

## Abstract

ROBERTS, MICHAEL ANTHONY. Student Engagement In The Early College High School. (Under the direction of Dr. Ruie Jane Pritchard).

This mixed methods study investigated how student engagement was influenced by Early College High Schools. Early College High School students, teachers, and administrators participated in the study, along with their teaching and administrative counterparts from their community college partners. The study examined the impact of smaller class sizes, mastery orientation, parental involvement, teacher support, and rigorous curricula on the various aspects of student engagement. Qualitative data including personal interviews, classroom observations, writing prompts, document analysis, and questionnaires were examined to measure the effect of the Early College high school on behavioral, motivational, and cognitive engagement.

Findings indicated that Early College High School students demonstrated characteristics of elevated levels of motivational engagement, cognitive engagement, and behavioral engagement. According to the data, former at-risk ECHS students achieved at school academic and standardized test levels that were comparable to their counterparts across the state while achieving high attendance rates and low rates of behavioral misconduct. Further, high school teachers and community college instructors acknowledge elevated levels of class participation, task focus, attentiveness, and help-seeking.

Student Engagement in the Early College High School

BY

Michael A. Roberts

A dissertation submitted to the Graduate faculty of  
North Carolina State University  
In partial fulfillment of the requirements for the degree of  
Doctor of Philosophy

Curriculum and Instruction

Raleigh, North Carolina

2007

APPROVED BY:

---

Dr. Ronald Honeycutt

---

Dr. Sid Johnson

---

Dr. Ruie Pritchard, Chair

---

Dr. Bonnie Fusarelli

Dedication

*In memory of Bruce Steven Roberts*

*Whose love of life has inspired me*

*To live every day*

*Whose love of learning has inspired me*

*To learn every day*

*And whose much too early passing*

*Has taught me to love like there is no tomorrow*

## Biography

Michael Roberts was born in Fayetteville, N.C. in 1965 and grew up in Raeford, North Carolina. After graduating from Hoke County High School in 1983, he attended High Point University in High Point, NC for two years. In 1986, Michael enlisted in the North Carolina Army National Guard and completed M-1 main battle tank training at Ft. Knox, Kentucky. After graduating with honors from Armor School, he accepted a tennis scholarship to St. Andrews Presbyterian College in Laurinburg, NC. Upon graduating in 1990, he spent the next ten years as a tennis teaching professional and the Tennis Director at clubs in Fayetteville, NC and Charleston, WV. Michael received his Master of Arts degree in English Education from the University of North Carolina at Pembroke in 2002. While working as an English Instructor and varsity tennis coach at Methodist University in Fayetteville, NC, in 2003, he was admitted to the doctoral program in Curriculum and Instruction at North Carolina State University. He currently lives in Lumberton, NC with Amy, his wife of ten years, and his two beautiful daughters, Cayce, 6, and Kathryn, 4. As of this writing, he owns over thirty chess sets.

## Acknowledgements

No dissertation reflects the results of one person's sole effort, but rather the culmination of the efforts of many. I would like to acknowledge those who believed in me, encouraged me, inspired me, and taught me. It is through their extraordinary talents that I have been able to complete the work contained herein.

I must first acknowledge the incredible efforts of my dissertation committee. I would like to thank Dr. Ruie Pritchard for her years of guidance, patience, good advice, and mentorship. Despite such heavy responsibilities, you were always there to help me manage whatever crisis arose. I thank Dr. Ron Honeycutt for helping me to maintain my perspective, focus, and positive attitude throughout the course of my doctoral program. It took a while, but I finally learned not to "sweat the small stuff." I thank Dr. Sid Johnson for his wisdom and friendship over the years and the many laughs he provided over the course of my program. The human element that you brought to this process was very important to me. I would like to thank Dr. Bonnie Fusarelli for teaching me how to conduct professional qualitative research and for agreeing to serve on my committee when she was immersed in other work and preparing for an addition to her family. I cannot fully express my appreciation to you all.

