11-1-2010

Student Engagement Differences by Ethnicity and Scale for Ninth Grade Students

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Abstract

Differences on three subscales of student engagement were compared across ethnic groups and by subscale. The ninth grade is often considered a vital juncture that indicates success or failure to graduate high school. When a student goes through a transition he or she often experiences some type of change in student engagement levels and may experience adverse effects in the form of academic, social, and psychological challenges. Researchers of the National Research Council (2004) believe that the engagement process (the successful interaction between the individual and the educational context) is considered a means toward alleviating unsuccessful student outcomes. Therefore, this study explored student engagement in three domains after a high school transition for Hispanic and White ninth grade students attending a small, rural high school.

Student engagement was measured for each of three domains of engagement (behavioral engagement, emotional engagement, and cognitive engagement), treating engagement as a multidimensional construct, using the Student Engagement Survey (*SES*).

Results from the data analyses indicated no statistically significant differences in levels of engagement on the *SES* across the three engagement subscales (behavioral, cognitive, and emotional) for a group of ninth grade students. Also, no significant differences were found between Hispanic and White students' views of engagement.

Results suggest that future research in which engagement components are present or not present or are being put into practice effectively versus ineffectively may allow researchers to understand the pathways between stratagem for changing the learning environment and the extent to which those changes will influence engagement and, ultimately, individual student success. The inclusion of other aspects of data could make available a broader scope of understanding into the positive and/or negative influences on student engagement.

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Document Type

Dissertation

Degree Name

Ph.D.

STUDENT ENGAGEMENT DIFFERENCES BY ETHNICITY AND SCALE FOR NINTH GRADE STUDENTS

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A Dissertation

Presented to

the Morgridge College of Education

University of Denver

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In Partial Fulfillment

of the Requirements for the Degree

Doctor of Philosophy

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by

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November 2010

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Acknowledgements

This dissertation would not have been possible without the sustained efforts and encouragement of many people. There are those who make a challenge much easier and I would like to take this opportunity to acknowledge and thank those people.

I would like to convey my gratefulness to my advisor, Dr. Sylvia D. Hall-Ellis, and to Dr. Kathy Green, for their assistance and intellectual prowess. Their personal guidance, commitment, and suggestions for improvements were invaluable. A very special thank you goes to Dr. Green for her extraordinary gift for teaching, her wisdom, and her personal assistance with statistics. Too, thank you to Dr. Bruce Uhrmacher for serving on my committee and to Dr. Janet East for serving as outside chair for my dissertation defense, along with the kindness displayed by both of you. I owe a debt of gratitude to Assistant Dean Maria Riva for her unending educational and emotional support.

I would also like to recognize unforgettable people like Dr. Ellie Katz, Dr. Ken Seeley, and Dr. Martin Tombari. Thank you to Dr. Seeley and Dr. Tombari for granting me the privilege of working with the Colorado Foundation for Families and Children and for the knowledge they contributed to my research.

Too, I would also like to acknowledge the wonderful staff of the University of Denver who is behind the scenes and who were always willing to help me. A special mention goes to Mary Sue Brown for her expertise in technical techniques.

I am deeply appreciative of all my family members for their continued prayers, interest, and support of this endeavor. Thank you to my children, Michael and Bradley,

for being sources of endless joy and comfort in my life. Lastly, thank you, Mother, for your gracious, loving manner that has never waivered through the years.

To all mentioned, your individual contributions helped me accomplish a life-long dream. Your insight into my abilities and your time and attention gave me the motivation and courage to keep on keeping on.

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Chapter One: Introduction

In response to the dilemma of academic and psychological student disengagement, there is general agreement among policymakers, organizations, educators, and researchers that student engagement is a robust characteristic that determines a student's success in school. Moreover, researchers have identified student engagement as a solution to the problem of low student achievement and high dropout rates. Students considered as "disengaged" generally have poorer academic outcomes than students who are considered "engaged". Research has indicated that students with higher engagement levels have characteristics while at school that improve their interaction with the school setting, its practices, and student-related outcomes (Connell & Wellborn, 1991; Shernoff, Schneider, & Csikzenmihalyi, 2001). Consequently, much of the research on engagement is an attempt to identify the various factors that can help explain why some students learn more successfully than others (Fredricks, Blumenfeld, & Paris, 2004; Klem & Connell, 2004).

Studies show that students become progressively disengaged as they move from middle school to high school. In view of that, and in an effort to engage high school students with their school and learning, the transition from middle school to high school has received increased attention due to research studies showing ninth grade course failures and dropout rates that exceed those of other grade levels (Marks, 2000; Mizelle

& Irvin, 2000; Neild, Stoner-Eby, & Furstenberg, 2008; National Center for Education Statistics, 2005; Roderick & Camburn, 1999; Hertzog & Morgan, l998).

The first year of high school often determines a student's success throughout high school and beyond. Yet, transitioning students often struggle through their first year and display individual differences in engagement levels that can have adverse effects on successful student outcomes. When students transition to the ninth grade, they must face greater academic challenges, a new and larger environment, depersonalization, and a lack of sense of community (Lee & Smith, 2001), making successful transitions problematic. By tenth grade, students may already be behind due to lack of attendance, lack of course credits, and lower levels of academic achievement (National Center for Educational Statistics, 2005). What was to be a student's momentous first year of high school may instead turn out to be a missed opportunity to graduate on time or to graduate at all.

Researchers and educators acknowledge that a significant number of students are failing, starting in the ninth grade, and that great disparities in learning exist in our nation's schools. Today's schools serve a diverse array of students with varied abilities and motivations for learning. Many students enter high school far below where they need to be academically in order to have a successful experience. Low graduation rates are driven by students who are not well prepared for high school and who have trouble transitioning. Ninth grade is the weakest link in "promoting" power and 40% of ninth grade students (in cities with the highest dropout rates) repeat the ninth grade, are disengaged from school, and may eventually drop out. Only 50% of students who enter ninth grade meet the requirements for graduation in four years (Balfanz & Legters, 2004).

Known as the ninth grade bulge, statistics show that in the 2003-2004 school year there were 4.19 million students enrolled in grade nine, and in the following school year, 2004-2005, the tenth grade enrollment was 3.75 million: a loss of 10.5%. These figures reflect both the number of students not promoted to tenth grade and/or students that dropped out after ninth grade (National Center for Educational Statistics, 2005).

Data from the National Assessment of Educational Progress reports that only 70% of all high school students graduate from high school. The overall graduation rate for Colorado in 2008 was 74% and Hispanic graduation rates drop to nearly 50% (Colorado Department of Education, 2008).

In summary, even though graduation rates are gauged as the final indicator of student success for all students, the National Research Council (2004) recommends that schools accomplish the more ambitious goal of *deep* cognitive engagement across the school years. Deep cognitive engagement suggests that school characteristics and multiple influences (academic and psychological) related to student engagement create secondary school effectiveness (National Research Council, 2004). These researchers believe that the engagement process (the successful interaction between the individual and the educational context) is considered a means toward alleviating unsuccessful student outcomes and is vital to school reform.

Study of Rural Populations

It is common for districts in rural settings to have graduation rates that are unacceptably low (Johnson & Strange, 2007). The Colorado Department of Education

(2008) data for the site of the current study shows a graduation rate of 53%-68%, with the Hispanic graduation rate being as low as 44%-53%.

Every state faces challenges ensuring that all rural students receive a high quality education and equal access. Furthermore, the inability to attract and retain experienced, qualified teachers in rural areas is a clear barrier to improving student performance and graduation rates in low-performing schools (Neild, 2003). Central to this study**,** Johnson and Strange (2007) report that Colorado's state status for rural schools is deemed critical on educational outcomes. Small, rural school districts make up 55% of Colorado's school districts, with an overall student population of 127,280. The state's rural schools must meet the needs of one of the nation's highest percentages of English Language Learners, being the tenth highest among the 50 states. As rural America grows and grows increasingly diverse, the need for supportive environments to meet the needs all students grows ever more important.

Ethnicity.

Researchers have developed theories regarding the influences of ethnicity on school experiences and academic performance. The purpose of these theories has been an attempt to shed light on why ethnic minority students fail or succeed in schools (Fergus, 2009) and why there is a continual achievement gap in the United States (Shin, Daly, & Vera, 2007). One of the most important issues in education today is the achievement gap between ethnic groups (Skalsky, 2009).

Finn and Rock (1997) believe that Hispanic students often experience a cultural and language mismatch within many English-dominated schools. This mismatch may

affect students' perceptions of school belonging and be a subsequent risk factor for school failure. Studies on the correlation between emotional engagement and belonging among Hispanic and White students suggest that ethnicity is an important hierarchical division of society among groups within a school (Vaquera, 2009).

Bennett (2006) found that there was a statistically significant relationship between ethnic identity and school engagement. Too, Glanville and Wildhagen (2007) state that because of the variance in student success among ethnicities, it is fitting to evaluate the effects of engagement across ethnic groups. In order to enhance the understanding and measurement of student engagement, they suggest that engagement be measured as a multidimensional concept in which behavioral and psychological components are included as important variables.

School Transitions

When the adolescent transitions from the middle school level to the high school level, the organizational changes in a school become a dominant factor affecting levels of student engagement. School size will be significantly increased and students will move from one classroom to another, facing unfamiliar teachers. Learning motivation will be more extrinsic and lecture-driven. Students will be responsible for keeping track of their progress in many different subjects, with little one-on-one help or personal insight into the engagement of the student (Lee & Smith, 2001; Mizelle & Irvin, 2000).

The negative ramifications of high school transitions have been widely researched, documenting academic, social, and psychological challenges.

Academically, the transition is often characterized by a decrease in motivation and disengagement from the learning process causing a decline in performance (Harter & Connell, 1984; National Research Council, 2004). A decline is particularly true for low-performing youth and minorities whose dropout rates are the most severe (Fenzel, 2000; Rumberger, l987).

Eccles, Lord, Roeser, Barber and Hernandez-Jozefowicaz (1997) have shown that the psychological adjustment to a transition can have a profound influence on adolescent development. The transition to high school has been found to have a negative impact on a student's self-concept (Fenzel, 2000; Harter, Whitesell, & Kowalski, l992). Eccles and Midgley (1989) found that important changes and events particularly have an effect on adolescent students, often resulting in a lower self-esteem, greater instability of self-image, and a higher self-consciousness. Levels of anxiety and/or depression (Wigfield, Eccles, MacIver, Reuman, & Midgley, 1991) can become exacerbated and students' daily grades and overall grade point averages have been found to decrease (Gutman & Midgley, 2000).

In addition, the transition to high school brings about new social roles. Students who disengage and display an inclination toward dropping out are more likely to have social difficulties, negative attitudes toward school, and higher levels of stress (Cairns & Cairns, l994; Wehlage & Rutter, l986). One of the leading causes of disengagement and dropping out of school is alienation (social isolation) from peers and teachers. As students try to manage new peer relationships, the social outcomes of

creating or joining new social groups may be the cause of bullying and aggression (Finn, 1989; Newmann, 1981; Pellegrini, 2002; Pellegrini & Long, 2002).

The convergence of all these factors makes engagement with school challenging. Bloom (1976) expounds on the consequences of an unhealthy academic and psychological school experience:

> At the other extreme are the bottom third of students who have been given consistent evidence of their inadequacy…over a period of five to ten years. Such students rarely secure any positive reinforcement in the classroom...from teachers. We would expect such students to be infected with emotional difficulties and to exhibit symptoms of acute distress and alienation from the world of school and adults (p. 158).

Belongingness is fundamental to an adolescent's well-being (Osterman, 2000). In contrast to alienation, belongingness is represented by feelings of significance; having a sense of being included; being accepted and respected in school; and, school as a place to realize goals, along with personal advancement (Finn, 1989).

Seeley, Tombari, Bennett, and Dunkle (2009) make the following recommendations for engaging high school students:

- Focus on engagement**.** Schools and their leadership should redouble their efforts to reach each child through heightened focus on the school's primary educational mission: to create the conditions for learning for *all* students; thereby helping the youth in their midst to become productive adults.

- Model caring behavior**.** Teachers and administrators need to be trained in how to model appropriate caring in the school community and this should be developed and made part of teacher and principal licensure programs and professional development curricula.

- Offer mentoring programs**.** Mentorship of specific students should be made part of the job description of every adult working in the school setting. Students should be given opportunities to mentor and lead other

students in the classroom, in cooperative learning situations, and in learning programs.

- Re-examine the transitions in the school structure**.** Schools should seriously explore the possibility of facilitating the transition from the [middle school to the high school] by developing transition programs with a range of services from universal to intensive so as to better acclimate students to this abrupt shift in their educational environments (p. 14).

Engagement

One of the most widespread problems facing the American school system is the "emotional and physical withdrawal of students from school" (Voelkl, 1996, p. 760). Research has shown that engagement has mediating factors that can overcome unsuccessful student outcomes (Greenberg et al., 2003; McNeeley, Nonnemaker, & Blum, 2002; Osterman, 2000). Consequently, many previous research studies have addressed the behavioral, emotional, and cognitive components of engagement. However, these studies generally conceptualize the concept of engagement using only one or two constructs of engagement.

For instance, researchers have studied the construct of behavioral engagement which is generally thought of as participation in school practices and extracurricular activities (Finn, l993, 2006; Finn & Rock, 1997; Finn & Voelkl, 1993; Skinner & Belmont, 1993). Other studies have examined the construct of emotional engagement which is the psychological component of student identification with school and the value students place on school-related outcomes (Connell & Wellborn, l991; Finn, 1989, 1993; Lee & Smith, l995; Skinner & Belmont, 1993; Voelkl, 1996, 1997). For instance, Shernoff, Csikszentmihalyi, Schneider, and Shernoff (2003) consider student engagement as the culmination of concentration, interest, and enjoyment. Referred to as "flow" (an

intensity of focus), flow is a phenomenon that pairs cognitive engagement with high emotional involvement. Other research studies have been conducted on cognitive engagement in regard to motivational goals and self-regulated learning (Connell & Wellborn, 1991; Finn, 1993; Finn & Rock, 1997; Marks, 2000; Newmann, Wehlage, & Lamborn, 1992) while the National Research Council (2004) considers motivation and engagement to be interchangeable and overlapping concepts. Libbey (2004) provides an overview of a plethora of the various terms and definitions of school engagement throughout the research literature, a compilation of measurement tools that have been used, and a comparison chart that illustrates how engagement has been used across variables.

