidelines for implementation, and related matters.

2.21 SCHOOLWIDE DISCIPLINE
• Preventive discipline practices

When the unit of analysis is the entire school, researchers have most often conducted comparative studies of well-disciplined and poorly disciplined schools to identify critical differences in discipline practices. From this research has emerged a list of elements commonly found in safe, orderly, well-managed schools. The following components of preventive discipline are identified in the work of Duke (1989); Lasley and Wayson (1982); Short
Commitment, on the part of all staff, to establishing and maintaining appropriate student behavior as an essential precondition of learning. Well-disciplined schools tend to be those in which there is a school-wide emphasis on the importance of learning and intolerance of conditions which inhibit learning.

b) High behavioral expectations. In contrast to poorly disciplined schools, staff in well-disciplined schools share and communicate high expectations for appropriate student behavior.

c) Clear and broad-based rules. Rules, sanctions, and procedures are developed with input from students, are clearly specified, and are made known to everyone in the school. Researchers have found that student participation in developing and reviewing school discipline programs creates a sense of ownership and belongingness. Widespread dissemination of clearly stated rules understand what is and is not acceptable.

d) Warm school climate. A warm social climate, characterized by a concern students as individuals, is typical of well-disciplined schools. Teachers and administrators take an interest in the personal goals, achievements, and problems of students and support them in their academic and extracurricular activities.
e) A visible, supportive principal. Many poorly disciplined schools have principals who are visible only for "official" duties such as assemblies or when enforcing school discipline. In contrast, principals of well-disciplined schools tend to be very visible in hallways and classrooms, taking informally with teachers and students, speaking to them by name and expressing interest in their activities.

f) Delegation of discipline authority to teachers. Principals in well-disciplined schools take responsibility for dealing with serious infractions, but they hold teachers responsible for handling routine classroom discipline problems. They assist teachers to improve their classroom management and discipline skills by arranging for staff development activities as needed.

g) Close ties with communities. Researchers have generally found that well-disciplined schools are those which have a high level of communication and partnership with the communities they serve. These schools have a higher than average incidence of parent involvement in school functions, and communities are kept informed of school goals and activities.


What is known about the organization of orderly schools is that they are characterized by commitment to appropriate student behavior and clear behavior expectations, for students. Rules, sanctions, and procedures are discussed, debated, and frequently formalized into school discipline and
classroom management plans. To balance this emphasis on formal procedure, the climate in these organizations conveys concern for students as individuals. This concern manifests itself in a variety of ways, including efforts to involve students in school decision-making, school goals that recognize multiple forms of student achievement, and de-emphasis on homogeneous groupings.

Short (1988) underscores these findings: Research on well-disciplined schools indicates that a student-centered environment, incorporating teacher-student problem-solving activities, as well as activities to promote student self-esteem and belongingness is more effective in reducing behavior problems than punishment. Finally, Wayson and Lasley (1984) note that, in well-disciplined schools:

Rather than rely on power and enforce punitive models of behavior control, (staff) share decision-making power widely and so maintain a school climate in which everyone wants to achieve self-discipline.

- Enforcing school rules

Yet, even in school environments with excellent preventive discipline, problems still arise and must be addressed. Of the many practices in use, which ones have researchers identified as effective in remediating school discipline problems? Not surprisingly, the answer depends on the severity of the problems. For the discipline issues faced by most schools, research supports the use of the following practices, many of which are applicable at either the school-wide or classroom levels:
✓ Punishment, in some forms. Researchers (Cotton and Savard 1982, Docking 1982) have found punishment to be an effective method of remediating individual misbehavior and therefore improving school order if the punishment is:

✓ Commensurate with the offense committed. Draconian punishments are ineffective, as discussed further on.

✓ Perceived by the student as punishment. Punishments can sometime be too light—or even unintentionally reinforcing to students. Effective, frequently used punishments include depriving students of privileges, mobility, or the company of friends.

✓ Delivered with support. Students often need encouragement to improve their behavior and assistance in learning how to do so.

✓ Counseling, counseling services for misbehaving students are based on the assumption that target students lack insight and understanding regarding their own misbehavior. Positive outcome have been noted by researchers as a result of:

Observing and interviewing students to determine their awareness of their troublesome behavior and the meanings that it hold for them, providing information and instruction when necessary, setting needed limits, and insisting that students assume personal responsibility for their behavior and its consequences (Brophy 1983).
- **In-school suspension**: In-school suspension programs which include guidance, support, planning for change, and opportunities to build new skills have been demonstrated to be effective in improving individual student behavior and thus increasing school order (Allen 1981; Cotton and Savard 1932; Doyle 1989; Miller 1986).

- **Contingency contracting**: Research supports the cooperative development and use of contingency contracts, which specify the sanctions students will face if they do not behave in accordance with the terms of the contract (Allen 1981; Cotton and Savard 1982).

- **Home-based reinforcement**: Structures in which students are given rewards (e.g., Verbal, tangible, or privileges) and sanctions (e.g., loss of privileges, such as television time, snacks, or later bedtime) at home, based on their behavior at school, have been shown to improve student behavior (Atkeson and Forehand 1979; Leach and Byrne 1986).

Researchers have also looked at school environments, which also looked at school environments which are so fraught with disorder and danger that more broad-based approaches are called for to bring about real improvements in the school environment. In such settings, researchers have found the following strategies to be effective:

- **Organizational development approach**: Gottfredson (1988, 1989) and Gottfredson, Karweit, and Gottfredson (1989) have conducted several research projects in which instructional and discipline programs were
restructured, resulting in significant improvements in student behavioral and academic outcomes. In these projects:

- Curriculum and discipline policy review and revision were conducted, with input from all groups within the school, including students.
- Academic innovations such as study skills instruction and cooperative term learning were implemented.
- Climate innovations, such as school pride campaigns and expanded extracurricular activities, were instituted.
- Career-oriented innovations, such as career exploration programs and job-seeking skills programs, were added to the curriculum.
- Special services, such as counseling and monitoring of improvements, were provided to target students identified as having serious problems.
- Increasing parent involvement. Fotttfredson (1988, 1989) and others have found that increasing parent involvement is a critical element in improving order in troubles schools.

2.22 CLASSROOM MANAGEMENT AND DISCIPLINE

- Preventing classroom discipline problems

In 1970 J.S. Kounin wrote and published a new famous book titled Discipline and Group Management in Classrooms. Results of studies from the kindergarten to university levels were presented, with Kouin focusing particularly on findings from an observational study of 80 elementary classrooms. Undertaken to identify strategies and processes used in effectively and ineffectively managed classrooms, this study produced findings, which
have consistently received validation from later researchers. Defining effective managers as those teachers whose classrooms were orderly, had a minimum of student misbehavior, and had high levels of time-on-task, and ineffective managers as those whose classrooms lacked these qualities, Kounin found that effective and ineffective managers did not differ greatly in their methods for dealing with disruption. Instead, effective managers were found to be much more skilled at preventing disruptions from occurring in the first place. Kounin went on to identify the specific behaviors these effective managers engaged in to keep students focused on learning and to reduce the likelihood of classroom disruption. These included:

- "Withitness" – the teacher communicating to the children by his/her behavior that he/she knows what the students are doing and what is going on in the classroom.
- Overlapping – attending to different events simultaneously, without being totally diverted by a disruption or other activity.
- Smoothness and momentum in lessons – conducting smooth and brisk pacing and providing continuous activity signals or cues (such as standing near inattentive student or directing questions to potentially disruptive students)
- Group alerting – attempting to involve non-reciting children in recitation tasks and keeping all students "alerted" to the task at hand.
- Stimulating seatwork – providing students seatwork activities that have variety and offer challenge.
Research conducted during the past twenty years has underscored Kounin’s findings and elaborated them into a more detailed list of behaviors comprising effective classroom management. The following validated practices are identified in the work of Bowman (1983); Brophy (1983, 1986); CEDAR/PDK (1989); Emmer (1982); Emmer and Evertson (1981); Emmer, et al., (1983); Gettinger (1988); Gottfredson, Karweit, and Gottfredson (1989); Luke (1989); Moskowitz and Hayman (1976); Ornstein and Levine (1981); Sanford and Evertson (1981); Strother (1985); and Weber (1983):

- Holding and communicating high expectation for student learning and behavior. Through the personal warmth and encouragement they establish, effective manager/teachers make sure that students know they are expected to learn well and behave appropriately.

- Establishing and clearly teaching classroom rules and procedures. Effective managers teach behavioral rules and classroom routines in much the same way as they teach instructional content, and they review these frequently at the beginning of the school year and periodically thereafter. Classroom rules are posted in elementary classrooms.

- Specifying consequences and their relation to student behavior. Effective managers are careful to explain the connection between students’ misbehavior and teacher-imposed sanctions. This connection, too, is taught and reviewed as needed.

- Enforcing classroom rules promptly, consistently, and equitably. Effective managers respond quickly to misbehavior, respond in the same way at different times, and impose consistent sanctions regardless of the gender, race, or other personal characteristics of misbehaving students.
• Sharing with students the responsibility for classroom management. Effective managers work to inculcate in students a sense of belonging and self-discipline, rather than discipline as something imposed from the outside.