I am deeply grateful for those who took an interest in my education and encouraged me to pursue my highest goals. I would like to thank my mother, Peggy Roberts, for always encouraging me to pursue academic and intellectual challenges. I want to acknowledge my brother Daniel for the sacrifices that he has made for so long so that I

would have whatever I needed. I thank my in-laws, Dr Gerry and Elizabeth Devine for coming to my rescue on so many occasions and for encouraging me to stay the course.

Most of all, I am indebted to my family. For my daughter Cayce: Before you were born, I wanted to be someone important who did great things. After you were born, I became exactly that. For my daughter Kathryn, my buddy: Thanks for the laughter you have brought into my life every day. Your laugh is contagious and your unconditional affection has helped me realize what is truly important. To my wife Amy: Your belief in me has carried me through some very trying times. You have supported me in every way imaginable and I marvel at your steadfastness. You have managed to maintain a high-stress job while being a great wife and mother, and do them all so well. I am forever indebted to the diligence, patience, and sacrifice that you have demonstrated on my behalf for over ten years. You have inspired me to be all I can become and I am eternally grateful.

## Table of Contents

	Page
List of Tables.....	viii
1. Introduction.....	1
1.2 Purpose of the study.....	3
1.3 Significance of the Study for Research and Practice .....	3
1.4 Conceptual Framework .....	5
1.4.1 Expectancy x Value Theory .....	6
1.4.2 Self-efficacy Theory .....	6
1.4.3 Goal Orientation .....	7
1.4.4 Attribution Theory.....	8
1.4.5 Cognitive Theories of Engagement .....	8
1.5 Summary .....	9
2. Review of the Literature .....	10
2.1 Introduction .....	10
2.2 Student Engagement Defined .....	10
2.3 Student Engagement and the Disenfranchised.....	11
2.4 Engagement and Academic Success .....	12
2.5 Educational Factors that Influence Engagement .....	13
2.6 Types of Engagement .....	15
2.6.1 Behavioral Engagement .....	15
2.6.2 Cognitive Engagement .....	15
2.6.3 Motivational Engagement .....	16
2.7 Predictors of School Engagement .....	17
2.8 Teacher Support .....	18
2.9 Early College High School Initiative .....	19
2.10 The Early College High School Approach.....	21
2.11 Summary .....	22
3. Methodology .....	23
3.1 Introduction .....	23
3.2 Pilot study .....	23
3.3 Research Goals and Questions .....	23
3.4 Research Site .....	26
3.5 Participant Selection .....	27
3.5.1 Student Participants .....	27
3.5.2 Faculty and Administrator Selection .....	28

3.6	Student Interview Participant Selection .....	28
3.8	Teacher/Administrator Description .....	30
3.9	Access and Consent .....	31
3.11	Methods and Data Collection .....	31
3.11.1	Student Writing Prompt .....	32
3.11.2	Interview Questions .....	32
3.11.3	Instructor/Administrator Questionnaire .....	35
3.11.4	Rating Responses .....	37
3.11.5	Field Notes .....	38
3.11.6	Classroom Observation .....	39
3.11.7	Document Analysis .....	39
3.12	Validity .....	40
3.13	Reliability .....	41
3.14	Generalizability .....	42
3.15	Triangulation .....	42
3.16	Data Analysis .....	45
3.17	Interpreting Data .....	46
3.18	Ethical Concerns .....	48
3.18.1	Informed Consent .....	48
3.18.2	Risks and Vulnerability .....	48
3.18.3	Confidentiality .....	49
3.18.4	Compensation .....	49
3.18.5	Researcher Bias .....	50
3.19	Limitations .....	50
3.20	Summary .....	51
4.	Results and Discussion .....	52
4.1	Student Profiles .....	52
4.1.1	Beth .....	52
4.1.2	Christina .....	54
4.1.3	Sondra .....	56
4.1.4	Jasmine .....	58
4.1.5	Vanessa .....	60
4.2	Summary of Student Profiles .....	61
4.3	Students' Voices .....	62
4.3.1	Negative Essay Responses .....	65
4.3.2	Positive Essay Responses .....	66
4.3.3	Neutral Essays .....	67
4.3.4	Essay Prompt Summary .....	67
4.4	Research Questions .....	68
4.4.1	Subquestion 1 .....	68
4.4.1.1	Behavioral Engagement .....	68
4.4.1.2	Behavioral Engagement Discussion .....	70