Wilson (2004) examined how the educational and social environment of a school can enhance or impair a student's behavioral, emotional, and academic development. For that reason, researchers propose that a multifaceted approach to the study of engagement-in which all three components (behavioral, emotional, and cognitive) are combined-has a greater guarantee of producing a wealth of knowledge about the adolescent student and is regarded by researchers as a way to “ameliorate low levels of academic achievement, high levels of student boredom, disengagement, and high dropout rates” (Fredricks et al., 2004, p. 60).

The phenomenology of multifaceted engagement can thus be maintained or enhanced by a sense of belonging where students feel welcomed, appreciated for who they are, and are challenged in a developmentally appropriate way; caring adults that can support their endeavors, meet their needs, and provide happy places in which to learn;

deep cognitive learning that is challenging and intrinsically motivating based on the culmination of concentration, interest, and enjoyment; a chance to realize his or her full potential; and, school practices that improve the social, emotional, physical, and intellectual development of the whole child (Greenberg et al., 2003; Libbey, 2004; Shernoff et al., 2001).

Importance of the Study

The importance of the study was the alarming fact that student disengagement with school serves as a gateway to numerous problems, challenges, and negative outcomes for adolescents, starting in the ninth grade of high school, particularly for populations of students who may be at risk for negative school outcomes (Hertzog & Morgan, l998; Mizelle & Irvin, 2000; National Center for Education Statistics, 2005; Neild, Stoner-Eby, & Furstenberg, 2008; Roderick & Camburn, 1999). Klem and Connell (2004) state that "by high school as many as 40% to 60% of students have become chronically disengaged from school-urban, suburban, and rural-not counting those who already dropped out" (p. 262).

To counteract these distressing facts, researchers have studied the value of students being "engaged in school, yet few have attempted to define engagement formally or to study it as an outcome of school processes" (Finn & Voelkl, l993, p. 249). Fredricks and colleagues (2004) state that engagement is an antidote for low achievement levels and other forms of student disengagement and should be studied as a "meta" construct comprised of three domains: behavioral engagement, emotional engagement, and cognitive engagement.

Researchers believe that combining the three domains of engagement is imperative for creating a complete picture of the individual student. Understanding the adolescent as a whole child is beneficial to the individual student (Noddings, 2005). For example, looking through the lens of a multifaceted approach to engagement has the potential for *seeing* the individual learner as a human being born with many unique gifts and talents. Educators must be obliged to recognize the complex developmental make-up of the adolescent or "a loss of that awareness will exact a great toll on our educational systems" (Senge, 2000, p. 42).

The three domains of engagement are significantly and dynamically interrelated and give a more accurate and compassionate portrayal of the learner: how they behave (behavioral engagement), feel (emotional engagement), and think (cognitive engagement)" (Fredricks et al., 2004).

Fredricks and colleagues define the three domains of engagement as follows:

> *Behavioral engagement* draws on the idea of participation; it includes involvement in academic and social, or extracurricular activities; and is considered crucial for achieving positive academic outcomes and preventing dropping out. *Emotional engagement* encompasses positive and negative reactions to teachers, classmates, academics, and school, and is presumed to create ties to the institution and influence willingness to do the work. Finally, *cognitive engagement* draws on the idea of investment; it incorporates thoughtfulness and the willingness to exert the effort necessary to comprehend complex ideas and master difficult skills (p. 60).

Furthermore, engagement research suggests there is a strong connection between student engagement (an outcome) and school engagement (a process).

Student engagement.

Students who are fully engaged in school are more likely than their disengaged peers to attain their academic and personal goals. Engaged students have good attendance records, positive outlooks, put forth effort, have intrinsic motivation, demonstrate student achievement, and are tracked for college (Connell, Spencer, & Abner, 1994; Finn, 1993; Finn & Rock, 1997). On the other hand, students who display low levels of engagement are more likely to experience innumerable problems, such as poor attendance, low self-esteem, negative attitudes, suspensions or expulsions, low or failing grades, and often drop out of school (Finn, l989; Lee & Smith, l995).

Skinner and Belmont (1993) offer a definition of engagement vs. disengagement:

> Students who are engaged show sustained behavioral involvement in learning activities accompanied by a positive emotional tone. They select tasks at the border of their competencies, initiate action when given the opportunity, and exert intense effort and concentration in the implementation of learning tasks; they show generally positive emotions during ongoing action, including enthusiasm, optimism, curiosity, and interest. The opposite of engagement is disaffection. Disaffected youth are passive, do not try hard, and give up easily in the face of a challenge. They can be bored, depressed, anxious, or even angry about their presence in the classroom; they can be withdrawn from learning opportunities (p. 572).

School engagement.

School engagement includes interpersonal social bonds and involves student commitment to the school and an investment in learning. An engaging social and academic context has the potential to encourage and support students so that they can be effective learners (Fredricks et al., 2004; Libbey, 2004). Increasing engagement in the school setting should include promoting engaged learning, good behavior, and the interests and the emotional side of the student (Altenbaugh, 2003).

During the developmental, adolescent years, schooling plays a principal function in a young person's everyday life and his or her view of self. Therefore, school should be a good place to be. Schools that give significance to the whole child and fully recognize an individual's talents and potential leave long-lasting impressions that set the stage for a permanent progression of education and the joy of learning (Eisner, 2005). Nodding (2003) has suggested that one of the aims of education should be happiness and that schools should be genuinely happy places.

Blum (2005) connects positive school engagement to healthy behavior and academic achievement. The extent to which schools create stable, caring, engaging, and welcoming environments is the extent to which all our children will flourish. He identifies three dynamic factors that influence school engagement: individuals, environment, and culture.

Engagement is thought to be acquiescent and responsive to the relationship between students and their environments (Connell & Wellborn, 1991). The person-environment fit theory suggests there may be a mismatch between the needs of adolescents and the opportunities and attention offered them by their academic and social environments (Eccles, Midgley, & Wigfield, 1993; Hunt, 1975).

Additionally, the extent to which a school environment meets a student's needs may determine his or her degree of engagement (Connell, l990; Connell & Wellborn, 1991; Klem & Connell, 2004). Bridgeland, Dilulio, and Morison (2006) give an account of 400 people who dropped out of school. Among the reasons for not finishing school

were a perception that school is boring, bad relations, a feeling of being unmotivated, and having little connection with the school environment.

Libbey (2004) categorizes the reciprocal effects of student engagement and school engagement. Both types of engagement share nine related variables that are needed for positive student practices:

1. academic engagement;
2. belonging;
3. fairness;
4. liking school;
5. student voice;
6. peer relations;
7. teacher support;
8. safety; and,
9. school-related activities.

Purpose of the study.

The purpose of the study was to determine the differences among subscales of student engagement for transitional ninth grade students and the differences between White and Hispanic students' views of engagement in each of the three domains (behavioral, emotional, and cognitive). For the school year 2008-2009, the sample population of ninth graders was 63% Hispanic and 37% White. Therefore, an important opportunity was presented to compare the differences among subscales of engagement for Hispanic and White groups in a rural high school. Determining the nature and extent

of differences among the three domains were thought to be a facilitator in identifying student needs that can best guide the school in an effort to increase positive school practices and outcomes.

Researchers continue to look at the construct of engagement in hope of furthering successful student outcomes. As well, they believe there is a need to know more about urban and rural school settings, age, ethnicity, and other individual differences of student engagement (Fredricks et al., 2004).

The researcher surveyed 70 ninth grade students in a rural high school to address the following questions:

Do perspectives of student engagement for a group of ninth grade students differ among domains, as measured by the School Engagement Survey (*SES*) (NCSE, 2006)?

Are there differences between Hispanic and White ninth grade students' views of engagement by domain?

In summary, in this introductory chapter, the problem, purpose, research questions, and the importance of the study were examined within the framework of a "meta" construct for engagement because there is a need to analyze engagement levels in a multiplicity of dimensions. The importance of school and student engagement for ninth grade students was believed to be critical. Since student disengagement is a major problem for high schools, investigating the differences among domains of engagement for ninth grade students and differences between Hispanic and White students deserved particular consideration.

Definition of Terms

Adolescence is the stage of maturation between childhood and adulthood.

Behavioral Engagement is meaningful participation in academic, social and extracurricular activities. Behavioral engagement can have a negative or positive response and is crucial for developing positive school-related outcomes and for the prevention of dropping out of school.

Belongingness is defined as“ being a significant member of a school community, being accepted and respected in school, having a sense of inclusion in the school, feeling proud of being a member of that school community, and embracing school as part of his or her self-view” (Voelkl, 1997, p. 296).

Cognitive Engagement is an investment in the learning process: a willingness to exert effort, master difficult skills, and comprehend complex ideas.

Developmental Levels refers to age-related capacities. Developmental levels are physical, social, emotional, and intellectual.

Disengagement is the process of a disaffection or disconnection with school-related practices and outcomes.

Emotional Engagement refers to the affective domain. It is a willingness to show effort and to discover learning as rewarding. Emotional engagement includes positive or negative reactions to people and environments.

Environmental Fit or Person-Environment Interaction is the coordination of individual differences and environmental effects.

Flow Theory is the culmination of intense concentration, interest and enjoyment in learning or an activity.

Hispanic is a person of Cuban, Mexican, Puerto Rican, South or Central American, or other Spanish culture or origin, regardless of race.

Motivational Engagement is intrinsic motivation, motivational goals, and self-regulated learning.

Multifaceted Engagement incorporates engagement as a construct with more than one dimension and includes the areas of behavioral, emotional, and cognitive engagement.

School Engagement involves student commitment to the school, an investment in learning, and interpersonal social bonds.

Student Engagement is engagement in three domains: behavioral engagement, emotional engagement, and cognitive engagement. Students with higher engagement levels have characteristics while at school that improve their functioning in the school setting.

Transition refers to a student changing schools.

White is a person having origins in any of the original peoples of Europe, North Africa or the Middle East.

The Whole Child refers to the combined physical, behavioral, emotional, and cognitive developmental levels of an individual student.

Delimitations.

Generalizations made from the results of this study are limited to populations that are similar to this sample. In educational research, one can rarely study every member of a defined population (for this study, ninth graders in rural Colorado schools), but it is possible to collect data from a sample of individuals who are assumed to be representative of a population.

Results of this study are delimited in the following ways:

1. The data from this study were limited to the study site.
2. The data from this study were limited to ninth grade students.
3. The data from this study included a sample population of two groups: Hispanic and White.
4. The data from this study were for the 2008-2009 school year.
5. The data were taken from a small sample population.
6. A single measure of school engagement was used, and the results may not hold if alternative measures had been employed.

These delimitations address the generalizability of the results. However, it is assumed that the data are similar enough to other rural school districts concerning transitional ninth graders and that the findings can be generalized to other studies.

Chapter Two: Review of the Literature

A variety of student characteristics can be nurtured through "engaging" schools resulting in the probability of academic success. The literature review for this study was an attempt to identify the factors that clarify why some students learn more successfully than others and why some students have higher engagement levels than others (Finn, 2006).

Adolescence

Adolescence is a time like no other in a young person's life; it is a time of transition from childhood to adulthood when many changes take place in the physical, social/emotional, and cognitive development of the adolescent. These developmental processes contribute to behavior, emotion, and thought at the individual level.

"Adolescence is often a period of heightened vulnerability and adjustment as a consequence of potential disjunctions between the developing brains' behavioral, emotional, and cognitive systems that mature along different timetables, along with the biological processes" (Steinberg, 2005, p. 69). For the ninth grade student, these changes take place simultaneously with the transitional phase of moving up and into a new educational environment. Transitions can have a profound impact on adolescent development because the process involves both role and setting changes (Bronfenbrenner, 1979) and can even cause a propensity toward psychological disturbance (Bloom, 1976).

The National Institute of Child Health and Human Development (2006) call for a better grounding in the application of child and adolescent development research. To facilitate student success in school, researchers at the institute promote the development of the social/emotional qualities of a student along with the learning content and information. The following statements integrate adolescent development and school practices:

- Relationships Matter: Schools are active social systems, and students with positive relationships demonstrate positive behaviors. Data show that emotional support and attention enhance a student's capacity to learn.
- Context Matters: Development resides in the interaction between context and the individual. Classroom and school context can serve a protective, stabilizing function. Well-organized schools and responsive adults promote self-regulatory skills that facilitate academic performance.
- Affect Matters: Affect drives cognition. Students function better when they have confidence in a secure base where they have the support they need, can explore more competently, are not fearful, and can give attention to learning.
- The Child Matters: It is important for schools to focus on the whole child; not just on skills. Research in developmental neuroscience has demonstrated that children grow cognitively at different rates and may not achieve the same stage of development at the same time (p. 2).

Adolescence and the whole child.

In 2007, the Association of Supervision and Curriculum Development (ASCD) convened the Commission on the Whole Child. Researchers suggest that if the whole child "were truly at the center of each educational decision, we would create learning conditions that enable youth to develop all of their gifts and realize their fullest potential" (p. 4). Rather than a fragmented approach that focuses only on academics and measurements of achievement, ASCD challenges educators to embrace a whole child

approach. They propose that schools "design learning environments that weave together the threads that connect not only math, science, the arts, and humanities, but also the mind, heart, body, and spirit" (p. 2). Students often receive schooling for the head but little for the heart and soul. The bond formed between the student and the institution promotes engagement; that is, if it has healthy values and practices and is receptive to the whole child and their development (Noddings, 2005).

ASCD embrace words of Pablo Casals to emphasize the unique characteristics of the individual child:

> Do you know what you are? You are a marvel. You are unique. In all the world there is no other child exactly like you. In the millions of years that have passed, there has never been another child exactly like you. You may become a Shakespeare, a Michelangelo, or a Beethoven. You have the capacity for anything. Yes, you are a marvel (p. 5).

Comer used the forum of the National Institute of Child Health and Human Development (2006) to propose a multifaceted framework that has the potential to promote the most advantageous adolescent development. His field-based intervention research emphasizes critical domains of student development, along with the opportunities they afford. He believes these critical domains are imperative to educating the adolescent as a whole child. For this study, the following four critical domains are emphasized:

Table 1.

Critical Domains

Domain	Adolescent Development
Physical	Provide opportunities to support healthy physical functioning of students such that academic learning and classroom interaction are optimal.
Cognitive	Provide opportunities to increase students' capacity to think, plan, solve problems, set goals, and work with focused attention.
Social	Provide opportunities to increase youth's capacity to build healthy relationships across the range of human diversity.
Psychological	Provide opportunities to increase youth's capacity for self-acceptance, self-reliance, self-confidence, and identity formation.

Adolescent physical/cognitive development.