• Maintaining a brisk pace for instruction and making smooth transitions between activities. Effective managers keep things moving in their classrooms, which increases learning as well as reducing the likelihood of misbehavior.

• Monitoring classroom activities and providing feedback and reinforcement. Effective managers observe and comment on student behavior, and they reinforce appropriate behavior through the provision of verbal, symbolic, and tangible rewards.

In addition to this general, strongly supported list of practices associated with well disciplined classrooms, researchers have identified other approaches which are effective in establishing and maintaining positive, elderly classroom environments. For example, engaging in misbehavior is sometimes a response to academic failure, and some researchers and reviewers (e.g., Allen 1981; Cotton and Savard 1982; Gettinger 1988; and Lasley and Wayson 1982) have noted improvements in classroom order when marginal students are provided opportunities to experience academic and social success.

Anderson and Prawat (1983) and others have noted that many students simply do not perceive a connection between their level of effort and the academic or behavioral outcomes they experience. These students have what
psychologists call an "external locus of control", and do not believe in their own ability to influence events. Nor, oftentimes, do they have the skills to identify inappropriate behavior and move from inappropriate to appropriate behavior. Researchers have observed behavioral improvements in settings where students are taught to attribute their success or failure to their personal effort, and in which they (1) learn to check their own behavior and judge its appropriateness; (2) talk themselves through a task, using detailed, step-by-step instructions; and (3) learn and apply problem-solving steps when confronting classroom issues.

Brophy (1983), Gottfredson (1986, 1988), and others have also noted that the use of cooperative learning structures can increase student task engagement, acquaint students with the benefits of working together, and ease the tensions that sometimes arise among racial/ethnic groups- all of which are related to reductions in the incidence of misbehavior.

The work of others researchers (e.g., Ornstein and Levine 1981) has also revealed that it is beneficial for teachers to use humor to hold student interest and reduce classroom tensions and to remove distracting materials, such as athletic equipment or art materials, that encourage inattention or disruption.

Research focused on the beginning-of-the-year behavior of elementary and secondary teachers has shown that the above-mentioned effective management practices produce much more positive outcomes when they are enacted from the very first day of school. Research shows that teachers who are ineffective managers at the beginning of the year find it very difficult to
establish and maintain control in their classrooms later on (Emmer 1982; Emmer and Evertson 1980; Evertson, et al. 1983).

• Remediating Classroom Discipline Problems

These same researchers, together with Pestello (1989), also found that effective managers intervened more quickly when disruptions occurred than did ineffective managers, and their interventions got results more quickly.

What kinds of interventions for dealing with classroom misconduct are supported by research? Those whose work was consulted in preparation for this report have identified an array of effective approaches, some of which are similar to techniques used to prevent misconduct and, not surprisingly, are also similar to effective discipline practices identified at the school-wide level:

• Behaviour modification approaches. Many researchers (Brophy 1983, 1986; Cobb and Richards 1983; Cotton 1988; Crouch, Gresham, and Wright 1985; Docking 1982; McNamara, Harrop, and Owen 1987; and Moskowitz and Hayman 1976) have identified reinforcement (Verbal, Symbolic, or tangible) and effective in improving the classroom conduct of misbehaving students, researchers have found that the provision of reinforcement does not undermine students’ intrinsic motivation, provided the reinforcement is contingent on performance and given sparingly.

Contemporary behavior modification approaches involves students more actively in planning and shaping their own behavior through participation in the negotiation of contacts with their teachers and through exposure to training designed to help them to monitor and
evaluate their behavior more actively, to learn techniques of self-control and problem solving, and to set goals and reinforce themselves for meeting these goals.

- Group contingencies. The use of structure in which rewards and punishments are meted out to groups based on the behavior of individuals within those groups have been found effective in remediating misbehavior (Brophy 1983, 1986; Luke 1989).

- Pro-social skills training. Training in self-warness, values clarification, cooperation, and the development of helping skills has been successfully used to improve the behavior of misbehaving students.

- Peer tutoring. Greenwood, Carta, and Hall (1988) and other researchers have found that peer tutoring structures lower the incidence of misbehaviour in classrooms. Depending on the situation, students with behavior problems may serve as either tutors or tutees.

2.23 TEACHER TRAINING IN CLASSROOM MANAGEMENT

Having determined that the use of certain classroom management techniques makes for well-disciplined classroom environments, some researchers have turned their attention to the question of whether significant improvements in classroom discipline could be achieved through the provision of teacher training in these validated techniques. Research on the effects of teacher training includes work by Emmer, et al. (1983); Evertson (1985, 1989); Evertson, et al., (1983); Fitzpatrick and McGreal (1983); Mandlebaum, et al., (1983); and Stallings and Mohlman (1981).
Typically, training programs include learning activities and practice in the areas of:

- Organizing the room and materials
- Developing a workable set of rules and procedures
- Assuring student accountability
- Formulating and explaining consequences
- Planning activities for the first week
- Maintaining the management system
- Increasing instructional clarity
- Organizing instruction
- Adjusting instruction for special groups.

Such training programs have proven very successful in bringing about reductions of discipline problems in the classrooms of participating teachers.

2.24 DISCIPLINING DIFFERENT KINDS OF STUDENTS

As previously noted, students need to be taught what constitutes appropriate behavior, what the school and classroom rules are, and how to follow them. Obviously, this will be approached differently, depending upon the age/grade level of the students. Children below the fourth grade require a great deal of instruction and practice in classroom rules and procedures. Brophy (1976) notes:

Effective management, especially in the early grades, is more an instructional than a disciplinary enterprise. Effective managers socialize their
students to the student role through instruction and modeling. It is important that these teachers be consistent in articulating demands and monitoring compliance, but the most important thing is to make sure that students know what to do in the first place. With older students, researchers (e.g., Brophy 1983, 1986, Doyle 1989) have noted that the best results are obtained through vigilanty reminding students about the rules and procedures of the school and classroom and monitoring their compliance with them.

Researchers have also found that, whereas the developmental level of small children is such that they tend to regard all punishment as unfair and undeserved, older students generally do regard punishment for misbehavior as fair and acceptable, provided that the punishment "fits the crime".

Finally, some researchers have observed that students from lower socio-economic backgrounds sometimes need more detailed instruction regarding classroom rules and procedures than other students, in order to insure understanding and compliance. Sanford and Evertson (1981) conclude:

More and longer attention to orienting students to classroom procedures may more beneficial in low SES junior higher than in most junior high schools.

2.25 SPECIFIC DISCIPLINE PROGRAMS

Many educational program developers have responded to the prevalence of school discipline problems by preparing and marketing packaged programs which purport to bring about reductions in misconduct and consequent increases in school order. Research on the effectiveness of these programs is
not plentiful, much of it is technically flawed, and, unfortunately, findings are generally inconclusive. The following overview of programs and research findings could, therefore, be taken as tentative:

Reality Therapy (RT). William Glasser's Reality Therapy involves teachers helping students make positive choices by making clear the connection between student behavior and consequences. Class meetings, clearly communicated rules, and the use of plans and contracts are features. Researchers (Emmer and Aussiker 1989; Gottfredson 1989; Hyman and Lally 1982) have noted modest improvements as the result of this approach.

- A positive Approach to Discipline (PAD). PAD is based on Glasser's Reality Therapy and is grounded in teachers' respect for students and instilling in them a sense of responsibility. Program components include developing and sharing clear rules, providing daily opportunities for success, and in-school suspension for non-compliant students. Research (e.g., Allen, 1981) is generally supportive of the PAD program.

- Teacher Effectiveness Training (TET). The TET philosophy differentiates between teacher-owned and student-owned problems and proposes different strategies for dealing with them. Students are taught problem-solving and negotiation techniques. Researchers (e.g. Emmer and Aussiker 1989) find that teachers like the program and that their behavior is influenced by it, but effects on student behavior are unclear.

- Transactional Analysis (TA) within the context of counseling programs, students with behavior problems use terminology and exercises from
Transactional Analysis to identify issues and make changes. The notion that each person's psyche includes child, adult, and parent components is basic to the TA Philosophy. Such research as has been conducted (e.g., Cobb and Richards 1983) has found the TA counseling approach beneficial.

- Assertive Discipline (AD). First publicized and marketed in 1976 by developer Lee Canter, Assertive Discipline is a well-respected and widely used program. According to Render, Padilla, and Krank, over half a million teachers have received AD training (1989). AD focuses on the right of the teacher to define and enforce standards for student behavior, clear expectations, rules, and a penalty system with increasingly serious sanctions are major features. Some research (e.g., Mandlebaum, et al. 1983; McCormick 1987) is supportive, but most is inconclusive about the effectiveness of the AD approach (Emmer and Aussiker 1989; Gottfredson 1989; and Render, Padilla, and Krank 1989).

- Adlerian approaches. Names for psychiatrist Alfred Adler, “Adlerian approaches” is an umbrella term for a variety of methods which emphasize understanding the individual’s reasons for maladaptive behavior and helping misbehaving students to alter their behavior, while at the same time finding ways to get their needs met. These approaches have shown some positive effects on self-concept, attitudes, and locus of control, but effects on behavior are inconclusive (Emmer and Aussiker 1989).
• Student Team Learning (STL). Student Team Learning is a cooperative learning structure and, as such, is an instructional rather than a disciplinary strategy. Its use, however, appears to have a positive effect upon the incidence of classroom misbehavior (Gottfredson 1989).