During the adolescent years, the brain continues to form. Goleman (1995) has documented that the frontal lobe, "the seat of emotional self-control, understanding, and artful response," continues to develop into early adulthood (p. 226). Time Magazine *(*2008) reports that researchers have used imaging to study the prefrontal cortex of adolescents and found that the final development of the prefrontal cortex continues on into the late teens (even up to age 25). The prefrontal cortex of the brain "affects our highest mental functions (executive functioning) for planning, setting priorities, organizing thoughts, suppressing impulses, and weighing the consequences of one's actions" (p. 5). In the adolescent, the brain regions that "put the brakes on risky, impulsive behavior are still under construction" (p. 2).

Research in developmental neuroscience recognizes the continued development of cognitive competencies in the adolescent. Adolescence is a time of advances in reasoning. Even so, reasoning abilities may be affected by such matters as impulse control and peer influences. Since cognition influences emotions and emotions have an underlying effect on cognitive processes, the personal ethics of the adolescent may be challenged when faced with real-life issues (Steinberg, 2005). As a result, adolescence is considered to be a crucial and vulnerable period of developmental change (physical, social/emotional, and cognitive).

Adolescent social/emotional development.

Teenagers are emotional creatures by nature and prone to distinctive, hard-to-predict behavior. Since a teenager's brain is still developing in the areas of regulation for behavior and emotion, there can be deficits in emotional and cognitive competencies which, in turn, often leads to depression, eating disorders, crime, substance and alcohol abuse, anxiety, negative attitudes, and other disruptive behaviors (Goleman, 1995). As a result, teenagers' judgment and decision-making skills are susceptible to uncertain behaviors due to underdeveloped social and emotional factors (Steinberg, 2005). The amygdale-the center of emotions-can elicit an emotional response, oftentimes without cognitive participation, called "the fight or flight" response (LeDoux, 2002). For adolescents, Steinberg (2007) says this response can "create a situation in which one is starting an engine without yet having a skilled driver behind the wheel."

Goleman (1995) believes that emotions matter for rational thinking. To prove this point, Goleman refers to research done by Salovey and Mayer who have developed five

significant domains of emotional intelligence: 1) self-awareness; 2) appropriate feelings; 3) self-motivation and self-control; 4) empathy; and, 5) the skill of relationships (social competence and incompetence). These domains of emotional intelligence are still maturing in the adolescent and are influenced by "intellectual abilities, as well as their desires, motives, and interests" (p. 72).

Emotional intelligence and competent reasoning abilities can be brought to fruition sooner when they are nurtured by healthy, positive support systems (Steinberg, 2007). Bronfenbrenner (1993), a developmental psychologist, specifically highlights the merits of good, structured support systems for the proper development of the whole child because, otherwise, we are leaving them without a foundation to develop competence and a moral character.

Challenges of the Transition

The ninth grade transition has received much attention from researchers because of course failures and dropout rates that are higher than other grade levels (Hertzog & Morgan, 1998; National Center for Education Statistics, 2005; Roderick & Camburn, 1999). The statistics are grim nationwide concerning low levels of achievement and low graduation rates, but they are particularly disconcerting for ninth grade students (National Center for Educational Statistics, 2006).

The transition to high school can be a time of excitement or a time of turmoil. The countless adjustments ninth grade students must make can be linked with poor school-related outcomes and dropping out of school (Alspaugh, 1998). Moving to a new school often precipitates a whole series of events that generate problems, and the more problems

that youth experience, the lower their expectations of school success will be (Roderick & Camburn, 1999).

The individual make-up of the student combined with contextual factors of the environment can interact to produce a positive or negative experience. Along with encountering new problems, some students' feelings of failure may have already been internalized by cumulative experiences they have had previously in the educational system. If these students have had a history of poor academic achievement and failure, they may feel school is a waste of time. Even though they may want a new beginning, these students continue to find that school can be an unrewarding experience. Generally speaking, the student may be short on motivational engagement which culminates in a lack of interest in schoolwork and participation in school (Deci & Ryan, 1985).

Arkos and Galassi (2004) found the transition to be more challenging for students who have greater gaps in academic achievement due to limited language and literacy skills and less parental participation. Research shows that a difficult transition from eighth grade to ninth grade is associated with achievement loss (Alspaugh, 1998), even for the academically competent. Consequently, *all* ninth grade students are presented with challenges that have an affect on their level of engagement.

Behavioral challenges.

A student who feels rejected or alienated in high school will display behavioral problems, diminished interest, and put little effort into learning and school activities. These students often have negative attitudes and skip school more often than their peers. Behavioral problems appear to increase significantly in the ninth grade. There is more

bullying, more fighting, and more negative peer pressure to experiment in undesirable behaviors which often results in suspensions and expulsions (Osterman, 2000).

On the other hand, research shows that positive relations correlate with positive attitudes about school, a healthy self-esteem, and a reduction in anger (Midgley & Maehr, 2000). The Wingspread Declaration on School Connections (2004) gives strong evidence that if a student makes a connection to school he or she is less likely to "exhibit disruptive behaviors, school violence, substance and tobacco use, emotional distress, and early age of first sex" (p. 233).

Social/emotional challenges.

Social characteristics are greatly influenced by the emotions of an adolescent. When ninth grade students move from middle school to high school, their status-quo changes dramatically. No longer the eldest, most mature students, they find themselves at the bottom of a new, unfamiliar social structure. The new status-quo can make them feel insignificant. They have to navigate the larger and more impersonal environment and find new friends, meet new teachers, confront peer pressure and encounter fighters and bullies (Eccles, Wigfield, Midgley, MacIver & Feldhauer, 1993; Newman, 1981).

For most students, identification with a group of friends is important in forming a strong connection with the school. "Physical appearance, good looks and good grooming, athletic ability, leadership in school activities, academic achievement, and popularity often determine social status and peer acceptance" (Talmi, 2001, p. 10). Ninth grade students have a great variance in behavior. They desire to be independent, yet they normally prefer the security of a group. Even so, there is evidence that students in

transition experience increased feelings of isolation which can be the beginning of a lowered self-esteem (Hertzog & Morgan, 1998).

Many adolescents have fears about all new social situations and especially those that involve older students (Mizelle & Irvin, 2000). An adolescent's emotions are up and down, like a roller-coaster, causing psychological distress and upheaval. Harmful psychological and social factors leave students at a greater risk for becoming disaffected with school (Eccles et al., 1993).

Cognitive challenges.

Transitions are often associated with academic achievement loss. Ninth grade students often experience a decrease in intrinsic motivation and feel disaffected from learning (Harter, 1981). Alspaugh (1998) reported that students making the transition to high school had a greater achievement loss than did any other developmental transitional stage. Furthermore, the transition has also been associated to dropping out (sometimes shortly after entering high school) and failing to graduate on time (Anderman, Maehr, & Midgley, 1999).

Throughout the transitional period, students often have to cope with increased academic stress caused by having to meet higher expectations, increased workload in core content classes, and more homework (Mizelle & Irvin, 2000). They have more choices to make about what subjects to take. If they are on the college track, schoolwork is much harder at multiple levels (Mizelle, 1995). Other challenges ninth grade students must meet are numerous tests, a new and harder grading system, less attention from teachers, and expected independent behavior (Newman, 1992). Harter et al. (1992) state

that learning declines over time as students strive to adapt to the normative high school system of extrinsic motivational orientation versus a more intrinsic, engaging one.

Eccles, Midgley, and Adler (1984) found that high schools are increasingly more impersonal, more formal, more evaluative, more competitive, and socially comparative due to high-stakes testing, teacher-controlled evaluative outcomes, overall GPA's, and rewards focused on academics. This type of educational system focuses on appraisal of self instead of learning, causing students to re-evaluate their scholastic competence. A low perception of competence may cause more pressure and anxiety about school-related matters and be the source of disengagement from school (Harter et al., 1992).

School environments and personal experiences that influence the perception of competence may end in an affective reaction which leads to a change in motivational engagement and individual competence (Bandura, 1977; Connell & Wellborn, 1991; Harter & Connell, 1984).

In the same way, students who are engaged with school are more likely to learn, to find learning rewarding, to graduate, and to go on to college (Marks, 2000). Klem and Connell (2004) expound on the fact that "engagement in learning is as important for success in school as it is elusive in the more traditional, bureaucratic schools" (p. 262).

What's more, an engaging environment is essential to the individual and to education itself (Dewey, 1927). Students are more likely to be engaged and succeed when they experience a connection to their school (National Center for School Engagement, 2006). The Wingspread Declaration on School Connections (2004) outlines the following learning conditions for school-connectedness:

- High expectations for academic success, coupled with support;
- Positive relationships;
- Physical and emotional safety;
- Promotion of motivation, engagement, and attendance which affects academic achievement;
- Less disruptive behaviors, violence, substance and alcohol abuse, and emotional distress; and,
- Accountability measures that impact academic performance and school completion rates, discipline issues, and absenteeism (p. 233).

Engaging schools have been found to foster healthy youth development. "Engaging schools promote a sense of belonging by personalizing instruction, showing an interest in students' lives, and creating a supportive, caring social environment" (National Research Council and Institute of Medicine, 2004, p. 3).

Since engagement at the student level is thought to be a psychological process of interest, enjoyment, thought, commitment, and the effort that students apply to their learning (Marks, 2000) researchers conclude that engagement is an unvarying predictor of student achievement and school completion (Fredrick et al., 2004)

The Outcomes of Engagement

Achievement.

Given the emphasis placed on academic achievement in schools, the ways in which students acquire knowledge through the learning process has become a primary focus.

Klem and Connell (2004) propose that engagement has two aspects: an ongoing challenge and a reaction to challenge. First, an ongoing challenge is comprehensive and

refers to a student's behavioral, emotional, and cognitive development at school. Second, a reaction to challenge is a situational factor during which a student may engage or disengage when faced with perceived failure. Engaging in a challenge involves facing the problem head on with effort, planning, time on task, and motivation, combined with good behavioral skills and positive emotions. Conversely, disengaging involves avoidance of the situation, feeling threatened, having negative emotions, and escaping mentally and/or physically. In the face of failure, anger, resentment, anxiety, and hopelessness (giving up) might surface. Therefore, a student's response to these personal challenges is complex and can be observed outwardly as feelings (emotions) of competency (cognitive) that produces a behavioral component.

"Students perform better when they become more self-aware and confident about their learning abilities, try harder to motivate themselves, set goals, mange their stress, and organize their approach to work" (Greenberg et al., 2003, p. 470). Demonstration of higher levels of engagement will produce better academic performance, resulting in higher test scores and higher grades (Klem & Connell, 2004). Fredricks et al. (2004) state that engagement has a positive influence on academic achievement; therefore, engagement and academic achievement go hand-in-hand.

In addition, researchers have shown that a student's sense of belonging and participation (emotional engagement) contributes to achievement (Finn & Voelkl, 1993; Lee and Smith, 1993). Feelings of belonging are closely tied to student motivation (Eccles & Gootman, 2002; Ryan, 2000; Wentzel, 1997). A sense of community

(belonging and relatedness) meets a student's psychological needs that result in cognitive engagement (Ryan, 2000).

Other research shows a correlation between achievement and measures of behavioral engagement and emotional engagement (Connell & Wellborn, 1994; Finn, 2006; Skinner & Belmont, 1993; Voelkl, 1997). Studies have shown that there is a positive correlation between behavioral engagement and achievement-related outcomes, such as various achievement measures, grades, standardized achievement tests, and district and state tests for high school students (Connell, Spencer, & Abner, 1994; Connell & Wellborn, 1991; Marks, 2000).

In summary, the National Research Council (2004) perceives the outcomes of engagement as having a positive impact on learning, working with others in a positive manner, and healthy functioning in a social institution. On the contrary, a lack of engagement has a negative impact on student achievement and is the continuing progression of negative attitudes, poor relationships, and malfunctioning in a social institution.

School completion.

School completion is an outcome of student engagement and yet more students fail ninth grade than any other grade (National Center for Education Statistics, 2006).

Roderick and Camburn (1999) have reported that the ninth and tenth grades are the weakest in the educational system and are notoriously known for low achievement and high rates of dropping out. The education system often equates these facts with the characteristics of the individual. However, disengagement with the school process is,

more often than not, the result of the interaction between the individual and the educational context (Alexander, Entwisle, & Horsey, 1997; Roderick, 1993).

Schools are faced with creating opportunities and support so that all children can learn and be successful. School improvement efforts must show adequate yearly progress (AYP) in overall performance of students. Schools are required to show progress for all students, including various subgroups such as English Language Learners. (*No Child Left Behind Act*, 2001). Yet, the National Center for Education Statistics (2006) reported that the dropout rate for native-born Hispanics (16-24 years old) was lower than that of foreign-born Hispanics. In addition, the overall data for the graduation rates in schools across the United States report that in 2005-2006 only three-quarters of the 2002-2003 freshman class graduated from high school with a regular diploma.

However, there is a current and healthy shift from the prevention of dropping out (*No Child Left Behind Act*, 2001) to the promotion of school completion; a transfer from the sole intent of "fixing the child" to a school-shared responsibility for a person-environment fit instead (Eccles & Midgley, 1989). Roderick and Camburn (1999) suggest that problems in high schools are not simply intake issues external to the schools themselves.

In its place, improved end results are associated with the organizational structure of the high school. In the past, "emphasis has been placed on the types of students that attend high schools and not on how the structure and pedagogy of the school shape student performance" (p. 337). Dropping out versus school completion was noted as early as 1987 when attention was given to the mistaken belief that dropping out of school was a

final and ultimate event. Instead, dropping out is a process of gradual disengagement, a chain of events in a developmental process (Rumberger, 1987).

Finn (1993) presents two models that illustrate the student withdrawal process related to school practices. The "frustration-self-esteem model" explains the effects of failure which causes a lowered, school-related self-esteem. An unhealthy self-esteem leads to frustration, disengagement, and dropping out. The "participation-identification model" emphasizes the importance of school engagement. When a student does not participate in the learning process and school activities, he or she is more likely to disengagement physically, academically, and emotionally.

Depictions of the withdrawal process are as follows (p. 134):

The process of frustration-self-esteem:

Unsuccessful school performance→Reduced self-esteem→Dropping out

The process of nonparticipation and withdrawal:

Nonparticipation (Physical withdrawal)→Unsuccessful school outcomes→

Nonidentification (Emotional withdrawal)

Another part of the withdrawal process is absenteeism. Just as the *No Child Left Behind* legislation has put increased emphasis on student achievement as measured by standardized test scores, they have also mandated that schools and school districts report unexcused absentee rates in their published report cards because absenteeism is an indicator for Adequate Yearly Progress (AYP) (Colorado Department of Education, 2008).