While no one program appears to be the answer to school discipline issues, all of those in the above listing include components, which have been validated as effective. As Wayson, et al. (1982) point out in their summary of the discipline practices of effective schools, these schools generally did not use packaged programs; instead, they either developed their own programs or modified commercially available program to meet the needs of their particular situation.

2.26 INEFFECTIVE DISCIPLINARY PRACTICES

Research investigations, which have yielded information on effective disciplinary practices have also produced findings about ineffective practices. It is important for educators to be aware of the strategies research has shown to be ineffective, in part because this knowledge can assist them in planning local programs, and in part because, unfortunately, some of these practices continue to be widely used. Ineffective practices include:

• Vague or unenforceable rules. The importance of clear rules becomes obvious when observing, as researchers have, the ineffectiveness of "rules" such as, "be in the right place at the right time" (Doyle 1989; Gottfredson and Gottfredson 1985).

• Ambiguous or inconsistent teachers responses to misbehavior. When teachers are inconsistent in their enforcement of rules or when they react in inappropriate ways (such as lowering students' grades in response to misbehavior), classroom discipline is generally poor (Gottfredson 1989; Gottfredson and Gottfredson 1985).

• Punishment which is excessive or which is delivered without support or encouragement for improving behavior (Cotton and Savard 1982; Lovergrove, et al. 1983). Among the kinds of punishment that produce particularly negative student attitudes are public punishment (Elliot 1986) and corporal punishment.

• Corporal punishment: Most of the literature on corporal punishment is unrelated to research on effectiveness. As Doyle (1989) points out, most writers either ignore or assume the efficacy of this highly controversial practice, and go on to discuss it from a moral perspective. Writers (e.g., Doyle 1989; Docking 1982) point out, for example, that racial and ethnic minority students receive more corporal punishment in school settings than other students.
Recently, however, more researchers have studied the effectiveness of corporal punishment in reducing misbehavior and have found that, in addition to the moral and psychological arguments against its use, it is indefensible on ground of efficacy. Researchers (e.g., Docking 1982; Doyle 1989; Maurer and Wallerstein 1984) have found that:

- The results of corporal punishment are unpredictable.

- Even when it is successful at inhibiting inappropriate behavior, corporal punishment still doesn’t foster appropriate behavior.

- Corporal punishment is sometimes unintentionally reinforcing since it brings attention from adults and peers.

- Corporal punishment often creates resentment and hostility, making good working relationships harder to create in the future.

- Corporal punishment is related to undesirable outcomes, such as increased vandalism and dropping out.

- Out-of-school suspension. Once again, minority students are over represented in out-of-school suspension rates (Doyle 1989; Slee 1986). Moreover, research does not support the use of out-of-school suspension. As Slee points out, suspension doesn’t help the suspend student, nor does it help the other students, because school staff simply get rid of troublesome students rather than changing the school environment in such a way as to prevent/reduce discipline problems.
Finally, as researcher William Wayson underscored during a telephone conversation with the present author, over 90 percent of suspensions occur over behaviors, which are more irritating and annoying than truly serious. Wayson noted that discipline policies should be written and enforced in such a way that suspension, if it is used at all, is not used for these less-serious infractions.

2.27 PERSPECTIVE ON IMPROVING SCHOOL AND CLASSROOM DISCIPLINE

School personnel seeking to improve the quality of discipline in their schools and classrooms are encouraged to follow the guidelines implicit in the discipline research. These include:

- At the school level
  1. Engage school-and community-wide commitment to establishing and maintaining appropriate student behavior in school and at school-sponsored events.
  2. Establish and communicate high expectations for student behavior.
  3. With input from students, develop clear behavioral rules and procedures and make these know to all stakeholders in the school, including parents and community.
  4. Work on getting to know students as individuals; take an interest in their plans and activities.
  5. Work to improve communication with and involvement of parents and community members in instruction, extracurricular activities, and governance.
6. If commercial, packaged discipline programs are used, modify their components to meet your unique school situation and delete those components, which are not congruent with research.

7. For the principal/Headmaster/Headmistress.

8. Increase your visibility and informal involvement in the everyday life of the school; increase personal interactions with students.

9. Encourage teachers to handle all classroom discipline problems that they reasonably can; support their decisions.

10. Enhance teachers' skills as classroom managers and disciplinarians by arranging for appropriate staff development activities.

- At the classroom level

11. Hold and communicate high behavioral expectations.

12. Establish clear rules and procedures and instruct students in how to follow them; give primary-level children and low-SES children, in particular, a great deal of instruction, practices, and reminding.

13. Make clear to students the consequences of misbehavior.

14. Enforce classroom rules promptly, consistently, and equitably from the very first day of school.

15. Work to instill a sense of self-discipline in students; devote time to teaching self-monitoring skills.

16. Maintain a brisk instructional pace and make smooth transitions between activities.
17. Monitor classroom activities and give students feedback and reinforcement regarding their behavior.

18. Create opportunities for students (particularly those with behavioral problems) to experience success in their learning and social behavior.

19. Identify those students who seem to lack a sense of personal efficacy and work to help them achieve an internal locus of control.

20. Make use of cooperative learning groups, as appropriate.

21. Make use of cooperative learning groups, as appropriate.

22. Make use of humor, when suitable, to stimulate student interest or reduce classroom tensions.

23. Remove distracting materials (athletic equipment, art materials etc.) from view when instruction is in progress.

- **When discipline problems arise**

24. Intervene quickly; do not allow behavior that violates school or classroom rules to go unchecked.

25. As appropriate, develop reinforcement schedules and use these with misbehaving students.

26. Instruct students with behavior problems in self-control skills; teach them how to observe their own behavior, talk themselves through appropriate behavior patterns, and reinforce themselves for succeeding.

27. Teach misbehaving students general pro-social skills-self-awareness, cooperation, and helping.
28. Place misbehaving students in peer tutoring arrangements, have them serve either as tutors or tutees, as appropriate.

29. Make use of punishments which are reasonable for the infractions committed; provide support to help students improve their behavior.

30. Make use of counseling services for students with behavior problems; counseling should seek the cause of the misconduct and assist students in developing needed skills to behave appropriately.

31. Make use of in-school suspension programs, which include guidance, support, planning for change, and skill building.

32. Collaborate with misbehaving students on developing and signing contingency contracts to help stimulate behavioral change; follow through on terms of contracts.

33. Make use of home-based reinforcement to increase the effectiveness of school-based agreements and directives.

34. In schools which are troubles with severe discipline problems and negative climates, a broad based organizational development approach may be needed to bring about meaningful change; community involvement and support is critical to the success of such efforts.

- **Ineffective discipline practices**

35. Avoid the use of vague or unenforceable rules.

36. Do not ignore student behavior which violates schools or classroom rules; it will not go away.
37. Avoid ambiguous or inconsistent treatment of misbehavior.

38. Avoid draconian punishments and punishments delivered without accompanying support.

39. Avoid corporal punishment.

40. Avoid out-of-school suspension whenever possible. Reserve the use of suspension for serious misconduct only.

The strength of the research base supporting these guidelines suggests that putting them into practice can help administrators and teachers to achieve the ultimate goal of school discipline, which, as stated by Wayson and Lasley (1984), is “to teach student to behave properly without direct supervision.”

2.28 WHEN DO TRENDS IN STUDENT BEHAVIOR DEMAND SCHOOL-WIDE POLICIES AND PLANS?

How can we examine the school environment to see what positive changes we can make to a school’s climate or culture? What tools are best suited to assessing how students and teachers view their school’s climate or context for learning?

- Systematic school improvement to meet changing student needs

To meet the needs of increasingly diverse student populations and the challenges of accountability-driven education systems, they mental health and education professionals have attempted to broaden the scope of their practice to include systemic prevention and intervention efforts. Ecological models have been proposed for the provision of educational services that embrace this
systematic focus (e.g., Sheridan & Gutkin, 2000). Within an ecological framework, students' behavioral difficulties demand an awareness of contextual variables (e.g., learning environment, community resources, and home context), as well as students' intra-individual characteristics. In their attempts to remediate and treat students' social-emotional and behavioral difficulties, practitioners are confronted with many extraneous factors that are difficult to address or rectify (e.g., families' socio-economic students, community safety and crime, and individual students' predisposition to disability and mental illness). School and classroom contexts, however, are factors that educators and communities can enhance or restructure to better meet students' needs (Lehr & Christenson, 2002). Although researchers in school psychology and special education have created measures of classroom environment and interaction, researchers have generally given less attention to measure of school context. This is unfortunate because classrooms, nested within schools, have climates that are directly or indirectly influenced by wider school context (Anderson, 1982). By understanding and evaluating characteristics of the larger school context, educators can become aware of the following:

- School-wide protective or risk factors that may influence intervention outcomes.
- Resources within the larger school community to address students' needs.
• **Evaluation school climate and school culture**

The data that researchers have collected in effectiveness studies of school-wide behavior interventions have included the number and kinds of discipline referrals, school demographic information, school vandalism costs, and behavioral observations in classrooms (Sprague *et al.*, 2001). Certainly, these data are essential for demonstrating the effectiveness of a school’s implementation effort, but they may not provide a complete picture of the changes required and produced by school-wide behavioral interventions. Fullan and Steigelbauer (1991) suggested that educators need to attend to the phenomenology of change—that is, how people actually experience change. The school climate and school culture measures described in this article are vehicles for achieving this goal, providing policy-makers and practitioners with methods to collect information on stakeholders’ perspectives and “sense-making” regarding school-wide behavior intervention (Spillane *et al.*, 2002; “Theoretical Foundations for Evaluating School Context”).

• **School climate instruments**

Most school climate measures are survey instruments completed by teachers, students, and school administrators. The Comprehensive Assessment of School Environments (CASE; National Association of Secondary School Principals, 1986), the organization Health Inventory (OHI; Hoy & Sabo, 1998; Hoy *et al.*, 1991), and the organizational climate Descriptive Questionnaire (OCDQ; Hoy & Sabo, 1998; Hoy *et al.*, 1991) are three school climate instruments available to practitioners. The Comprehensive Assessment of
Review of Relevant Literature

School Environments (CASE). The CASE is a product of the Task Force on School Climate, convened by the National Association of Secondary School Principals (NASSP) in 1982. Task force members conducted an extensive review of research and instrumentation concerning the construct of school climate. This review process led to the creation of an extensive model of the components of school environments, which subsequently formed the foundation for development of the Comprehensive Assessment of School Environment-Information Management System (CASE-IMS):

- Instruments for assessing 34 input, mediating, and output variables of a school environment.
- Computer software for scoring response sheets and for interpreting data.
- Procedures for predicting the effect of alternative paths of action on school outcomes.
- Suggested interventions for positively affecting selected variables.

The CASE school Climate Survey represents only one mediating variable within the larger CASE-IMS evaluation framework. The CASE school Climate Survey consists of 55 items and is administered to students, teachers, and parents to assess their perceptions about 10 dimensions of school climate. You can administer the School Climate Survey alone or as part of the larger CASE evaluation package that includes three components:

- Satisfaction Surveys administered to parents, teachers, and students.
- Teacher Report Forms for collecting information about teachers' perceptions of school and district leadership.

- Student Report Forms for collecting information about students' academic self-concepts. Evidence of the reliability of the school Climate Survey is adequate.

Internal consistency co-efficients for the surveys range from .63 to .92 and test-retest coefficients range from .63 to .92. Unfortunately, the technical manual provides no criterion-related evidence for the validity of the CASE School Climate Scale differentiates between different school environments or reflects improvements in climate brought about by intervention efforts (Allen, 1992; Leong, 1992). The CASE-IMS represents a promising method for measuring a variety of components that contribute to school effectiveness. Within the context of this system, inferences made from results on the CASE School Climate Surveys could provide important information for school reform efforts. Until additional evidence of construct and consequential validity is available, however, you should interprets CASE results with caution.

Organization Health Inventory (OHI) and Organizational Climate Descriptive Questionnaire (OCDQ) Developed by Hoy and his colleagues, the OHI and OCDQ have several technical and practical features that enhance their appeal for educators and program evaluators. For example, both the OHI and the OCDC have separate instruments for use in elementary, middle, and high schools. Although the instruments for each age group contain many of the same items and scales, they also have features that reflect the differences between
school environments and organizations at the different grade levels. Most school climate measures are survey instruments completed by teachers, students, and school administrators.

In his seminar work, Brofenbrenner (1979) provided the following definition of the ecological orientation:

The ecology of human development involves the scientific study of the progressive, mutual accommodation between an active, growing human being and the changing properties of the immediate settings in which the developing person lives, as this process is affected by the relations between these settings, and by the larger contexts in which the settings are embedded. Using Apter and Conoley's (1984) framework, Sheridan and Gutkin (2000) modified the pivotal assumptions of ecological theory to address students within the contexts of classrooms, schools, and communities.

**Assumption 1:** Each student is an inseparable part of a small social system.

**Assumption 2:** Disturbance is not viewed as a disease located within the body of the student but, rather, as discordance (a lack of balance) in the system.

**Assumption 3:** Discordance may be defined as a disparity between an individual's abilities and the demands or expectations of the environment—"failure to match" between child and system.

**Assumption 4:** The goal of any intervention is to make the system work.

If we embrace these assumptions, then the need for techniques to measure and evaluate school context becomes apparent. Clearly, educators
cannot “make the system work” without examining the influence of the school context on a particular student, the student’s teachers, and his or her classmates.

- **Contrasting constructs: Climate versus culture**

  Comprehensive reviews of school climate measures (Anderson, 1982; Lehr & Christenson, 2002) have addressed constructs and models used in school context research. The differences between the terms setting, atmosphere, environment, culture, and climate are both subtle and important. Creating a positive school context, however, is often a primary objective of school reform and restructuring efforts (e.g., Positive Behavior Support or the Yale Child Study Center School Development Program). A survey of the school context research suggests that climate and culture are the generally preferred constructs for researchers’ investigations of school context.

- **Definitions of School Climate**: Researchers have often described climate as a school’s personality; some early conceptualizations of organizational climate were essentially adaptations of individual personality theory (Hoy & Sabo, 1998). Current measures of school climate grew out of a body of research on organizational climates in industry and university contexts. Early work by March and Simon (1958) and Argyris (1964) focused on the characteristics of business organizations that influenced employee morale, productivity, and commitment (Anderson, 1982). Stern's (1964) research in university settings concerning “press” (i.e., students’ perceptions of
environmental pressures on students exerted by a given school) suggested:
(a) students’ collective perceptions of school climate do reflect objective reality; (b) students’ individual perceptions of school climate are not merely reflections of their personal characteristics; and (c) students’ descriptions of the school climate can be separated from their attitudes (Anderson, 1982).

Thus, school climate can be defined as the pervasive quality of a school environment experienced by students and staff, which affects their behaviors (Hoy & Sabo, 1998). According to Haynes, Emmons, and Ben-Avie (1997), school climate refers to “the quality and consistency of interpersonal interactions within the school community that influence children’s cognitive, social, and psychological development”. To gather information on the “personality” of schools, measures of school climate tend to focus on individuals’ behaviors and their perceptions of the patterns of communication and interactions within the school context.

- Definitions of School Cultures: Reflecting the diversity of definitions for the term in the anthropological literature, definitions of school culture vary. (according to Berger, 1995), “it has been estimated that anthropologists have advanced more than 100 definitions of culture”. Research on organizational culture dates back to studies of business and industry in the 1930s and 1940s. Bernard (1938) and Mayo (1945) originally conceptualized workplace culture as the “norms, sentiments, values, and emergent interactions” of an organization. School culture can be defined as
Review of Relevant Literature

"the way we do things around here" and consists of the organization's shared beliefs, rituals, and ceremonies, and patterns of communication (Deal & Kennedy, 1982). School culture represents the underlying assumptions and beliefs developed through earlier problem solutions, which help to define reality within an organization (Angelides & Ainscow, 2000). In their definition, Hoy, Tarter, and Kottkamp (1991) attempted to synthesize the various definitions of school culture and suggest it is "a system of shared orientations (norms, core values, and tacit assumptions) held by members, which holds the unit together and gives it a distinct identity".

- School culture is generally more abstract than theoretical foundations for evaluating school context

The three OHI instruments consist of 37 to 45 items (depending on the version) that measure teachers' and administrators' perceptions about the organizational health of their school. The items are organized into five to seven distinct scales, each of which demonstrates an acceptable level of reliability (internal consistency co-efficients ranged from .87 to .95). Administration of the OHI takes about 10 minutes and can be completed by each respondent independently. Moreover, an index of school health can be computed by summing the standardized scores for each of the individual scales (Hoy & Sabo, 1998). Unfortunately, the OHI does not include instruments for measuring students' perceptions of school health. Hoy and his colleagues, however, have conducted extensive research to provide construct and criterion-
related evidence for the validity of the OHI. Moreover, some studies have examined the contribution of organizational health to overall school functioning. Similar to the OHI, three separate versions of OCDQ exist to measure teachers' and administrators' perceptions of school climate at the elementary, middle, and secondary school levels. The questionnaires consist of 34 to 50 items (depending on the version) that ask respondents to rate the extent to which statements (e.g., "Teachers help and support each others") are true of behavior in their school. Individual items contribute to five or six scales that describe teacher and administrator behavior. Potential users should note the relatively inadequate internal consistency for some of the scales on the middle and secondary school versions of the OCDQ (e.g., disengaged-elementary internal consistency co-efficient = 0.75; committed-middle school (0.60); Disengaged-middle (0.46); and Intimate-Secondary (0.71). for the elementary and middle school versions of the OCDQ, factor analysis confirmed the existence of a second-order factor structure. For example, on the OCDQ for middle schools, one factor was comprised of measures of principal behavior (i.e., supportive, Directive and Restrictive), while the other factor consisted of measures of teacher behavior (i.e., Collegial, Committed, and Disengaged). The factor structure was similar for the elementary version of the OCDQ with the Intimate Scale replacing the committed scale in the factor that describes teacher behavior. These second-order factors contribute to the equation of Principal Openness and Teacher Openness Indices. The resulting standard scores for Teacher Openness and Principal Openness, which range from 200 to
800, are used to determine whether the school climate is best described as Open, Engaged, Disengaged, or Closed. Because of the complex organization of most secondary school environments, the scales on the OCDQ for secondary schools environments do not confirm to the same second-order factor structure as those on the versions for elementary and middle schools. Therefore, the Openness Index for secondary schools can be determined using the standard scores from four of the five sub-scales. The remaining scale standard score can be used as an index of Intimacy. Similar to their work with the OHR, Hoy and colleagues have subsequently used the three versions of the OCDQ in numerous studies that provide construct-and criterion-related evidence of the OCDQ's validity. Additional studies have examined the contribution of organizational climate (i.e. openness) to overall school achievement. For example, Teacher Openness \( r = 0.52 \) and Principal Openness \( r = 0.43 \). Indexes were significantly correlated to a measure of academic press (i.e., the amount a school stressed academic performance and students respected other students who were academically successful; Hoy et al., 1991).