Legislators expect to see a correlation between attendance and academic achievement. Characteristically, a large increase in missed school takes place past the tenth grade. It is common sense that students need to be in school to learn and if students miss too much school achievement will be negatively impacted (Seeley, Tombari, Bennett, & Dunkle, 2009).

The following chart gives substantiation that the school environment and the home environment are common contributors to student absenteeism. Many of the individual characteristics can be associated with unengaging school practices. Neilson & Gerber (1979) compiled the following factors that can be related with attendance (pp. 314-325):

Table 2.

Factors Related to School Absenteeism

School Environment	Home Environment	Individual Characteristics
Teacher/student conflict	Divorce	Intelligence
Poor academic school	Unemployment/SES	Negative perception of separation
High competition	Illness/psychopathology	Few friends
High teacher control	Alcohol/substance abuse	Low social competence
Low teacher report	Family conflict	Low self-esteem
Stringent rules/unfairness	Moving	High levels of anxiety
Grading practices	Education level of parents	
	Inconsistent discipline	

Other variables that contribute to disengagement and no completion are: doing less homework, exerting less effort in school, non-participation in school activities, cutting class, skipping school, disruptive behaviors resulting in suspension and retention problems, early school failure, and poor attendance (Cairns, Cairns, & Neckerman, 1989; Connell et al., 1994; Finn & Rock, 1997; Finn & Voelkl, 1993).

Disengagement with course work is common at the high school level. In a study concerning grades, students who have more than one semester of a failing grade in core subjects and fewer than five completed course credits by the end of the freshman year are indicators that a student is falling behind and will not graduate on time (Allensworth & Easton, 2005).

Theoretical literature contends that it is *low achievement* that is the most common cause of a student's withdrawal from school (Bloom, 1976). Low achievement creates feelings of failure (Finn, 1989), along with social difficulties (distancing) and unconstructive attitudes (Cairns & Cairnes, 1994). When students fail courses and do not progress through the required sequence of courses, they fall further and further behind. The lack of successful course completion combined with a defeatist attitude, make students at high risk for dropping out. To prevent a continuous and downward spiral, researchers stress the importance of early adjustment to high school and help with academic recovery.

In particular, teachers and other educators have an obligation to pay attention to the high school transition in order to reduce dropout rates (Roderick & Camburn, 1999). Failure to earn a high school diploma increases the likelihood of unemployment, poverty,

poor physical and emotional health, and could lead to involvement in the criminal justice system (National Research Council, 2004).

In summary, without consideration of the necessary foundation in which students experience opportunities for success in a caring, supportive environment many of the problems associated with low academic achievement and dropping out will not be improved (McPartland, 1994). A multifaceted approach to student engagement can increase the rate of school completion. *Behavioral engagement* may improve absences, truancy, inappropriate classroom behavior, non-participation in extracurricular activities, and poor social relations; e*motional engagement* may improve negative attitudes, negative views of self, and a lack of interest and relevance in schoolwork; and, *cognitive engagement* would improve poor grades, low test scores, and a lack of course credits and retention (Fredricks et al., 2004).

Contextual Factors of Engagement

The literature on engagement offers a conceptual framework from three perspectives: the psychological, the educational, and the developmental. Within this framework are the contextual factors of engagement: the school context; the classroom context; the peer context; and, the student context. All contexts are interconnected.

School context.

Research shows that all learners benefit from school-wide efforts to provide engaging climates that promote positive student outcomes. Engagement research that has been conducted on the investment or commitment a student has in relation to their learning environment has been referred to school bonding, identification with school,

school attachment, school connection, and school engagement. Regardless of what term is used, all research studies show that efforts to facilitate engagement have the capacity to produce more successful students (Libbey, 2004). Resnick et al. (1997) suggest that school engagement is a psychological state that has protective factors and has the potential to decrease negative developmental outcomes.

Research shows that student performance in the first year of high school is a school-related outcome. Eccles and Midgley (1989) propose that grade and motivational declines following a transition are a developmental mismatch between the developmental needs of adolescents and their environment. Good versus bad school-wide contexts can explain why there is often a significant variance in student engagement, especially for the transitional ninth grade student. Providing a good transition into a high risk environment will not ensure that students will adapt and perform well; a psychological investment in a school depends largely on situational school-level factors. Since learning is the foremost intention of schooling, it is essential that schools strengthen the behavioral, emotional, and cognitive levels of the individual student (Goodenow & Grady, 1993).

Even though students enter school with varying experience, theory and empirical evidence has shown that schools can influence students' perceptions of being cared for by all stakeholders and raise their levels of emotional well-being and academic success (McNeely, Nonnemaker, & Blum, 2002). Resnick et al. (1997) have identified school engagement as the *only* school-related variable that has protecting factors for every single school outcome.

During the adolescent years, school is a dominant part of a student's everyday life. The level to which students are engaged with school is "the extent to which students feel a sense of belonging and are supported by others" (Goodenow, 1993, p. 80). Developmental psychologists believe that engagement with school encourages positive adolescent development (Ainsworth, 1973; Erikson, 1987).

There are two prominent components to school engagement that promote positive youth development: participation and identification. Finn (1989) developed the participation-identification model which is comprised of two components of engagement: a behavioral component (participation) and an emotional component (identification) which results in learning.

1. Participation in school includes behaviors such as initiatives in learning, responsiveness to school requirements, extracurricular activities, and decision making; and,
2. Identification with school means the student has a sense of belonging and values school (p. 14).

Certain school settings see common patterns of student disengagement manifested in limited participation and little concern for school-related values. An impaired self-esteem, self-concept, and low academic competency are often the consequence. As a result, the adolescent often opposes the school context he or she sees as responsible for feelings of ineffectiveness and powerless (Finn, 1989). Voelkl (1997) believes that a lack of participation, along with disruptive behaviors, has dire consequences on student performance. Negative behaviors and attitudes are often expressed in a form of

detachment that includes low grades, truancy, frequent absences, and dropping out of school. “All these behaviors can be associated with a student’s feelings of not belonging in school and not valuing school itself or school-related outcomes” (p. 294). In that case, a student would rather be anywhere else other than school.

Research studies shows that disengagement with school is found more frequently among minority students (Finn, 1993; Rumberger & Larson, 1998; Wehlage, Rutter, Smith, Lesko, & Fernandez, 1989). Hunt (1975) conceptualized the model of person-environment fit in order to understand the interactions individuals have with their environment. A student is not as academically successful when there is not a fit in the school-context. Often there is a person-environment mismatch for Hispanics who are not English proficient and are in an English speaking environment. This environment mismatch puts them at a disadvantage to perform on an academic equal footing with native English proficient peers. If a person of ethnicity feels like he or she fits in the school environment then that the learner will put more effort into schoolwork and improve levels of performance (Pintrich & De Groot, 1990).

For all students who are academically or socially vulnerable, early failure in high school is an impediment to successful engagement (Roderick & Camburn, 1999). Students can feel alienated by a curriculum that does not meet their needs (Wehlage & Rutter, 1986). Newmann (1981) emphasizes the need for designing schools that reduce alienation in all forms because “student engagement is necessary for learning” (p. 548).

Understanding the dynamics of engagement in a school-context is especially important when planning and implementing programs for students of ethnicity or others who may be at risk for negative school outcomes (Finn & Rock, 1997).

Marzano (2003) recommends the following as the most effective school-level factors in rank order of their impact on student achievement: opportunity to learn; time; monitoring; encouragement to achieve; parental involvement; school climate; leadership; and cooperation (p. 18).

Student engagement and achievement are linked to "high standards for academic learning (high standards meaning mastering the necessary skills students need for moving up to another grade or going to college), implementation of a meaningful, engaging pedagogy and curriculum, professional learning communities, and personalized learning environments" (Klem & Connell, 2004, p. 262). As researchers, policymakers, and educational leaders focus their efforts on the improvement of student performance in high schools, they "must pay attention to the extent to which the contexts of the schools are providing adolescents with the kind of learning environments and supports that promote positive engagement and academic success" (Roderick & Camburn, p. 336).

Classroom context.

Classrooms are a social phenomenon and the notion that social relations add value to our lives in the communities to which we belong reflects an Aristotelian perspective on human nature (Lee & Smith, 1999; Noddings, 2003). Noddings (2003) suggests happiness as an aim for education. Great thinkers have correlated the joy of learning with the traits of a rich intellectual life, rewarding relationships, love of place, and sound

character. Classrooms that are happy places advance these traits through the building blocks of the teacher-student relationship and the structure of the classroom.

Teacher-student relationship.

The likelihood of students being motivated and engaged in learning is the extent to which they have teachers who establish a caring atmosphere that shapes the instructional process and supports students' meaningful involvement in the classroom (National Research Council, 2004). A study by Ryan and Patrick (2001) shows that a teacher-student relationship of mutual respect is central to the theme of engaging students in their learning and can cause disruptive behaviors to decrease. Wentzel (1998) documented that interest in classes, pursuit of goals, and adherences to classroom rules were a direct result of teacher support. The quality of relationships in the classroom is associated with student academic motivation and attitudes toward school (Eccles et al., 1993). An increase in school-related values and a sense of belonging is evoked when students feel safe and comfortable in expressing themselves and are able to share ideas (Goodenow, 1993).

Classroom structure.

Engagement in the classroom will develop within a structured classroom climate (Skinner & Belmont, 1993). As a vital part of the classroom structure, Klem and Connell (2004) recommend clear teacher expectations for behavior and academics, along with consequences for not meeting those expectations. Newmann (1981) theorizes that engagement in learning will be reinforced by (a) positive teacher attitudes regarding the potential and strengths of the student, including the marginal student; (b) teaching

practices that involve students in the learning process with the inclusion of cooperative learning strategies; (c) a diversified and differentiated curriculum relevant to the needs of the student and that permits diverse forms of talents; and, (d) opportunities for fun.

Work norms are part of the classroom structure and are related to behavioral, emotional, and cognitive engagement. Behavioral engagement involves persistence, effort, attention, and participation in class; emotional engagement involves enthusiasm, interest, and pride in accomplishments (Connell and Wellborn, 1991; Fredricks, Blumenfeld, Friedel, & Paris, 2003; Skinner & Belmont, 1993); and, cognitive engagement is characterized as attention, problem solving, use of meta-cognitive strategies, and the willingness to face a challenge (National Research Council, 2004).

The National Research Council (2004) recommends the following work norms for student engagement in the classroom:

> Teachers should continually monitor the effectiveness of the curriculum presented and the best practices associated with instructional strategies, not only for progress of student learning, but also to see if students are staying engaged behaviorally (e.g., attendance, completion of work), emotionally (e.g., enthusiasm for learning activities) and cognitively, (e.g., efforts to understand and apply new concepts) (p. 4).

As a final point, research on classroom climate shows a correlation between higher levels of student engagement when the classroom structure includes fair rules, clear expectations, work orientation, and positive attitudes (Fredricks et al., 2004).

Instructional strategies.

Wiggins and McTighe (1998) believe that “learning is fragile” (p. 57) and central to the well-being of the learner are schools that meet the developmental needs of the adolescent and incorporate research-based policies and best practices.

While a review of all research-based best practices for the development of deep cognitive engagement is outside the scope of this dissertation, some follow.

Learning styles.

Dewey believed in the personalization of the learner. However, American secondary schools largely practice depersonalization. In a personalized school environment, the people in the school show concern for the individual student and his or her personal interests (cited in Neumann, 2008). This idea parallels with the diversity of learning styles and natural intelligences within a school setting (Senge, 2000). A learning style refers to a learner's personal characteristics and individual preferences for thinking, perceiving, processing and remembering information. Intelligence is enhanced when a student's learning style is identified. Since students have different interests and learn in different ways, there are numerous ways to determine and demonstrate learning so that the learner is highly engaged (Gardner, 1983).

Brain-based learning.

The incorporation of brain-based learning in schools demonstrates an understanding of the developmental, intellectual growth of the adolescent. As stated earlier, it is most important for educators to remember that the frontal and pre-frontal lobes of an adolescent's brain are not fully formed (LeDoux, 2002). The following research is by Jensen (2005):

Student brains spend approximately 13,000 hours in a school environment and the brain can be changed by the experiences students encounter in school. "Educators should

take responsibility for the ways in which they are shaping brains in the social environment of our schools" (Jensen, 2005, p. 95).

Brain-based learning has important key elements that educators must take into account: peer pressure, acceptance, disapproval vs. reinforcement, and the role of emotions. Common sources of demotivation that have an effect on student engagement in high schools are a lack of positive relationships, learned helplessness (common in high school students), awareness of disrespect for one's culture, a perception of threats, drug use, and class assignments that have no relevance.

However, educators have a great deal of influence over the activation of intrinsic motivation in their students. The brain has web-like signaling systems that are called states of mind. Sensations (i.e., hunger, fatigue), feelings (i.e., happiness, worry) and thoughts (i.e., optimism, focus) all combine to create state changes. These state changes are in constant flux, real and cognitive, and responsive to the internal and external environment. States combine behavioral, emotional, and cognitive processes for decision-making. Educators can "read" the present state of their learners, set up a frame for state change, and begin the state change. Inducing a great variety of learner states and getting students to the appropriate state change gives the learner opportunities to engage and make new discoveries. The research on brain-based strategies is particularly relevant when working with teenagers. Even though their state of mind is constantly changing, it is very workable. "The good news is that the brain is changed for the better by good friends, smart nutrition, healthy habits of the mind, perceptive teachers, making good choices, and being a part of meaningful learning" (Jensen, 2005, p.103).

The flow theory.

The theory of flow was developed by Csikszentmihalyi (1990). Flow is "a state of deep absorption in an activity that is intrinsically enjoyable and that provides a feeling of creative accomplishment and satisfaction. When there is intense concentration, interest, and enjoyment in a learning task, learning is more meaningful" (Shernoff, Csikszentmihaltyi, Schneider, & Shernoff, 2003, p.160). Many athletes and performers have experienced the state of flow, as have others who are so absorbed in an activity that they lose all track of time.

Shernoff et al. (2003) studied high school students across the United States to find out the conditions in which adolescents reported being engaged. The study presented a conceptualization of student engagement in high school classrooms from the perspective of the flow theory. They reported that the participants experienced high levels of engagement when the task and their own skills were matched, the instruction was relevant, and the learning environment was collaborative (versus listening to lectures or watching videos).