- **Evaluating school culture**

  Investigators of school culture have typically used ethnographic and participant observation methods to gather information about school communities and their members. Although qualitative research methods may
not attain the reliability and validity of the questionnaires used in School Climate Research, school climate, focusing less on individual’s behavior and more on the assumptions, interpretations, and expectations that drive individual’s behaviors within the school context.

- **Climate or Culture**: which construct is more meaningful Evaluating Schoolwide Behavior Interventions?

  In their review of the research on school climate and school culture, Hoy and Sabo (1998) indicate their preference for using measures of school climate and suggest the following advantage: (a) an emphasis on survey technology and statistical analysis; (b) the utility of schools climate as an independent variable for explaining student outcomes and staff performance; and (c) school climate measures’ ability to produce a “snapshot” of organizational and individual behavior for the expressed purpose of managing and changing that behavior. For professionals serving as outside consultants or those attempting to complete large-scale program evaluations with numerous variables, school climate measures are probably the more reasonable choice. However, when considering services within a particular school setting, the evaluation techniques typically used within investigations of school culture may provide more useful data for facilitating change. (Figure 1 provides a user-friendly overview of the advantages and disadvantages of each approach). As with any assessment, practitioners interested in assessing school context are advised to consider their “referral questions” to facilitate selection of an appropriate assessment technology.
• Theoretical Foundations for Evaluating School Context.

• Evaluating School Context: Advantages and Disadvantages of the different approaches advantages.
  ✓ Part of a larger information management system that includes 34 variables regarding school environment.
  ✓ Computerized software available for scoring and data management.
  ✓ Includes student, parent, and teacher surveys.
  ✓ Adequate reliability information provided by developers.

• Disadvantages
  ✓ Only available for secondary schools (Grades 6-12)
  ✓ No information on construct and consequential validity provided by developers.

• Advantages
  ✓ Time-efficient administration (i.e., approximately 10 minutes to complete).
  ✓ Adequate reliability and validity provided by developers.
  ✓ Research conducted by developers suggests the measure is related to school effectiveness.
  ✓ Separate measures for elementary, middle, and high schools.

• Disadvantages
  ✓ Only includes measures of teacher and administrator-student and parent questionnaires are unavailable.
Advantages

✓ Provides an opportunity for reflection on the assumptions and beliefs that guide student, teacher, or administrator behavior.

✓ Utilizes the skills and knowledge of practitioners with training in conducting classroom observations (e.g., school psychologists, administrators, and special educators).

Disadvantages

✓ The definition of a “critical incident” is not well defined.

✓ The observation and evaluation process has the potential to damage collegial relationships- An outside evaluator may need to complete the process.

Advantages

✓ Extensive professional literature on the use of Quality Improvement Tools is available.

✓ Provides a series of techniques for assessing and addressing “value gaps” (e.g., differences between a school’s culture and the goals of the behavior intervention program).

✓ Process provides opportunities for evaluators to probe stakeholders’ responses and for stakeholders to participate in evaluating the meaning information produced.

Disadvantages

✓ Organizing and conducting focus groups can be time consuming.
• Evaluating school climate

Comprehensive Assessment of School Environments (CASE)-School Climate Survey Organization Health Inventory (OHI) and Organizational Climate Descriptive Questionnaire (OCDQ) Evaluating School Culture Critical Incident Analysis Quality Improvement Tools interviews and focus groups assessments may provide useful information that assists in analyzing school context. Climate questionnaires directly assess descriptions, indirectly assess patterns of relationship among these descriptions, and do not assess organizational members' interpretations of events. Investigation of school culture focuses on assessing the meaning individuals ascribe to interactions and events (Rentsch, 1990). Unfortunately, may qualitative research methods demand extensive observation and participation within the school context. This level of commitment may be unreasonable for many practitioners. Two approaches for data collection and analysis may represent less time intensive methods for evaluating school culture: Critical Incident Analysis and Quality Improvement Tools:

• Critical incident analysis

The term critical incident was originally used by historians to describe turning points in the life of a person, an institution, or social movement (Tripp, 1993). Angelides and Ainscow (2000) proposed that by observing and analysing critical incidents in classrooms, schoolyards, and teachers’ lounges, researchers can “uncover” underlying assumptions and beliefs that guide
behavior within a school. In a school context, critical incidents do not need to be monumental or "turning point" events. Instead, Angelides and Ainscow (2000) suggested that critical events can be relatively minor incidents—everyday events that happen in every school and in every classroom. Events attain "critically" via the justification, the significance, and the meaning given to them by participants. Although this definition is appealing in its universality, without further elaboration the classroom observer would be at a loss to separate critical incidents from everyday occurrences. Therefore, Angelides and Ainscow (2000) recommended the following procedure for identifying and analyzing critical incidents. When something occurs in the classroom that surprises or intrigues the observer, it should be recorded as a critical incident. The observer proceeds with an analysis, using the following "probing questions":

- Whose interests are served or denied by the actions of this critical incident?
- What conditions sustain and preserve these actions?
- What power relationships between principal, teachers, pupils, and parents are expressed in this incident?
- What structural, organizational, and cultural factors are likely to prevent teachers and pupils from engaging in alternative ways (Angelides & Ainscow, 2000, p. 158)? Whenever possible, participants (e.g., teachers and pupils) should be interviewed about their perceptions and explanations of the critical incident. Following the interview, the observe
synthesizes the information from the interviewees' multiple perspectives. This information is used to refine the observer's own analysis of the critical event. When a collection of critical events have been recorded and analyzed, the observer should present his or her findings to the school staff and encourage reflection about the information. The staff can use the following questions to guide this discussion:

✓ What does this account tell us about ourselves?
✓ What can we learn from this analysis?
✓ What does this information point to about the nature of the way in which we work together?
✓ Does this information help us to see things that we could change (Angelides & Ainscow, 2000, p. 160)? Angelides and Ainscow (2000) suggested that engaging in these reflective discussions could assist school staffs in identifying possible interventions for improving their school cultures. They caution, however, that presentations of critical incidents should be both sensitive and professional in tone to protect the feelings and reputations of involved parties. Critical Incident Analysis is a potentially appealing technique for practitioners who have extensive training and experience with conducting classroom observations.

Angelides and Ainscow (2000), however, recommended that schools hire an "outside" observer to complete the critical event observations. This approach seems wise because critical incidents have the potential to present teachers and their classrooms in a less-than-flattering light, leading to
potentially strained professional relationships. Quality Improvement Tools
Quality Improvement tools represent a more appropriate evaluation techniques
for practitioners who desire information about their own school’s culture. Although many practitioners may not be familiar with the Quality Improvement tools, these procedures are not new. In fact, their development can be traced back to Deming’s work with the Japanese Union of Scientists and Engineers (JUSE) in post-World War II Japan, and followed through the subsequent Total Quality Management (TQM) “revolution” in both Japanese and American businesses (Brassard, 1986). The application of Quality Improvement processes to educational decision making has been prompted by the need for educators to become more cost efficient and solution originated in their evaluation of schools’ work environments and cultures. Snyder (1988) defined school culture as “the collective work patterns of a system (or school)… as perceived by its staff members” (Johnson, Snyder, Anderson & Johnson, 1996). The Quality Improvement Evaluation process provides practitioners with tools to examine staff members’ attitudes and beliefs about the school’s work patterns and organizational structure. Detert, Louis, and Schroder (2001) offered a series of propositions that attest to the importance of considering a school’s culture during implementation of the Quality Improvement process. School change facilitators need to address “value gaps” between a reform program and the underlying school culture. Moreover, school reformers should deal not only with the aggregate of stakeholder values in relation to an existing culture, but also to how individuals’ values align with the dominant values of
the school community, and how potential incongruities affect their well-being and productiveness (Detert et al., 2001). Therefore, one of the primary needs in most school improvement processes is the investigation of the school culture and its underlying values and the design of subsequent interventions to align individuals’ values and needs with those of the change initiative. Recruiting focus groups that represent each group of key stakeholders and completing a series of the Quality Improvement tools with each group is one method for gathering important information about current school culture and possible strategies for intervention. Unlike school climate questionnaires, the Quality Improvement process allows evaluators to probe participants’ responses and engages in collectively drawing conclusions. A potential drawback to using the Quality Improvement tools is the time commitment required to recruit and organize representative focus groups.