The comprehension of complex ideas and the mastery of difficult skills are the hallmarks of deep cognitive learning strategies. Deliberate and thoughtful students use a variety of strategies when faced with challenging learning situations, which includes the dynamics of a student's drive for success or the avoidance of failure (Wiggins & McTighe, 1998). When students use self-regulated strategies, seek out opportunities to learn, and master skills they generate higher levels of cognitive engagement (Fredricks et al., 2004; Klem & Connell, 2004; Marks, 2000). Teachers often use behavioral strategies

to evoke cognitive learning. Strategies at a very basic psychological level would be students paying attention, staying on task, and responding to the more shallow instructional strategies like reading a text, the use of worksheets, and memorization (Fredricks et al., 2003).

The use of extrinsic motivation is a common method of teaching in high schools. Extrinsic modes of learning may control immediate behaviors (Eccles et al., 1993) but undermine the intrinsic motivation and the investment in learning which diminishes over the school years (Harter & Connell, 1984). From a developmental perspective, engagement produces intellectual growth and that growth is an active response of the adolescent to the environment. There is a connection between engagement and the belief that schoolwork is both interesting and relevant to student needs (Csikszentmihalyi, 1990).

Peer context.

High school is a web of social networks and peer groups often cluster according to their levels of engagement and interests. The quality of peer relationships, social competence, and socially responsive behavior has been linked to academic success. Peer acceptance is known for increasing student interest in school by affecting a student's well-being, but peers can also be responsible for the cause of anxiety, depression, and low self-esteem (Wentzel, 1994). However, if a student has a positive peer social group distress can be assuaged (Wentzel & Asher, 1995).

Peer acceptance and peer rejection are common aspects of high school life and are associated with a feeling of satisfaction with school (emotional engagement), appropriate

behavior (behavioral engagement) and academic effort (cognitive engagement) (Wentzel, 1998). Students most at risk for disengagement have little contact with peers who have high expectations for academic success. Classes designated for low achievers may only reinforce low standards and competence. Adolescents who do not like school, do not follow rules, or do not have the support of their peers are more likely to disengage from school (Fredricks et al., 2004). Therefore, the National Research Council (2004) recommends that formal and informal ability tracking be eliminated so there is more interaction and engagement among low achievers and high achievers.

Social conditions influence cognition. Therefore, educators must pay attention to the development of social skills in the adolescent that will, in turn, increase their levels of cognitive engagement (i.e., an instructional strategy such as cooperative learning has been proven to increase student engagement and achievement). Since different students have varying levels of cognition, the extent to which students are engaged in their learning, with peers as positive role models, is an indicator of how well they will do in school (Jensen, 2005).

Engagement as a Multifaceted Construct

Engagement in school is "the attention, interest, investment, and effort students expend in the work of school" (Marks, 2000, p. 155). Engagement is often studied by researchers as a singular variable and measured independently and individually. However, to date, research has not capitalized on the potential of engagement as a multifaceted construct.

The research on engagement has grown out of a concern for disengaged students and embraces the idea that student engagement is an outcome of overall school practices, has protective factors, and is an antecedent to school success ((Finn, 1989, 1993, 2006; Finn & Rock, 1997). Fredericks and colleagues (2004) have formed a more developmentally-focused perspective on student engagement. They present a theoretical framework that combines the three domains of engagement: behavioral, emotional, and cognitive into a "meta" construct. Because of the interactive effects between the context/environment and the individual, these researchers believe that a multifaceted approach should be used in the study of engagement.

A comprehensive model is relevant to all students and, if used as the foundation for educational practices, can support school improvement efforts designed to produce more effectual schools and students. Guthrie and Wigfield (2000) suggest that engagement should only be studied by researchers and educators through the use of a holistic approach. The three components of engagement can link areas of research together that inform how students behave, how they feel, and how they think. Moreover, "it provides a richer characterization of the individual student" (Fredricks et al., 2004, pp. 82-83).

Behavioral engagement.

Behavioral engagement draws on the idea of participation which includes involvement in academic and social or extracurricular activities that are considered crucial for achieving positive academic outcomes and preventing dropping out (Fredricks et al., p. 60). For that reason, Finn's (1989) engagement model, known as the

participation-identification model, has been widely used to represent the role behavioral engagement has in withdrawing from school (Finn, 2006; Finn & Rock, 1997; Finn & Voelkl, 1993; Rumberger & Larson, 1998; Voelkl, 1997).

Bandura (1997) explains human behavior in terms of a reciprocal interaction between behavioral, cognitive, and environmental influences. He states that students learn through observing others' behavior, attitudes, and outcomes of those behaviors and suggests that a learner's behavior is an interactive process between cognitive and personal influences, external influences, and the influences of the behavior itself.

The connection between bonding and behavior is a basic principle of the social bonding theory (Hirschi, 1969). This theory emphasizes attachments or bonding to the institution that acts as a control mechanism to inhibit nonparticipation and unsuccessful school outcomes. Hirschi (1969) states that social bonding is comprised of four elements: *attachment* is an individual's affective tie to significant people and a concern with the opinions and expectations of others; *commitment* is an individual's interest in school and the extent they perceive school as offering the necessary opportunities for success; *involvement* is the amount of time and energy an individual invests in the values and activities of the school; and, *belief* is an individual's intense and personal beliefs that keeps them from breaking rules.

When the bonds to the school are weak, the individual feels free to engage in unacceptable behavior. Finn (1993) outlines three aspects of bonding and behavior:

> *First*, patterns of behavior have their beginning in previous school years. *Second*, the school can be responsible for the positive reinforcement of appropriate behavior. *Third*, there is a developmental process that leads to engagement or disengagement. These patterns have behavioral and psychological components. The behavioral component may take the form of working (or not working for good grades, participating (or not participating) in the academic and/or extracurricular parts of the school program, or channeling one's energies away from (or into) disruptive behavior. The psychological component involves positive affect for some youngsters (e. g. mental health; commitment; bonding) and negative for others (e. g. frustration and embarrassment; distress and alienation) (p. 13).

Making a rational decision to behave in appropriate ways is the foundation of the choice theory (Glasser, 1986). Glasser (1986) believes that people can control their own behavior and that all people need a sense of belonging, freedom, power, and fun to promote positive behavioral patterns. He also believes that teachers must recognize these needs in their students because they are relevant to behavioral engagement.

The attributes of successful learners is a key issue in educational research and many studies demonstrate a strong correlation between behavioral engagement and academic achievement (Connell et al., 1994; Marks, 2000). Wiggins and McTighe (1998) suggest that "one key to successful teaching for understanding is to grasp the role of attitudes and habits of mind" (p. 171). Marzano and Pickering (1997) stress three categories concerning habits of the mind as a framework for intelligent thinking behaviors that are characteristic of top students: self-regulation, critical thinking, and creative thinking.

In conclusion, Finn (1993) believes that engagement behaviors are more yielding to influence and should become the focus of educators and researchers.

Emotional engagement.

Emotional engagement is defined as a student's positive and negative reactions in the classroom (Connell & Wellborn, 1991; Skinner & Belmont, 1993) and a student's emotional reaction to their school and their teachers (Lee & Smith, 1995). Emotional engagement is presumed to create ties to the institution and has an effect on a student's willingness to do their schoolwork (Libbey, 2004). A positive reaction toward schooling, would include attitudes such as enjoyment, liking, belonging, bonding with peers and teachers, valuing, and the appreciation of school success (Anderman & Anderman, 1999; Finn, 1989; Goodenow, 1993; Voelkl, 1995). Some researchers even gauge positive emotional engagement by whether the student has fun at school (Newman, Wehlage, & Lamborn, 1992).

On an emotional level, the concept of a student's self-view is greatly influenced by the context of their relationships with peers, the teachers, the classroom, and the school environment. For instance, emotional engagement evolves into an even more critical developmental process when the adolescent undergoes a transition to the high school and becomes subject to changes in self-perceptions, peer group identification, and academic challenges (Harter, 1996).

In summation, emotional engagement is characterized by feelings of connection to the school community, feelings of inclusion, and feelings of support in the social environment. Therefore, it is vital for a student to know that he or she is a worthy member of a school; one who warrants care and concern (Goleman, 1995).

Cognitive engagement.

Cognitive engagement draws on the idea of investment in learning and incorporates thoughtfulness and the willingness to exert the necessary effort in order to comprehend complex ideas and master difficult skills (Fredricks et al. 2004, p. 60). Research has shown that cognitive engagement results in higher achievement scores across different age groups (Marks, 2000; Ryan, 2000; Skinner, Wellborn, & Connell, 1990). Higher levels of cognitive engagement have a psychological factor: a desire to go beyond the norm, along with a desire to be challenged (Connell & Wellborn, 1994; Newmann et al., 1992). Nevertheless, "even though student engagement in the intellectual work of school is important to student achievement and to the student's social and cognitive development, research has documented low levels of engagement, particularly in the classroom" (Marks, 2000, p. 154).

Academic self-concept and feelings of competency are positively related to academic achievement (Harter et al., 1992). Cognitive engagement is perceived as an important contributor to adolescent development, but only to the degree that students have a belief that school provides them with useful results (Finn, 2006). Since cognitive engagement plays a role in the psychological well-being of the adolescent student (Ryan, 2000), low levels of cognitive engagement are often displayed by a high degree of anxiety, stress, and poor coping skills in school (Ryan & Connell, 1989).

Therefore, educators need to find ways of increasing the levels of cognitive engagement; an essential ingredient in adolescent development (Steinberg, 2005).

Otherwise, this developmental period can lead to increased participation in at-risk behaviors and emotional turmoil (Finn, 2006).

Bandura (1989) states that a student should believe in his or her competency to perform learning tasks with a successful conclusion. *Deep* cognitive development suggested by the National Research Council (2004) is exemplified in Piaget's statement. Piaget (1972) sets forth two goals in education that are significant to the cognitive development of an adolescent:

> The principal goal of education is to students who are capable of doing new things, not simply of repeating what other generations have done-students who are creative, inventive, and discoverers. The second goal of education is to form minds which can be critical, can verify and not accept everything they are offered….We need pupils who are active, who learn to find out by themselves, partly by their own spontaneous activity and partly through material we set up for them, who learn to tell what is verifiable and what is simply the first idea to come to them (p. 345).

Adolescents' Needs

Research studies show that adolescent needs are "a mediator between contextual factors and engagement" (Fredricks et al., 2004, p. 80) and the extent to which those needs are met determines student engagement (Connell, 1990; Connell & Wellborn, 1991).

The educational philosopher, Paulo Freire, says:

> A civilizing education is the path through which men and women can become conscious about their presence in the world; the way they act and think when they develop all of their capacities, not only taking into consideration their needs, but also the needs and aspiration of others (cited by Senge, 2000, p. 212).

The three needs identified as being the most important to high school students are competency (feeling successful); belonging (feeling valued); and relationships (knowing

teachers and others in the school care about them and take an interest in them) (Klem & Connell, 2004). Maslow (1954, 1971) presents the concept of a hierarchical structure of human needs that has five levels: basic needs (such as food and water); personal safety; social needs (a sense of belonging); esteem needs (such as self-respect and the respect of others); and, self-actualization (the need for personal fulfillment).

The health and safety of the adolescent are concerns that high schools must address in order to best meet their needs. Teens are notorious for putting themselves at risk by the use of unhealthy behaviors (e.g., body images, alcohol, drug and tobacco use) and negative behaviors, (e.g., fighting, bullying, and carrying weapons). These behaviors need to be alleviated to meet the adolescents' hierarchical needs for relatedness, competency, and autonomy (Skinner & Belmont, 1993). These needs are closely related to levels within Maslow's hierarchy of needs are relatedness (level three); competency (level four); and autonomy (level five).

"Within the school-context, the extent to which an adolescent's academic and psychological needs are met or ignored is reflected in their self-system processes (attitudes and beliefs about self)" (Skinner & Belmont, 1993, p. 572).

McNeeley, Nonnemaker, and Blum (2002) state the importance of the stage-environment fit perspective as a way in which schools can meet an adolescent's developmental needs:

> Stage-environment fit theory suggests behavior, motivation, and mental health are influenced by the fit between the developmental stage of the adolescent and the characteristics of the social environment. Adolescents are not likely to feel connected to school if they are in a school that does not meet their core developmental needs (p. 138).

They state that the main developmental needs of high school students include autonomy, demonstrations of competency, caring and support from adults, developmental regulation, and acceptance by peers. High schools that promote positive adolescent development do so through creating positive, caring relationships that meet the needs of safety, love and belonging, respect, choice, and achievement.

The California Department of Education (CDE) (2005) proposes that Maslow's (1954) hierarchy of needs can offer an order from which schools can plan their policies and practices. If a student's academic and psychological needs are met, they are more likely to:

- Be engaged in school;
- Value educational goals;
- Build up social skills and understanding;
- Play a role in the school and community; and,
- Achieve academically.

Students are more likely to be less motivated, be more alienated, and be less academically inclined when schools don't satisfy their needs (CDE, 2005).

Need for relatedness.

The need for relatedness is conceptualized as an emotional need and is more likely to be met when there is a caring atmosphere and a personal concern for the student in the school and classroom context (Connell & Wellborn, 1994) and where the student is welcome and encouraged (Osterman, 2000). A positive correlation has been shown between the fulfilled need for a sense of belonging and engagement. Educational efforts

to enhance positive youth development by meeting a student's needs for relatedness will increase academic efforts (Goodenow, 1993). Brophy (1987) has proposed teacher behaviors that foster the psychological needs of an adolescent. Some of these behaviors are guidance, modeling, enthusiasm, choice, sincere praise, and confidence building.

Involvement is part of the interpersonal relationships between teachers and peers within a structure that effectively achieves desired outcomes. Involvement within the classroom structure is the degree to which teachers take the "time for, express affection toward, enjoy interactions with, are attuned to, and dedicate resources to their students" (Skinner & Belmont, 1993, p. 572). Connell and Wellborn (1991) surmise that student engagement is augmented in the domains of behavioral, emotional, and cognitive when the social context is supportive, encouraging, and personalized.

Need for competence.

Adolescents who are engaged in learning should be able to express pride and satisfaction in achievements and be able to increase their level of competency (Skinner & Belmont, 1993). Fredricks and colleagues (2004) state that when an adolescent's need for competency is met, a student is able to set their course, understand what it takes to do well, and succeed.

A level of competency can be increased in a favorable classroom structure where teachers clearly communicate their expectations by giving consistent responses, being helpful and supportive, and adjust instructional strategies to meet the need of the student, thereby allowing the student to achieve the desired outcomes (Connell & Wellborn, 1991). High levels of competence are associated with significant increases in mood,

enjoyment, self-esteem, and intrinsic motivation. Unsuccessful school practices can have a devastating impact on a student's perceived low level of competency. Instead, their strengths and talents must be noted and maximized for students to realize their full potential. Otherwise, the end result will be disengagement in learning and eventual dropping out of school (Harter, 1981).

Competence (self-efficacy) is the ability to perform a task in a specific domain or being capable. Therefore, educational research has brought to light the importance of not only considering the ability of the individual student, but the importance of the student believing that he or she can and will succeed (Bandura, 1997). Four processes have been identified that help students develop competence: *mastery experiences* that give the essential information for the learning task and are given feedback as to the degree of success (i.e. rubrics); *modeling* that gives the learner the opportunity to see success; *verbal persuasion* that gives the student feelings of competence by assuring them they have the necessary skills to perform a certain task; and, *physiological information* that conveys feelings of competence through the positive or negative attitudes an individual has toward a learning task (Bandura, 1997).

Meeting the needs of student competence has the potential to increase student engagement (Harter et al., 1992).

Need for autonomy.

> Gone is the offering of school work that might challenge each child and his particular talents as schoolwork becomes less differentiated, less interactive, less focused on individual student needs, and harder and more boring." (Seeley et al., 2009, p. 210).

As a developing adolescent matures, he or she has a desire for more complex and less routine learning tasks and, by this means, exercising self-regulated learning that gives more satisfaction and gratification in learning as an incentive in itself (Bonfenbrenner, 1979; Csidszentmihalyi, 1990). Csikszentmihalyi (1990) identified four factors that are crucial to reach the fifth level in Maslow's (1954) hierarchy of needs: self-actualization. He believes these four factors can lead to flow experiences: setting meaningful goals; garnering resources to accomplish the goals and being immersed in them; awareness of when to make necessary changes; and, celebrating short-term successes while keeping an eye on long-term goals.

Researchers suggest different strategies to engage the student as he or she becomes more autonomous. Marks (2000) advocates more cognitively challenging schoolwork that will engage students more deeply and that will promote intellectual development. Bronfenbrenner (1979) believes that learning in the high school environment fails in the developmental context of meeting a student's need for more authentic work because schools rarely participate in a caring curriculum.

Newmann (1991) states that schools have the following alienating characteristics: bureaucratically organized schools, meaningless, low-level school work, and impersonal relationships with students and teachers. Goodlad (1984) has characterized the high school student as dying of boredom, staring out classroom windows, waiting for the bell to ring and, more often than not, being disengaged.

A psychological and motivational theory developed by Connell (1990) proposes three needs necessary to encourage academic learning: the fundamental, inherent human

need to be able to express competence, the need for a sense of student engagement, and the need for authentic, autonomous work. Authentic, autonomous work is an intellectual involvement in a process to solve interesting and meaningful problems that have relevance to the world (Marks, 2000). High school students have an innate desire for more autonomy as opposed to doing work that is continually controlled by others (Ryan & Connell, 1989). Rather than using external control, autonomy will more likely be met when students can make choices, be involved in making decisions, and have a certain amount of freedom (Deci & Ryan, 1985; Fredricks et al., 2004; Marks, 2000).

Consequently, when the need for autonomy is met, studies have shown that students are more engaged (Connell & Wellborn, 1991; Marks, 2000; Shernoff, Schneider, & Csikzenmihalyi, 2001). Students who are engaged show more behavioral engagement in learning activities that have an element of autonomy accompanied by positive emotional reinforcement (Skinner & Belmont, 1993).

Summary of Chapter Two

The literature review for this study attempted to identify the factors that clarify why some students learn more successfully than others and why some students have higher engagement levels than others (Finn, 2006), along with the variety of student characteristics that can be nurtured to result in the probability of academic success. The more educators and researchers learn about the creation of engaging learning environments, the more we understand that, from the student's perspective, it is a complex social-emotional phenomenon that plays out differently on an individual level.

Disengagement of students in schools has received a great deal of deserved attention. Research suggests and supports the idea that the disengagement of ninth grade high school students is a serious problem with far-reaching consequences. Disengagement can be determined by a disconnection with school resulting in negative attitudes, discipline problems, boredom, low achievement, failure, dropping out, and, ultimately, an unsuccessful future.

The literature review offered concrete evidence that engagement has the potential to revolutionize academic achievement and to make improvements in student tediousness, disengagement, and the high dropout rates. In the course of policy making and educational reform, the inclusion of the appropriate academic and psychological dynamics of engagement holds promise for a quality education with successful student outcomes.

Student engagement can be enhanced by providing developmentally-appropriate practices, helping students overcome adverse challenges, supporting student needs, showing personal care and concern for the student, providing choice and a degree of freedom connected to student goals, and granting an array of opportunities for success. Thus, school environments will be transformed into happy places where *all* students are successful.

Chapter Three: Methodology

Background

The purpose of this study was to examine a group of ninth grade students' views and individual differences of engagement levels among three domains: behavioral engagement, emotional engagement, and cognitive engagement. The study addressed the following questions:

Do perspectives of a group of ninth grade students differ among three domains of student engagement, as measured by the School Engagement Survey (*SES*) (NCSE, 2006)?

Are there differences between Hispanic and White ninth grade students' views of engagement by domain?

Since course failures and dropout rates tend to be highest among freshmen, the study was conducted with a population of freshmen at one rural school. Although this was a convenience sample selected due to the researcher's access to the site and participants, the researcher anticipated that the findings would be valuable in thinking more broadly about the general population of rural ninth grade students who may be at risk for disengagement and school completion.

Design

This study used survey research because it is useful to assess phenomena that are not directly observable: inner experiences, opinions, values, interests, attitudes, and the

like (Gall, Gall, & Borg, 2003). Additionally, education research often includes surveys that allow for the collection of quantifiable data that can be described through statistical methods and used as a foundation for further research (Gall et al., 2003).

Participants and Setting

Data were collected at a rural, public high school in a Colorado mountain resort town with a population of around 10,000. The school district provided demographic information for the school. At the time of the study, 329 students were enrolled in the high school (grades nine to twelve). In the ninth grade class, there were 73 ninth grade students (39 males and 34 females).

During the 2008-2009 school year, 70 students participated in the study: 44 Hispanic students (63%) and 26 White students (37%). The participants completed the *SES* (NCSE, 2006) (Appendix A), an instrument used to measure student engagement as a multidimensional construct. Participants were recruited through their Freshman Advisory classes in cooperation with school staff. Consent from the school district was obtained and all ethical considerations regarding collecting data through survey research were followed. Since data were obtained from minor children, the researcher protected the anonymity of each participant. For that reason, participation in the study was anonymous and parental consent was required.

Instrument.

The *SES* was developed by the National Center for School Engagement (2006). The instrument assessed engagement levels in three domains: behavioral engagement, emotional engagement, and cognitive engagement. The researcher was granted

permission to use the survey for the study by the National Center for School Engagement (Appendix C). Survey items were chosen by the National Center for School Engagement from the following sources:

- ADD Health Survey-The National Longitudinal Study of Adolescent Health and the School Integration Index.

  (Add Health combines longitudinal survey data on respondents' social, psychological, and physical well-being with contextual data on school and peer groups to study how social environments and behaviors in adolescence are linked to health and achievement outcomes in young adulthood).

- Fredricks, Blumenfeld, Friedel, & Paris (2003).

  (School Engagement Survey supported by the MacArthur Foundation. Analysis of survey and interview measures of behavioral, emotional, and cognitive engagement based on engagement literature and school-related outcomes. Validity and concurrent reliability were established).

- CSAP Core Measures (2005) (CMS2, CMS8, CMS9, CMS13).

  (The measures are organized by domain and construct. These outcome assessments have been selected through an inclusive and iterative process that included numerous community, state, and national prevention and evaluation experts. The core measures have proved their validity and reliability through extensive use in a variety of settings).

- Jenkins (1997) research based on Hirschi's Social Bonding Theory: 4 Elements of School Bonding:

  1) Attachment: caring about others and what others think
  2) Commitment: educational values
  3) Involvement: participating in school activities
  4) Belief: accepting school rules and authority as fair

Following are the definitions used to group questionnaire items into the three domains of engagement (Fredricks et al., 2004; NCSE, 2006):

Table 3.

Domains of Engagement

Three Domains of Engagement	Behavioral Engagement	Emotional Engagement	Cognitive Engagement
Definition	Doing school work and following the rules.	Interests, values, and emotions.	Investment in learning.
Examples of Observational Phenomenon	Positive conduct that consists of effort, persistence, concentration, attention, asking questions, contributing to class discussions, following rules, studying, doing homework, required attendance, participation in school-related activities.	Affective reactions in the classroom, attitudes toward school and teachers, identification with school, feeling of belonging, appreciation of success in school.	Motivation, strategy use, a desire to go beyond the requirements, flexibility in problem solving, a preference for hard work and challenge, mental effort, a desire to master a task.

The *SES* has 51 items: 19 Cognitive items; 25 Emotional items; and, 7 Behavioral items. Rating scales (1-4 and 1-5) are used to capture responses. Anchors for the *1-4* scale are: 1) *strongly agree*; 2) *agree*; 3) *disagree*; and 4) *strongly disagree*. There are two *1-5* scales that are used. Anchors for the first *1-5* scale are: 1) *very important*; 2) *quite important*; 3) *fairly important*; 4) *slightly important*; and 5) *not at all important*. The other *1-5* scale is anchored as follows: 1) *always/almost always*; 2) *often*; 3) *sometimes*; 4) *rarely*; and) *never/almost never*.

Researchers at the National Center for School Engagement examined potential questionnaire items that best fit into one of the three domains of engagement (Fredricks et al., 2004; NCSE, 2006). These items are categorized in Table 4, as follows:

Table 4.

Engagement Scale Items

Behavioral Engagement	I treat my teachers with respect.
	I treat my classmates with respect.
	I try my best on homework.
	I complete my work on time.
	I follow the rules at school.
	I get in trouble at school.
	School is a waste of my time.
Emotional Engagement	I feel close to people at my school.
	I feel like I belong in my school.
	I feel safe in my school.
	I like the time I spend in school.
	I look forward to coming to school.
	I enjoy spending time with my friends while I'm in school.
	I want to be at school.
	I am interested in the work at school.
	When I first walked into my school I thought it was good.
	When I first walked into my school I thought it was friendly
	When I first walked into my school I thought it was clean.
	I am happy to be at my school.
	The discipline at my school is fair.
	The teachers at my school treat students fairly.
	I like most of my teachers at school.
	Most of my teachers care about how I'm doing.
	There is an adult at school that I can talk to about my problems.
	I respect most of my teachers.
	Most of my teachers understand me.
	I feel excited by the work in school.
	My classrooms are a fun place to be.
	I enjoy the work I do in class.
	I feel I can go to my teachers with the things that I need to talk about.
	Most of my classes are boring.
	I will fail no matter how hard I try.

Cognitive Engagement	How important do you think an education is? How important do you think it is to get good grades? How important do you think the things you are learning in school are going to be to you later in life? How important do you think it is to attend school every day? I care about how well I do in school. I try my best at school. I am getting a good education at my school. I want to go to college. I learn a lot from my classes. I come to class prepared. I am interested in the work I get to do in my classes. When I read a book, I ask myself questions to make sure I understand what it is about. I study at home even when I don't have a test. I talk with people outside of school about what I am learning in class. I check my schoolwork for mistakes. If I don't understand what I read, I go back and read it over again. I get good grades in school. How likely is it that you will attend college immediately after finishing high school? How likely is it that you will get a job immediately after finishing high school?

The *SES's* validity and reliability were evaluated by the researchers at the National Center for School Engagement (2006). The engagement items came from a variety of sources and team researchers for the National Center for Student Engagement (2006) categorized the survey items according to the definitions from the literature for behavioral engagement, emotional engagement, and cognitive engagement.

Reliability and validity for the instrument were supported by Dunkle (2009) whose data provided evidence about the levels of school engagement for sixth graders on overall engagement divided into three different engagement subscales (behavioral, emotional, and cognitive). His work was based on the theory of engagement proposed by

Fredricks and colleagues which supported the interconnections among the three engagement subscales (Fredricks et al., 2004; NCSE, 2006).

NCSE (2007) houses information regarding the psychometric quality of the *SES* behavioral, emotional, and cognitive engagement subscales. The dimensionality of the measure, scale use, item fit, reliability of separation, invariance of items, validity, and how well the items matched the sample were examined by Chen and Green (2010). Item fit is an index for checking whether items have logical function and provide a continuum for respondents. If the item is too complex, confusing, or measures a different construct then misfit may occur. Individual item fit was examined in order to see if any items were a misfit. The fit statistics revealed that there were no misfitting items on the *SES*.

The National Center for School Engagement found that the internal consistency for this survey ranged from .79 to .92 (Cronbach's Alpha). The correlation among subscales ranged from not significant to .93. The three scales correlated with each other, supporting the idea that engagement is multifaceted with related sub-constructs. Generally speaking, the item set demonstrated good psychometric statistics (NCSE, 2007).

Procedure

The researcher requested informed consent from the parents/guardians of all potential participants (Appendix B). Project information sheets (explaining the nature, purpose, and benefits of the study) and assent forms (to be a participant or to be a nonparticipant) were provided to students (Appendix B). The participants were notified of all the legalities required by the Institutional Review Board [IRB] of the University of

Denver, along with the necessary contacts. Students who assented, along with their parents'/guardians' consent to participate in the study, completed the survey during the normal school day in a classroom setting. All data collection was anonymous. The researcher requested that no names or any other identifiers be written on the surveys. Therefore, the researcher cannot link any survey to any individual student.

The *SES* was administered at the beginning of second semester, in the year 2009, to participants who were in the ninth grade of a 9-12th grade high school. Students were settling in after the holidays, they had finished their first semester at the school, they had had one grading period, and they had been in their new environment long enough to render a more informed judgment of their experiences as transitional ninth graders. Often, there is a "honeymoon" period when students first transition to a new school. Therefore, the researcher deliberately gave the survey at the beginning of the second semester.

The survey was administered to students in a group setting during their Freshman Advisory Classes. Classroom instructors were trained by the researcher (the District Literacy Specialist) on how to administer the surveys and were asked to sign confidentiality agreements (Appendix B). Directly after administration, the surveys were collected by the Freshman Advisory teachers, put in sealed, manila envelopes marked Freshman Advisory, hand-delivered to the researcher, and then secured under lock and key by the researcher.

Data Analyses

Descriptive statistical analyses.