- **Final consideration**

  Best practices for Evaluating School Context Practitioners interested in evaluating school context are confronted with a plethora of options, including written questionnaires, ethnographic methods, and focus groups. The following guidelines are intended to assist the decision-making process when selecting a strategy for evaluating school climate or school couture.

  Consider the questions that need to be answered. Within the domain of school climate, questionnaires are based on different theories and definitions of organizational climate. Therefore, practitioners should read user manuals and
supplemental information to make certain that survey instruments measure the constructs of interest. Moreover, survey respondents, observation subjects, and interview participants should include members of the target group of the evaluation. For example, if the school climate's contribution to student behavior and connectedness are areas of interest, practitioners should use techniques that directly assess students' perceptions of the school climate.

Use multiple methods of assessment. Information about school climate and school culture may be more meaningful within the context of data gathered from multiple sources. For example, results from school climate measures can be correlated with student achievements, attendance and discipline data, or measures of teacher satisfaction and sense of efficacy to provide a more meaningful picture of school functioning. Observations and interviews from school culture evaluations can be analyzed with behavior referrals and other artifacts that provide evidence of the themes and issues identified in the examination of school culture. When evaluating the effects of systematic interventions on school contexts, educators should attempt to follow the carpenter's rule: "Measure twice, out once."

Consider combining measures of climate and culture. Information collected from school climate surveys can be enriched with interviews and observations. Surveys and questionnaires are useful for assessing descriptions of events, but they do not assess the personally relevant meanings attached to events. To understand meaning in school, it is necessary to assess
interpretations of students, staff, and other community members (Rentsch, 1990). The combination of quantitative and qualitative methods can provide more meaningful information about school contexts to guide systematic prevention and intervention efforts, resulting in improved outcomes for students.

2.29 LOOKING AT CLASSROOM MANAGEMENT THROUGH A SOCIAL AND EMOTIONAL LEARNING LENS

Social and emotional learning (SEL) is an approach that teaches self-regulation, self-monitoring, and social skills in school settings. SEL has been shown to be an effective method of reducing negative social interactions and increasing academic achievement. The experiences of one intermediate school principal and her staff as they used SEL strategies to change the climate and culture of their highly diverse school population. Classroom management is discussed as the vehicle used by the teachers, while the principal aligned school procedures with the Philosophy of SEL.

Imagine a Classroom where students are greeted every day by their teacher and classmates, where there is a corner called the “Turtle Zone” for children to go to when they feel they do something that will get them into trouble. Envision a school secretary handing two students a “Problems Solving Diary” to complete after being sent to the office for fighting during recess. Their answers will become the basis for their discussion with the principal and the consequences they will face for their actions. Well, I don’t have to imagine it; I lived it. It id not happen by coincidence. It took hard work, persistence, and
a change in the way teachers, staff, and administrators thought, acted, and believed in themselves. It took an understanding of a concept called Social and Emotional Learning (SEL).

In 1992 the principal of a school that was being reconfigured from a K-5 building to a 4-5 intermediate school in response to a state desegregation mandate. The staff, it was focused our energies on making sure furniture, textbooks, equipment, supplies, and classrooms were ready when school opened in September. What would not understand was that was also needed to focus on planning and preparing for the new population of students, for the diversity among them, and, in many cases, the cultural gap between them and ourselves. The realisation that planning was needed because “inter-group contact may reinforce previously held stereotypes and increase intergroup hostility unless the contact situation is structured in such a way that provides equal status for minority-and majority-group members and provides strong institutional support for positive relations” (Schofield’s 1978 study as cited in Norris, 1998).

The school’s student population went from being approximately 42% minority to 56% between June and September. While African Americans made up the largest minority group, they were closely followed by Asian students (the largest population in this group being students from India). Beyond race and ethnicity, it was found that the greatest diversity was in the behaviors and attitudes some students brought with them. Negative behaviors such as arguing,
name calling, teasing, and even fighting did not tend to manifest themselves during instruction time in class; however, in the unstructured times before or after school, on the bus lines, and at recess, there were incidents that spilled over into the classroom. Students who looked different or spoke different or spoke differently from the majority of their peers experienced more victimization than others. Teachers used class time to settle disputes and soothe hurt feelings. Some parents living near the building became alarmed by what they perceived as daily fights. Our first year together was a real learning experience. There was much that would come to understand over the next few years.

What it was learned and how it was changed. It will present the concept of Social and Emotional Learning and show how our school staff used this approach to move closer to creating the kind of community where everyone felt safe, valued, and affirmed.

• Social and emotional learning

Social and Emotional Learning (SEL) is an approach that teaches individuals to recognize, regulate, and express the social and emotional aspects of their lives so they can successfully manage life tasks. Some people have the ability to be naturally attuned to their emotions and those of others, but some do not. Fortunately, unlike IQ, the abilities that comprise "emotional intelligence" can be acquired and/or strengthened. SEL skills are designed to created attitudes, behaviors, and cognition's that promote healthy social
relationship, personal well-being, and academic achievement. SEL is not a program, although there are hundreds of programs that address SEL issues. Leaders in the field of SEL believe that schools need to take a more programmatic approach where SEL behaviors permeate every part of school life – the policies, curricula, instruction, and interactions of all who work and learn there (Elias, Arnold, & Hussey, 2003).

In 1995, Goleman published a book that has had a major impact on the field of education. Emotional Intelligence: Why it can matter more than IQ connected brain research learning, extended Gardener’s theory of multiple intelligence, and re-energized the character educational movement. Goleman suggested that cognition alone is not enough for success in the classroom or, even more importantly, in life. Building on the work of Mayer and Salovey (1997), Gardner (1983), and many others, Goleman identified skills that children and adults need if they are to be able to navigate successfully through this very complex world in which we live. Two years later a group from the collaborative for academics social and emotional learning (CASEL), led by Maurice Elias, published Promoting Social and Emotional Learning: Guidelines for Educators (1997), and monograph that illustrated how emotional intelligence skills mapped onto schools. It identified 37 schools across the country that chose to address social intervention and prevention programs (e.g., drug awareness and prevention, AIDS education, delinquency, character education, and violence prevention) through a comprehensive programmatic
approach. In these schools, respect, responsible behavior, sound decision making, and effective problem solving became integral parts of the culture. They from the core of social and emotional learning.

An effective comprehensive approach to SEL calls for a synthesis of all classroom and school-wide programs so educators and students see the commonality among themselves and begin to make a concerted effort toward achieving the goals these programs were intended to reach. Table 1 shows a list of the essential components of an SEL approach. The components are not new ideas; rather, they are a refocusing on what effective schools and teachers have known and done for decades. If we recognize that schools are social and emotional places and we are social and emotional beings, then we must place emphasis on more than our cognitive brain. An effective education must teach to the whole brain (Elias et al. 2003).

Effective classroom management research shows that any successful change that is to take place at the school level is directly related to the skill and ability of the teachers (Darling-Hammond, 1996; Fitzgerald & Bass, 1997). The classroom climate they establish for themselves and their students greatly affects the learning process. Of critical importance among the many roles that teachers play is that of creating a positive, supportive classroom environment based on clear and well-organized management plan. Well-organized classroom management plans establish the parameters for the physical, social, emotional, and intellectual environments of the classroom. Classrooms where students feel safe to take risks, acquire new knowledge, and know they are
valued members of a community are classrooms where learning is optimized (Evertson, Emmer, & Worsham, 2003; National Research Council, 2000; Wang, Haertel & Walberg, 1994). “Classroom management refers to all of the things that a teacher does to organize students, space, time, and materials so that instruction in content and student learning can take place” (Wong & Wong, 1988). In other words, everything teachers do to get their students to achieve the knowledge and skills necessary for success must be the result of a purposeful and well-thought-out series of actions and activities. Research also shows that building a sense of community in schools is an integral part of creating a positive learning environment (Evertson et al., 2003; Good & Brophy, 1997). Community building begins on the first day students and teachers come together. It is here that SEL can be integrated into classroom life. Here, SEL is seen not as an add-on for the teacher, but the way that relationships, routines, and procedures are established so everyone feels cared form, respected, and valued. Many teachers plan for icebreaker activities on the first day of school to acquaint students with one another. In an SEL classroom, however, this process continues throughout the school year. The teacher understands that building a skill is not the same as teaching a fact or concept. A skill is performance based; it is an iterative process that requires practice with feedback and the opportunity to make adjustments followed by more practices.

The U.S. Department of Education’s National Diffusion network recognized Social Decision Making (1989) and Responsive Classroom (1992) as two programs of merit (Elias et al., 1997). Teachers trained in these
programs are taught to have daily gathering activities where students greet each other, as well as share and discuss their thoughts and feelings on issues such as current events, personal experiences, and academic concepts. In these gatherings there are clear rules for interaction: Students must listen to and respect each other, and no put downs or thoughtless comments can be made. Students learn what listening looks like and what it does not look like, because it cannot be assumed that knowing what to do also means knowing what not to do. These gatherings provide the chance for all students to become more than acquaintances and truly come to know one another. They help to create a climate where students are not afraid of taking risks, asking questions, or making mistakes because they know that any criticism they receive will be given in a respectful and constructive manner.