Descriptive statistical analyses were conducted using the Statistical Program for the Social Sciences (SPSS) (Norusis, 2003). Frequency distributions, measures of central tendency, and measures of variability and distribution for each variable were computed. The following variables were examined in the analyses:

Student Engagement: Engagement in the three domains for ninth grade students: behavioral engagement, emotional engagement, and cognitive engagement.

Ethnicity: The profile of engagement by group of 70 ninth grade students: Hispanic and White.

Paired-samples t tests.

Paired-samples t tests were used to evaluate the significance of the differences between the three pairs of engagement on the *SES* (behavioral and emotional, behavioral and cognitive, and emotional and cognitive). For each pair of variables, a t statistic and its observed significance level were computed (Norusis, 2003).

Multivariate analysis of variance.

The study employed multivariate analysis of variance (MANOVA) for determining whether the means of two groups differ on more than one dependent variable. The three dependent variables were as follows: (1) behavioral engagement, (2) emotional engagement, and (3) cognitive engagement. The purpose of MANOVA is to determine whether there are statistically significant differences between the centroids of different groups (Hispanic and White ninth grade students). Each research participant in

the MANOVA has a score on the three dependent variables of engagement. The mean (vector scores) for all the individuals in a given group is called a centroid. These scores are represented by the individual scores on all the dependent variables (Gall, Gall, & Borg, 2003). Multivariate tests were run: Wilks' Lambda yields an F value with an accompanying statistical significance test and is evaluated using an alpha of .05.

Box's M test for equality of variance-covariance matrices was produced using the SPSS program. Box's M tests the null hypothesis that the error variances and inter-correlations of the dependent variables are equal across groups (SPSS, 2004) which is an assumption made for appropriate use of MANOVA.

For this study, the independent variable was ethnicity measured as Hispanic and White and the dependent variables were engagement in three subscales measured on a rating scale.

Approach to creating subscale scores.

Responses to each item of the survey were recorded on a 1-4 or a 1-5 rating scale. The reliability statistics of the 1-4 and 1-5 subscales generated Cronbach's Alpha of .45 (behavioral), .88 (emotional), and .77 (cognitive). Given that two different scales were used (1-4 and 1-5), there must be reconciliation between the scales in order to make them compatible for analysis. Therefore, the 4, 5 response categories were recoded to a 4 in the 5-point scale. The reliability statistics for the Cronbach's Alpha of the recoded subscales were .55 (behavioral), .88 (emotional), and .79 (cognitive). Item responses were then averaged over subscale items to create subscale scores where higher scores reflected higher levels of engagement.

Chapter Four: Results

The purpose of this study was to answer the following two research questions:

- Do perspectives of a group of ninth grade students differ among the three domains of student engagement, as measured by the School Engagement Survey (*SES*) (NCSE, 2006)?
- Are there differences between Hispanic and White ninth grade students' views of engagement by domain?

The statistical analyses were centered on the research questions. The results are summarized in the following tables and figures.

Research Question # 1

Do perspectives of a group of ninth grade students differ among the three domains of student engagement, as measured by the School Engagement Survey *(SES)* (NCSE, 2006)?

No significant differences in levels of engagement on the *SES* across the three engagement subscales (behavioral, cognitive, and emotional) were found. Although the pairs (behavioral and emotional, behavioral and cognitive, and emotional and cognitive) showed small mean differences they were not statistically significant differences.

Table 5 presents the means and standard deviations by subscale after the survey items were recoded to a 1-4 scale.

The following table (Table 5) shows for each pair of variables the means and the standard deviations for the three subscales on the *SES* for a group of ninth grade students.

Table 6 provides the subscale correlations and Table 7 provides the paired-samples t test results and effect size of differences.

Table 5.

SES Subscale Means and Standard Deviations

Measures		Mean	SD
Pair 1	Cognitive	2.36	0.37
	Emotional	2.31	0.40
Pair 2	Cognitive	2.36	0.37
	Behavioral	2.33	0.35
Pair 3	Emotional	2.31	0.39
	Behavioral	2.33	0.35

Note*: N= 70*

Table 6.

SES Subscale Correlations

Measures		N	r	p
Pair 1	Cognitive & Emotional	70.00	0.757	<0.001
Pair 2	Cognitive & Behavioral	70.00	0.443	<0.001
Pair 3	Emotional & Behavioral	70.00	0.374	0.001

Table 7.

Paired-Samples T Test Results

Measures		Mean Difference	SD	t	p	Effect Size
Pair 1	Cognitive & Emotional	0.06	0.26	1.75	0.085	.23
Pair 2	Cognitive & Behavioral	0.03	0.38	0.65	0.517	.08
Pair 3	Emotional & Behavioral	-0.03	0.42	-0.52	0.607	.07

Figure 1 shows the subscale means. Scale 1 is cognitive, scale 2 is emotional, and scale 3 is behavioral.

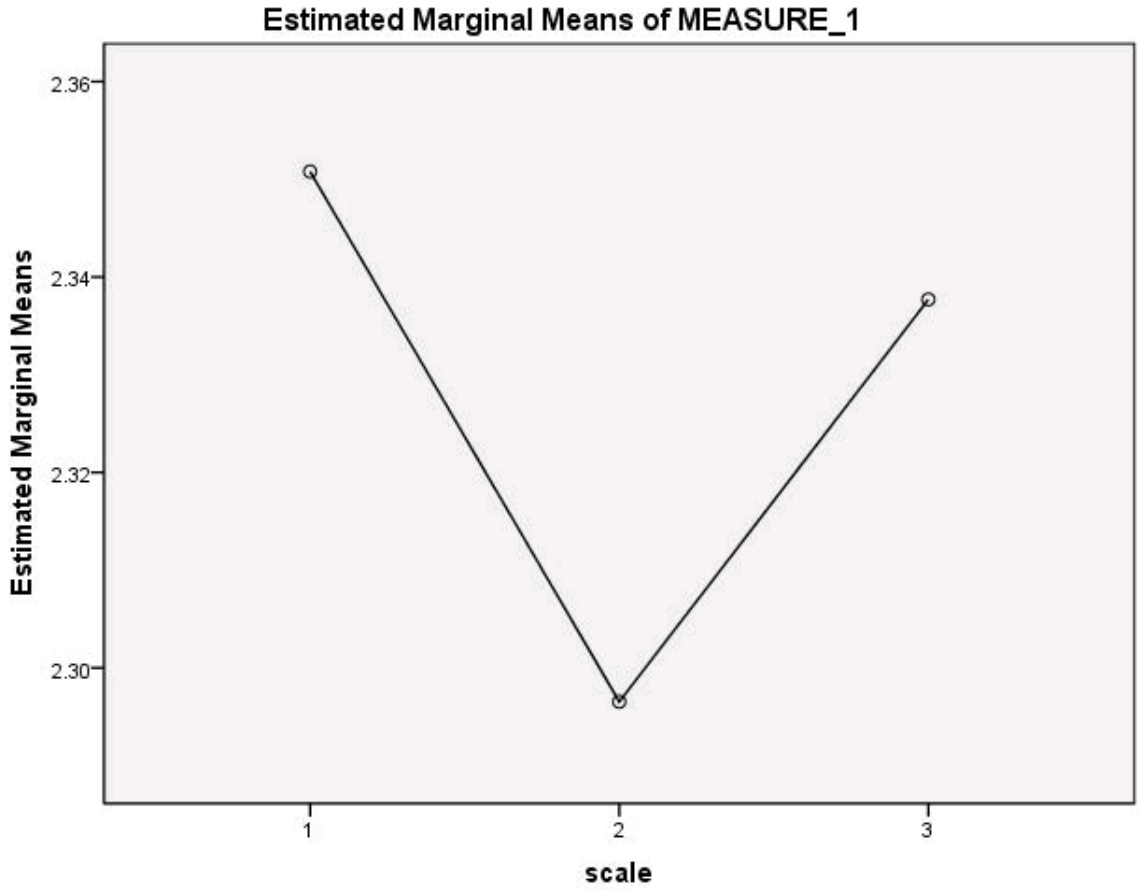

Figure 1. SES Subscale Means.

Research Question #2

Are there differences between Hispanic and White ninth grade student's views of engagement by domain?

This research question addressed differences in student views by race/ethnicity on student engagement. MANOVA was used to analyze the differences between two groups: Hispanic (n=44) and White (n=26). The level of measurement of the variables of MANOVA assumed that the independent variable was categorical in nature and that the dependent variables were continuous variables. An assumption of MANOVA is that homogeneity of covariance matrices was supported, which is tested using Box's M. test. Table 8 shows the assumption of homogeneity of covariance matrices was upheld.

Table 8.

Box's M Test of Homogeneity of Variance/Covariance Matrices

Box's M	5.891
F	.930
df1	6
df2	18128.150
Sig.	.472

The data showed there were no statistically significant differences by ethnicity for any of the dependent variables included (engagement subscales), Wilk's $\lambda = .97$, $F (3, 66) = 70$, $p = .56$.

The results of the MANOVA indicated no significant differences in domains of engagement (behavioral, emotional, or cognitive) between Hispanic and White students indicating that, for the study setting, Hispanic and White students had similar views of engagement.

Table 9 shows the mean ratings of Hispanic and White ninth grade students by the three subscales.

Table 9.

Group Differences Analyses: MANOVA.

	White		Hispanic		Total		
Subscale	Mean	SD	Mean	SD	Mean	SD	Cronbach's Alpha
Cognitive	2.30	0.39	2.40	0.35	2.36	0.37	.79
Emotional	2.25	0.42	2.34	0.37	2.31	0.39	.88
Behavioral	2.35	0.44	2.32	0.30	2.33	0.35	.55

Note: n = 44 Hispanic, n = 26 White, n = 70 Total

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Chapter Five: Discussion

This chapter contains a summary of the study, the key understandings from the data, recommendations for further study, and the conclusion.

Student Engagement

In recent years, there has been a growing awareness of the importance of student engagement for learning and achievement (Newmann, 1991; Shernoff et al., 2003). Supported by research, the underlying premise of the quantitative study was the supposition that disengagement with school serves as a gateway to numerous challenges and negative outcomes for all adolescents, starting in the ninth grade of high school (Hertzog & Morgan, l998; Mizelle & Irvin, 2000; National Center for Education Statistics, 2005; Neild, Stoner-Eby, & Furstenberg, 2008; Roderick & Camburn, 1999). The literature review attempted to show that engagement has the potential to "ameliorate low levels of academic achievement, high levels of student boredom and disengagement, and high dropout rates" (Fredricks et al., 2004, p. 60).

The study was designed to assess the perspectives of engagement for ninth grade students by group and for Hispanic and White students to determine differences in engagement among three domains (behavioral, emotional, and cognitive). The sample population was unique given that it was a rural population that was predominantly Hispanic. Therefore, it seemed important to investigate the connection between a group of students who could possibly fall behind in the ninth grade and differences in individual

student engagement levels because of the noted low graduation rates at the national level and at the study site.

The study examined two research questions concerning the impact of the high school transition on student engagement. Participants were asked to complete the School Engagement Survey (*SES*) (NCSE, 2006*)* which consisted of 51 items (7 Behavioral; 25 Emotional; and, 19 Cognitive). Participants rated the quality of their subjective experience on Likert-type scales of 1-4 and 1-5. The 1-5 Likert scale was later recoded to a 1-4 scale for consistency in data analyses.

Survey research was the optimal method to use for the purposes of the study. For one, it is assumed that each individual student is the best observer of his or her circumstances and was best be able to assess their own experiences. According to the research, it was important to recognize engagement as a multifaceted construct that could address the whole child; it has been determined that it is not satisfactory to study engagement as a single measure, especially when a researcher is working with the adolescent.

As well, the construct of engagement should include developmentally appropriate research studies (incorporating all three domains as a meta-construct) (Fredricks et al., 2004), especially when comparing the effects of the dimensions of engagement across ethnic groups (Glanville & Wildhagen, 2007).

For this study, the primary measure of student engagement was derived from three subscales on the School Engagement Survey *(SES)* (NCSE, 2006) (behavioral engagement, emotional engagement, and cognitive engagement) for ninth grade students.

Additionally, students were measured on the above-mentioned three subscales of engagement by group: Hispanic and White.

Each component of engagement was tested and reported through statistical analyses (paired-samples t tests and MANOVA). However, the results showed no significant differences in engagement levels for a group of ninth graders and no significant differences between White and Hispanic views of engagement.

School Engagement

The literature review predicted that identifying practices of the school environment (a process) may hold an important key to understanding student engagement (an outcome).

The study site.

One wonders, then, that if student engagement does not differ between White and Hispanic students' views, and if there are no differences among the domains for the group of ninth graders, what additional variables come into play that explain the differences in student outcomes, such as the low graduation rates, at the study site. The school has unsatisfactory graduation rates (59.3% for 2009), showing unsatisfactory student outcomes (National Research Council, 2004). Thus, further research is needed to explain what other variables come into play that has an affect on the dropout rate.

Educational attainment has always been seen as a way of improved status, especially for those who are socially and economically disadvantaged. However, Hispanic students are often at an educational disadvantage for many reasons compared to White students. Some of these variables are poverty, attendance at schools that are not

supportive or have favorable learning environments, parental education, and being foreign born. In that case, they often have limited English proficiency (National Center for Education Statistics, 2004).

Hispanic and White ninth grade students.

No significant differences were found between the two groups (Hispanic and White) indicating that both groups held similar views of engagement across domains. While the researcher expected to find profound differences based on race/ethnicity, it was a surprising outcome that the engagement levels of both groups were similar.

Slatsky (2009) and the NCSE (2009) found similar results when using the *SES* with 1000 sixth grade students in a middle school after a transition. The studies found no significant differences between White and Hispanic. Slatsky states:

> A major strength of this study was challenging a very evident stereotype. One stereotype that exists is that Hispanic students are less engaged in school than their White peers. Based on the findings of the study, Hispanic students were not low in engagement. Hopefully this finding can help educators promote engagement in all students, regardless of their ethnicity (p. 117).

Results of these studies suggest that differences between ethnic groups are minimal.

Although the measure employed in this study had primarily adequate psychometric characteristics, the continued lack of relationship with targeted outcomes suggests that further attention be paid to measure validation. A measure that delves more deeply into the effects of engagement may be preferable.

Domain Differences

Although there were no significant differences among the engagement domains for the group of ninth graders, the emotional scale mean was lower than the mean for the

behavioral/cognitive scales. The emotional subscale had the lowest mean on the overall measure. If the sample size had exceeded approximately 120 students, with the same pattern of means, the difference would have reached statistical significance at $p = .05$. Teachers of the ninth grade might put more emphasis on the affective aspects of teaching and learning ensuring that students experience a sense of belonging. Use of the valuable research behind emotional engagement can provide "staying power" for transitional freshman students. The literature review encapsulates the importance of students having a sense of belonging in their new environment in order for learning achievement to be increased. Goodenow (1993) defines a sense of belonging as, "the extent to which students feel personally accepted, respected, included, and supported by others in the school social environment" (p. 80).

The small sample size available for this study limited the researcher's ability to identify statistically significant differences due to the power limitations imposed by small samples.

Recommendations for Further Study

A number of suggestions for future research emerge from this study. First, it would be desirable to know how the interaction of the school environment and student engagement merges. Teacher and administrator interviews would be an opportunity to gain profound insight into engagement by giving recommendations on how to support and sustain engagement levels for ninth grade students. Second, the study could be replicated in other rural schools with gender and/or ethnicity included as independent variables for ninth grade students after transition, taking into account their GPA's, scores

on standardized tests, and the *SES*. Third, longitudinal designs that evaluate how motivation and engagement change over time and interact with developmental factors are greatly needed. Fourth, studies on the construct of multifaceted engagement could compare data between urban and rural schools. Fifth, the relatively small sample is a limitation as noted above. It is possible that with a larger sample, differences found in student self-ratings might be statistically significant; in particular, the emotional domain may emerge as receiving much lower ratings. Sixth, the *SES* has been used infrequently and additional validation study is needed to place greater confidence in the measure. Lastly, qualitative studies could look at different perspectives on the construct of engagement within the three domains to provide "a richer characterization of the whole child and how they behave, feel, and think" (Fredricks et al., 2004, p. 81).

Behavioral engagement.

The definition of behavioral engagement refers to doing school work and following the rules and norms while in school. Qualitative research could answer the "whys" of the quantitative research by using observational phenomenon that demonstrates behavioral engagement through positive student conduct that consists of effort, persistence, concentration, attention, asking questions, contributing to class discussions, following rules, studying, doing homework, required attendance, participation in school-related activities (NCSE, 2006).

Emotional engagement.

The definition of emotional engagement is students' interests, values, and emotions. Findings on emotional engagement could be extended by using observational phenomenon of affective reactions in the classroom, attitudes toward school and teachers, identification with school, feelings of belonging, and appreciation of success in school (NCSE, 2006).

Cognitive engagement.

The definition of cognitive engagement refers to an investment in learning. For cognitive engagement qualitative studies, observational phenomenon such as motivation, strategy use, a desire to go beyond the requirements, flexibility in problem solving, a preference for hard work and challenge, mental effort, and a desire to master a task could add valuable insight into a multifaceted approach to research on engagement (NCSE, 2006).

Conclusion

This study has taken an in-depth look at engagement levels and the differences among the three domains were examined. Data obtained from this study yielded evidence that student engagement for a group of ninth graders did not differ by ethnicity (Hispanic/White). There were also no statistically significant differences across domains of student engagement for the group of ninth graders. The researcher suggests that the construct of the survey instrument should be changed in order to generate significant differences.

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Appendix A

Student Survey

We would like to find out a little more about you and how you feel about school. By assenting to respond to the following questions will help us to do this. It will take you about 20 minutes to complete this survey. If you are unsure of how to answer a question, please answer it as best you can. All the information you provide is anonymous. It will only be used to help us learn about how to keep children interested in completing school. You do not have to answer any questions on this survey if you choose not to.

Your ethnicity (**please check all that apply**): ① White/Anglo ① Hispanic/Latino

1. How important do you think…	**Very important**	**Quite important**	**Fairly important**	**Slightly important**	**Not at all important**
An education is?	①	②	③	④	⑤
It is to get good grades?	①	②	③	④	⑤
The things you are learning in school are going to be to you later in life?	①	②	③	④	⑤
It is to attend school every day?	①	②	③	④	⑤

2. How much do you agree with each of the following statements?	**Strongly agree**	**Agree**	**Disagree**	**Strongly disagree**
I feel close to people at my school.	①	②	③	④
I feel like I belong in my school.	①	②	③	④
I care about how well I do in school.	①	②	③	④

I am happy to be at my school.	①	②	③	④
The teachers at my school treat students fairly.	①	②	③	④
I feel safe in my school.	①	②	③	④
I want to be in school.	①	②	③	④
I like the time I spend in school.	①	②	③	④
I like most of my teachers at school.	①	②	③	④
I look forward to coming to school.	①	②	③	④

3. How much do you agree with each of the following statements?	**Strongly agree**	**Agree**	**Disagree**	**Strongly disagree**
I am getting a good education at my school.	①	②	③	④
I will fail no matter how hard I try.	①	②	③	④
I want to go to college.	①	②	③	④
The discipline at my school is fair.	①	②	③	④
Most of my classes are boring.	①	②	③	④
Most of my teachers care about how I'm doing.	①	②	③	④
I learn a lot from my classes.	①	②	③	④
There is an adult at school that I can talk to about my problems.	①	②	③	④
I respect most of my teachers.	①	②	③	④
School is a waste of my time.	①	②	③	④
Most of my teachers understand me.	①	②	③	④

When I first walked into my school I thought it was good.	①	②	③	④
When I first walked into my school I thought it was friendly.	①	②	③	④
When I first walked into my school I thought it was clean.	①	②	③	④
I come to class prepared	①	②	③	④
I enjoy spending time with my friends while I'm in school.	①	②	③	④
I treat my classmates with respect.	①	②	③	④
I complete my work on time.	①	②	③	④
I treat my teachers with respect.	①	②	③	④
I try my best on homework.	①	②	③	④
I follow rules in school.	①	②	③	④

4. How often are the following statements true for you?	**Always/Almost Always**	**Often**	**Sometimes**	**Rarely**	**Never/ Almost Never**
I get in trouble at school.	①	②	③	④	⑤
I feel excited by the work in school.	①	②	③	④	⑤
I am interested in the work I get to do in my classes.	①	②	③	④	⑤
My classroom is a fun place to be.	①	②	③	④	⑤
When I read a book, I ask myself questions to make sure I understand what it is about.	①	②	③	④	⑤

I study at home even when I don't have a test.	①	②	③	④	⑤
I talk with people outside of school about what I am learning in class.	①	②	③	④	⑤
I check my schoolwork for mistakes.	①	②	③	④	⑤
If I don't understand what I read, I go back and read it over again.	①	②	③	④	⑤
Most of my teachers praise me when I work hard.	①	②	③	④	⑤
I try my best at school.	①	②	③	④	⑤
I get good grades in school.	①	②	③	④	⑤
I enjoy the work I do in class.	①	②	③	④	⑤
I feel I can go to my teacher(s) with the things that I need to talk about.	①	②	③	④	⑤

5. How likely is it that you will…?	**Definitely won't**	**Probably won't**	**Not sure**	**Probably will**	**Definitely will**
Attend college immediately after finishing high school?	①	②	③	④	⑤
Get a job immediately after finishing high school?	①	②	③	④	⑤

THANK YOU FOR COMPLETING THIS SURVEY!

Appendix B

Confidentiality Agreement
For Survey Administrators & Classroom Teachers

The High School Survey of Student Engagement is being administered within the school or classroom in order to better understand the high school experience for Freshman students—how they spend your time, what they have gained so far from their classes, their interactions with friends and teachers, and various activities. The information that provided will add to the body of knowledge in research for educators and contribute to student learning and development during the high school years.

Student participation is voluntary, and I will not encourage or discourage participation. If the student wishes to stop the survey at any time or chooses not to answer certain questions, there are to be no consequences. The choice to assent or not (see student assent form) is the student's. Survey responses will be kept confidential and destroyed after the statistics have been recorded. The researcher will collect surveys immediately after administration and handle them according to ethical survey administration procedures. Completed surveys and responses will be viewed only by the researcher and will be sealed. They will not be available to anyone in the classroom or school.

I have read the above information and agree to follow these guidelines when facilitating survey administration in my school or classroom.

_____

Print Name

_____

Signature Date

Please return this completed form, along with the surveys,
in the sealed envelope.
Thank you.

STEPS FOR ADMINISTERING STUDENT ENGAGEMENT SURVEY IN YOUR CLASSROOM

Prior to Administering Survey:

 Parent Consent Letters have been sent home with your students. Retain all bottom portions of the letters that are returned to you. Remember, non-participants **will not** take the survey and will read a book or work quietly at their desks.

 Read and sign the **Confidentiality Agreement**.

 Make sure you have the following materials:

- **Survey Administration Instructions** (*to be read to students*) – **Attached to this sheet**
- **Surveys and Assent Forms** (*one for each student*)
- **Envelope** for **Classroom-Level Tracking** (*to be completed by you*)

Survey Administration:

 Read the **Survey Administration Instructions (attached)** aloud to students. (*NOTE: Students may choose to complete the survey or leave it blank and do other schoolwork quietly at their desks.)*

 Distribute **Survey Forms** and **Assent Forms** to participants.

 Collect all surveys (including blanks.)

Following Survey Administration:

 Place **all** surveys in the envelope provided. Please include the following:

- Your signed **Confidentiality Agreement**
- Any parent permission slips you received
- **Surveys** (including blanks)

 Please **fill out** the Envelope for Classroom-Level Tracking **completely**. Return sealed envelope containing all materials to the Researcher. **THANK YOU!!!!**

High School Survey of Student Engagement 2009

Survey Administration Instructions

Before distributing the survey forms, please read the following guidelines to the class.

"This is a survey about your experiences as a first year student at the high school. We are very interested in you as a student and want to help you have a good experience. Your answers are very important and will help educators improve students' educational experience as they transition from middle school to high school."

"Please do not write your name on this survey. No one will know what you answer. The answers you give will be kept private."

"Completing the survey is voluntary. Whether or not you answer the questions will not affect your grade in this class. If you do not want to answer a question, just leave it blank. Please read every question and answer honestly. There are no wrong answers. This is not a test."

"Answer all questions that apply to you. AGAIN: It is important that you answer the survey honestly, based on what you really know and what you really do. The right answers are honest answers. **Let us remind you:** if you feel, for any reason, you are not doing well in *any* area of school, **we have two counselors that would love to see you and are there to help you with anything**."

"When you have finished the survey, turn it over and work quietly on other schoolwork until I collect all the surveys**.** If you choose not to take the survey, turn it over without marking any answers and work quietly on other schoolwork or read a book."

"Thank you, in advance, for your willingness to help."

Teachers:

As the last step**, distribute surveys to those who have parental consent. **Say**, "Please take time to read the assent form now (show students) and take time to look over the survey" (pause for a few minutes). * **NOTE:** ***Although the student should have been informed at home already, quietly and beforehand*, please tell or remind those students that do not have informed consent from their parents*.

.

Dear Parent:

This semester, our school will participate in an important research study about freshman and if they are engaged in their school. The freshman students will be asked about their high school experience in their first year: how they spend their time, what they have gained so far from their classes, their interactions with friends and teachers, various activities, and if they are making successful progress. The information they provide will add to the body of educational research; helping educators to improve and contribute to your child's learning and development during their high school years.

The survey is strictly voluntary and takes about 30 minutes to complete. No information is collected that can identify individual students. Only your child will know how he or she answers the questions. Students do not get school credit for completing the survey, and there are no consequences for not participating. Students who take part in the survey may choose not to answer any question or to stop the survey at any time.

If your child will participate in the *High School Survey for Student Engagement*, you do not need to sign or return anything. Students will receive the survey in class and are instructed to answer the questions or leave the survey blank. Students who are not completing the survey will read a book or do other schoolwork at their desk during the survey period. We encourage you to discuss the matter with your child and share your views on their choice to participate. Although the survey is voluntary, your child's participation is greatly appreciated.

For more information about the study **or to see a copy of the survey**, please call Researcher, Melissa M. Fattor at (719) 486-6950 #5018.

If your child will participate in the High School Survey for Student Engagement, you do not need to return this form. If your child will not participate in the survey, complete this form and have your child return it to the school in the next three days.

Student's name_____
I have read this form and understand what the High School Survey for Student Engagement is about.

- ☐ I do **not** want my child to complete the survey.

Parent's Name (printed):_____

Parent's Signature_____ Date:_____

PROJECT INFORMATION SHEET

CLASSROOM RESEARCH: STUDENT ASSENT

You are invited to be part of a study that will ask you questions about your high school experience: how your first year of high school is going, how you spend your time, what you have gained so far from your classes, your interactions with friends and teachers, and various activities. Answers to the survey will let you have a say in the improvement of your progress during high school. We really appreciate your input! It will help educators to help you have a more successful high school experience.

Participation in this study should take about 30-40 minutes of your time. You will be responding to 52 questions about how you are doing in your first year of school and if your experience has been good or not. ***Participation in the survey is strictly voluntary***. If, however, you experience discomfort during the survey, you may stop at any time. We respect your right not to answer any questions that may make you feel uncomfortable. Refusal to participate or withdrawal from participation will not result in any type of consequence.

Your answers and your identity will be secret-the surveys will be destroyed in the future. **Do not write your name anywhere on the survey. Return of the survey will show that you assent (agree to participate in this project).**

Thank you so much!!!

*This study is a research project being done by Melissa Fattor, M. A. Researcher, Melissa M. Fattor, can be reached at 719-486-6950, mfattor2@du.edu. The project is being supervised by Dr. Kent Seidel, Graduate School of Education, University of Denver, Denver, Colorado 80208, Kent.Seidel@du.edu.

*If you have any concerns or complaints about how you were treated during the interview, please contact Susan Sadler, Chair, Institutional Review Board for the Protection of Human Subjects, at 303-871-3454, or Sylk Sotto-Santiago, Office of Research and Sponsored Programs at 303-871-4052 or write to either at the University of Denver, Office of Research and Sponsored Programs, 2199 S. University Blvd., Denver, CO 80208-2121.

You may keep this page for your records.

Appendix C

Date: **Thu, 25 Aug 2005 15:53:33 -0600**
From: "Ken Seeley" <kens@coloradofoundation.org> **Block Address**
To: "Melissa Marlene Fattor" <mfattor2@du.edu>

Subject: **RE: dissertation topic**

We would be happy to have you use the school engagement survey from NCSE in your high schools. Also it will be given at Merrill Middle School in Denver to all students. We can sanction your use of the instrument and provide review of all the student consents and the administration protocols which should help your IRB review.

Dr. Ken Seeley, President

The Colorado Foundation

kens@coloradofoundation.org

303-837-8466 x 101