These class gatherings, sharing circles, or morning meetings are used as forums for discussing social problems that are taking place in the classroom or school. They may include role-play to brainstorm and illustrate possible solutions to a problem that is reoccurring on the blacktop at lunchtime or on the school bus. This is a productive and non-threatening way of providing students with behavioral options. Gatherings may also be used to review material on upcoming tests, current events, or a piece of literature. Connecting the SEL strategy to academic content provides the opportunity for the repeated practice and reinforcement necessary to make these behaviors more generative in nature.
A fundamental SEL skills is the ability to recognize emotions as they are being experienced and to know appropriate ways of dealing with them. Thus language needs to exist to properly identify feelings. Young children and those with limited language proficiency have a very restricted emotional vocabulary. They may only know that they are happy, sad, glad, or mad. Developing this type of vocabulary, as in any other subject area, is necessary for clarity and fluency of description. Students also need to know that often they feel more than one emotion at the same time about the same event. They may be excited about going away on a vacation, but upset about the fact that they will miss their best friends birthday party.

It should be clear that there is nothing wrong with being angry or upset with someone or something; rather, it’s what people do with that anger that makes the difference. Therefore, beyond naming their emotions, children need to know how to act on their them appropriately. Activities that can help to provide them with a repertoire of responses to real-life situations must be a regular part of the classroom experience. Such activities include reading and discussing stories where the main character has had to deal with a range of emotions, or having students create role plays dealing with ways to handle strong emotions. Goleman (1995) tells us that girls, especially between the ages of 8-12, who confuse the emotions they are having, are at high risk for developing eating disorders in later adolescence. They may eat when they are angry or anxious instead of using that energy to exercise, write, or socialize with peers.
In SEL classrooms students are taught to use active listening, I-Messages, and other effective communications skills so that the interactions within the class are clear, positive, and supportive. In active listening, students learn to paraphrase messages they receive from others and check for understanding. I-Messages help to avoid blaming and acquisitions because students them. They learn to emphasize with their classmates through pair-shares, role-play, and class meetings. They also learn decision-making and problem-solving skills to help them develop skills in goal setting, consequential thinking, and coping strategies to deal with the conflicts, stresses, and challenges of life. The integration of these skills into the academic content teachers are required to teach allows for more and frequent opportunities to practice them. As students learn to see issues from more than one perspective, they also begin to apply and practice these skills in academic subjects. In language arts, for example, students can discuss or role-play conflicts in a story or novel by taking on the perspective of various characters. Imagine dividing the class into Loyalists and Patriots to discuss the events leading up to the Revolutionary War. How much richer and more accurate an experience would it be if students examined America's westward expansion era from the viewpoint of the government, settlers, and Native Americans? This approach helps students build empathy, and having the ability to emphasize means that we care about others. Goleman (1995) suggests that those who are deficient in this emotion often go onto to commit horrible acts of violence.
The enterprise of SEL is decision-making and problem-solving. These skills are the culmination of all the previously mentioned skills. Teaching students to recognize challenges and problems they face, set realistic goals to achieve or resolve them, generate alternative approaches based on consequential thinking, create a plan of action, and implement and evaluate that plan are life-long behaviors that need to be fostered from an early age. Our lives and personal relationships are influenced by the choices we make. Virtually every profession, every industry, has emphasized the need for individuals who can make well-informed decisions and problems solve both independently and interdependently.

- **Sel and the standards**

In any discussion about education or educational approaches today the issue of standards must be addressed. The standards movement has had a great influence on what and how things are done in classrooms across the United States. State and national standards seem to be driving instruction, assessment, professional development, and school schedules. Time is a luxury few can afford any longer. So asking teachers to add another thing to their day is likely to be met with skepticism, frustration, and possibly anger. Even those teachers who embrace the importance of teaching their students to have self-regulating behaviors, respect for themselves and others, and good decision-making and problem-solving skills feel the pull to address the multitude of academic criteria.
Fortunately, many commonalties exist between the standards and SEL. Effective communication skills and the ability to express thoughts and feelings accurately and clearly are central not only to SEL and standards but also to the assessment piece of the movement as well (Norris & Kress, 2000). Research showing that learning is more effective in classrooms that are non-threatening and responsive to the needs of the students is also a powerful argument for the importance of these skills (Brophy, 1996). Nevertheless, the dilemma is how and where to incorporate these skills into an already overcrowded schedule.

The classroom management became the most logical home for SEL. It became the way teachers established expectations, rules, and procedures, and it set the tone for the way students would interact over the year. Part of our discipline plan was that students would complete a “Problem Solving Diary” that asked them to tell about the problem they were having, identify their goal, and generate some alternatives for approaching the problem that would yield a more positive result. Students learned a skill called, “Keep Clam”, which uses deep breathing to help get strong emotions under control before thoughtless negative actions were taken. This helped to greatly decrease the number of fights and confrontations at recess. Teachers learned to use a common language throughout the school and to set common standards of behavior for all children no matter where they were in the building. The teachers also found that the time it took to teach and practice these skills was regained, as they became routines.
It was also learned that creating this kind of school and classroom did not happen overnight. It did not happen in a year. However, over the five years that was worked together, there were many changes that took place in our school, our students, and ourselves. As a whole to one degree or another, learned to listen and talk to each other, and it was also learned that conflicts are a part of life. The differences never went away, nor should they have. What changed was our response to them. It was chosen to work and learn in an environment that valued knowledgeable, responsible, and caring individuals and recognized that our world was too diverse to live any other way. This was the culture and climate that was created. SEL is an ongoing process; it is not a goal that can be completely achieved. We learned that every day we need to rededicate ourselves to its principles.

2.30 A TRANSACTIONAL MODEL OF THE TEACHING / LEARNING PROCESS

In 1963, John Carroll wrote a seminal article that focussed attention on direct observation of classroom behavior of teachers and students. The systematic study of classroom processes thought to influence student achievement as measured on these tests led to an explosion of information about what exactly was going on within America’s classrooms. Prior to that, and to some extent this continues, the major variables were thought to be environmental or qualities of the teachers and students (Coleman et al., 1966; Jencks et al., 1972). The publications of A Nation of Risk (National Commission on Excellence in Education, 1983) made it abundantly clear that
Review of Relevant Literature

despite the increased funding for research and subsequent enlargement of the knowledge base of effective classrooms and schools, there were still major concerns with the functioning of the nation's school system. This was in spite of the fact that the American school system had made significant improvements during the 20th century. For example, more than 75% of its youth graduated from high school in the 1980s, up from less than 10% at the turn of the century (Greene, 2002). By the year 2000 it had risen to 84% (National Center for Education Statistics, 2000). At the same time the number of college graduates rose from less than 10% in 1960 to over 25% in 2000. This is one indication that the value of schooling is rising in importance.

In the 1980s several researchers developed models of the teaching/learning process that summarized much of what was shown about increasing test scores (e.g., Cruickshank 1985; Proctor 1984; Squires, Huitt, Segars, 1983). At the same time that researchers were focussed on accounting for all the factors related to school achievement, others developed models of effective teacher practice (e.g., Hunter, 1994; Resenshine, 1995; Slavin, 2003). A major problem that envelops all these models is that they focus on improving test scores; yet the public is concerned about students' character, self-esteem, and social development (Gallup, 1975, 1980). In this regard, the public seems more knowledgeable than the researchers about indicators of adult success in that student achievement, level of education, or measures of academic intelligence account for at best one third of the variance related to adult success.
(Gardner, 1995; Goleman, 1995). Recent attempts to hold schools, and especially teachers, totally responsible for student achievement presents a problem in that there are multiple factors not under the control of building-level educators that contribute to educational achievement (Huitt, 1999).

The following model is an attempt to consider most of the possible answer to the question: Why do some students learn more than others? According to the model, the reasons can be classified into four categories.

<table>
<thead>
<tr>
<th>A Transactional Model of the Teaching/Learning Process</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Context</strong></td>
</tr>
<tr>
<td>All those factor outside of the classroom that might influence teaching and learning.</td>
</tr>
<tr>
<td><strong>Input</strong></td>
</tr>
<tr>
<td>Those qualities or characteristics of teachers and students that they bring with them to the classroom experience.</td>
</tr>
<tr>
<td><strong>Classroom Process</strong></td>
</tr>
<tr>
<td>Teacher and student behaviors in the classroom as well as some other variables such as classroom climate and teacher/student relationships.</td>
</tr>
<tr>
<td><strong>Output</strong></td>
</tr>
<tr>
<td>Measures of student learning taken apart from the normal instructional process.</td>
</tr>
</tbody>
</table>

- **Output**

The most important of these categories is the Output category because the variables in the rest of the categories are used to predict or relate to the variables measured in this one. For example, when we ask “Why do some students learn more than other students?” We must also be clear about how we

At the present time in this country, when we say “How well or how much has the student learned” we mean “How well has the student done on a standardized measure of student achievement in the basic skills of Reading, Language Arts, and Mathematics?” If we change what we mean by learning (we want to know how much Science or Social Studies students have learned or we want to know if they have developed appropriate social skills) or if we change the particular measure of learning (Use the Metropolitan Achievement Test instead of the IOWA Test of Basic Skills), then we may change the important variables that relate to student learning. As we will see, there are a Variety of outcomes that are important in today’s world (such as cognitive development and character) that are not presently discussed when talk about student learning. I believe the most important category is output because once that has been defined it impacts the importance of the variables in the other categories.

• Classroom processes

The second most important category, at least from the perspective of the educational institution and educational psychology, is the Classroom Processes category. This includes all the variables that would occur in the classroom. There are three sub-categories: Teacher Behavior, Student Behavior, Other/Miscellaneous.
The category of Teacher Behavior consists of all the actions a teacher would make in the classroom and includes three additional sub-categories: Planning, Management, and Institution.

Planning refers to all of those activities a teacher might do to get ready to interact with students in the classroom. Management refers to controlling student behavior, while instruction refers to actually guiding a student learning. There are a variety of specific teacher classroom variables that have been related to student learning. For example, Welberg (1986), in a meta-analysis of teacher effectiveness research found support for the following individual variables:

- Use of positive reinforcement
- Cues and corrective feedback
- Cooperative learning activities
- Higher order questioning
- Use of advance organizers

However, Rosenshine (1995) showed that the approach to instruction labeled direct or explicit instruction was most likely to positively impact on learning as measured by scores on standardized tests of basic skills. Alternatively, changing the desired outcome measure puts the focus on different instructional methods. For example, if the desired outcome is creativity and independence, then open education may be a better alternative (Giaconia & Hedges, 1982). Alternatively, if better relationships among diverse students is the goal, the cooperative learning would appear to be the better instructional methods.
Given the moderate correlation's between teacher behavior and student learning as measured outside the classroom, however, it seem prudent to focus on student behavior within the classroom and the impact that teacher behavior has on that set of variables. Student Behavior includes all of the actions a student would make in the classroom and includes one very important variable (at least in relationship to predicting student achievement on standardized tests) and that is Academic Learning Time (ALT). ALT is defined as "the amount of time students are successfully covering content that will be tested" (Squires, Huit, Segars, 1983). ALT is a combination of three separate variables: Content overlap, Involvement, and Success. Content overlap is defined as "the percentage of the content covered on the test actually covered by students in the classroom" and is sometimes referred to as "Time on Target". Involvement is the "amount of time students are actively involved in the learning process" and is often referred to as "Time on Task." Success is defined as the "extent to which students accurately complete the assignments they have been given." A high level of Academic Learning Time means that (1) students are covering important (tested/evaluated), (2) students are "one-task" most of the class period; and (3) students are successful on most the assignments they complete.

There are a variety of other classroom factors which have been related to student achievement such as the classroom climate and the opportunity for students to engage in leadership roles.

One of the most important concepts that has been developed in educational psychology during the past 30 years is that classroom process variables are the most direct link to student achievement (Rosenshine & Stevens, 1986). More specifically, the teacher's classroom behavior
(incorporated in the categories of planning, management and instruction) has a direct influence on student behavior (most importantly Academic Learning Time) which, in turn, is most directly linked to measures of student achievement.

• Input

The third major category of variables, input, refers to descriptions of teachers and students prior to their coming into the classroom. There are again two important sub-categories: Teacher characteristics and Student Characteristics. Some important sub-categories of teacher characteristics includes the teacher's values and beliefs, knowledge, thinking and communication skills, performance skills, and personality. Of course, there are many more possible sub-categories, but these seem to be the most important.

The most important teacher characteristic (in terms of predicting how well teachers will perform in the classroom as well as student achievement) seems to be the teacher's values and belief or more particularly Teacher Efficacy (Ashton, 1984). This variable is a measure of the teacher's belief that students can learn and that he/she can teach. Another important set of teacher characteristics includes the teacher's knowledge with respect to the content domain (knowledge of subject matter to be taught), human growth and development (theories, topics, and stages), learning theory (behavioristic, cognitive, humanistic), and the teaching/learning process (concepts and principals as well as their application in formal and informal environments). This course is designed to address three of these important areas: human growth and development, learning theory, and the teaching/learning process.
In the state of Georgia, a teacher’s knowledge is evaluated through the completion of college-level courses and passing the Teacher Certification Test (TCT). At VSU, one requirement related to a teacher’s thinking and communication skills is successful completion of a speech course at the undergraduate level. Performance skills are measured through a requirement of student teaching and an annual evaluation using the Georgia teacher Observation Instrument (GTOI). Finally, while there is no single personality that seems to make the “Best” teacher, it is certainly a variable that has attracted a lot of interest. One measure of personality that has become popular in education circles is the Keirsey Temperament Scale (a version of the Myers-Briggs Type Indicator).

There are a wide variety of student characteristics that have been related to classroom behavior and student achievement. Bloom and other researchers (e.g., Anderson & Block, 1977; Bloom, 1971) engaged in the development of mastery learning have shown that when time to learn is allowed to vary, a student’s knowledge is most important. Other researchers have shown that when time to learn is held constant, as it is in most learning environments in the United States, then a student’s intelligence or academic ability is most important. This issue of “time to learn” is very important. If we truly believe that everyone can learn and that it is important to learn, then it would seem we would make a greater effort to provide the appropriate time to learn. However, if we believe that ability is more important and then only the most capable individuals can learn all we want them to learn, then the present system will continue to produce a result that verifies that expectation. Other student characteristics that have been found to be important include study habits, Age,
Sex/Gender, Motivation, Learning Style, Cognitive development, Socio-emotional development, Moral and character development and Race/Ethnicity. In fact, the list of important student characteristics is so long entire books have been written on them.

- Context

The category of context includes all of these variables outside of the classroom that have an impact on teacher and student characteristic, classroom process, and output. The most immediate sub-categories of context variables include School characteristic and school process.

School characteristics includes variables such as organizational structure and school size, school processes include factors related to activities such as leadership, supervisory practices, and school climate.

There are a wide variety of other context variables that influence the teaching/learning process. Some of the sub-categories of these variables include Home, Peer Groups, Community, Religious Institutions, Society, Culture, and International Conditions. Variables related to the home environment seem especially important and include such variables as the education levels of parents, family income/socio-economic status (SES), other parental characteristics (such as age or marital status), and a group of miscellaneous variables which includes the amount of technology in the home, the number of books and magazines in the home, and so forth. One of the variables that best predicts student achievement seems to be the level of mother's education-especially if she did not graduate from high school (e.g., Campbell, 1991; Voelkl, 1993; Zill, 1992). This may be because the mother is
the first educator of the child and the level of language usage she uses with the child is an important predictor of the child's language usage and school achievement. A second important factor is the amount of technology in the home (Perelman, 1992). This may be because technology is such an important factor in today's society and the more familiar the child is with technology, the more likely the child will feel comfortable in the modern classroom.

Other important context sub-categories include the community (Location, Emphasis on education), Peer groups, the society (including TV/Movies, Social institutions, etc.), state and national policies (including laws, programs, and funding), the culture (including values, language, art, music, etc.), and international/global conditions. A very important aspect of the letter is the Movement to the information age which is in turn influencing all other aspects of living (Huitt, 1995).

This is especially important because it is redefining the knowledge and skills that students need if they are to be successful in society. The number of people employed in the service and information sectors today is over 75% or approximately the same percentage as that accounted for by agriculture and industry in the 1870s.

The following is a simple example of how some of these variables might interact. Context variables such as the size and region of the community impact teacher and student characteristic while the context variables associated with the family impact student characteristics. Of course, there are other important context variables that could also be considered as described above. Additional context variables associated with school and state policies combine with
teacher and student characteristics influence student behavior, especially those variables associated with Academic Learning Time. Student classroom behavior then influences teacher classroom behavior in an interactive pattern. Student classroom behavior, therefore, is the most direct influence on student achievement as measured by instruments influenced by state policies. Student achievement at the end of one school year then becomes a student characteristic at the beginning of the next. Additional outcome variables that are important for success in the information age can be considered in the same manner.

### MODEL OF THE TEACHING-LEARNING PROCESS

<table>
<thead>
<tr>
<th>Community</th>
<th>School Policies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Size Region</td>
<td>Leadership/ supervision</td>
</tr>
<tr>
<td>Teacher Characteristics</td>
<td>Climate</td>
</tr>
<tr>
<td>Knowledge Skills Efficacy</td>
<td>Teacher behavior</td>
</tr>
<tr>
<td>Student Characteristics</td>
<td>Planning Management Instruction</td>
</tr>
<tr>
<td>Prior Knowledge Intelligence Learning Style Motivation</td>
<td>Student Behavior</td>
</tr>
<tr>
<td></td>
<td>Content Overlap Involvement Success</td>
</tr>
<tr>
<td>Family</td>
<td>Student Achievement</td>
</tr>
</tbody>
</table>

 Mothers Education Family  
 Income Books in Home  
 Academic Expectations
This model has been developed from the perspective of systems theory. It will be one of the main organizing features of this course. There are a variety of other models that have been developed to organize the variables of interest in educational psychology. McIlrath and Huitt (1995) provide a review of previous models of the teaching/learning process and compare it to this proposed model.