4.4.1.3	Cognitive Engagement .....	72
4.4.1.4	Cognitive Engagement Discussion .....	74
4.4.1.5	Motivational Engagement .....	74
4.4.1.6	Motivational Engagement Discussion .....	76
4.4.2	Summary of Subquestion 1 .....	77
4.4.3	Subquestion 2 .....	78
4.4.3.1	Class Size .....	78
4.4.3.2	Teacher Support .....	81
4.4.3.3	Rigorous Curricula .....	84
4.4.3.4	Staff Development and Cooperation .....	86
4.4.3.5	Goal Orientation .....	87
4.4.3.6	Parental Involvement .....	90
4.4.4	Summary of Subquestion 2 .....	91
4.4.5	Subquestion 3 .....	91
4.4.6	Summary of Subquestion 3 .....	97
4.4.7	Research Question 2 .....	97
4.4.8	Subquestion 1 .....	98
4.4.8.1	Academic Achievement .....	97
4.4.9	Summary of Subquestion 1 .....	100
4.4.10	Subquestion 2 .....	100
4.4.10.1	Dropout Rates .....	101
4.4.10.2	Adverse Behavior .....	102
4.4.11	Summary of Subquestion 2 .....	103
4.4.12	Subquestion 4 .....	104
4.4.12.1	Teacher Empowerment .....	104
4.4.12.2	School and Class Size .....	107
4.4.13	Subquestion 3 Summary .....	108
4.5	Chapter Summary .....	109
5.	Findings and Conclusions .....	112
5.1	Major Findings .....	113
5.1.1	ECHS and Educational Factors .....	114
5.1.2	Essay Prompt Summary .....	115
5.2	Implications for Practice .....	115
5.3	Recommendations for Research .....	118
5.4	Summary .....	119
6.	References .....	120
7.	Appendices .....	126

7A	NCSU IRB Permission Form .....	128
7B	Informed Consent Form for Research .....	130
7C	Writing Prompt for Student Essay .....	133
7D	Student Interview Questions .....	135
7E	Teacher/Administrator Questions .....	137
7F	Memorandum .....	139
7G	Syllabus .....	141

## List of Tables

Table 4.1	ECHS Student Performance in College Classes.....	96
Table 4.2	Performance on each course of the A-B-C's End-of-Course Tests.....	99
Table 4.3	Teacher Working Condition Survey .....	105
Table 5.1	ECHS Engagement Factors.....	113
Table 5.2	Educational Factors.....	114

## CHAPTER ONE

### **Introduction**

The Early College High School Initiative is an innovative educational reform effort designed to increase the number of minority and disadvantaged students who complete high school and pursue a college degree (Brotherton, 2003). Citing studies which indicate that disadvantaged and low-income students are not being challenged during the last years of high school or getting the advanced coursework needed to prepare for college, the Bill and Melinda Gates Foundation, in partnership with the Ford foundation and W. K. Kellogg Foundation, USA committed over \$50 million to begin the initiative at over seventy campuses around the country (Brotherton, 2003). According to Brotherton (2003), the Gates Early College Initiative is based on the acclaimed Bard High School Early College which was established in 2001 through cooperation between the New York Board of Education and New York Public Schools.

The Early College High School (ECHS) curriculum is designed as a unit, with high school and college-level work woven seamlessly into a single academic program. While each ECHS location has traits that are unique to its particular community, all of the ECHS locations must meet the following requirements (Brotherton, 2003):

1. Students graduate with an Associate of Arts degree or enough college credits to enter a four-year baccalaureate program as a college junior.
2. Classes will must have no more than 100 students per grade level to ensure personal attention.
3. Each school must offer a state-of-the-art college-level science, technology,

engineering and mathematics curriculum, with non-traditional internships, mentorships, and industry partnerships.

4. Each school will work to be self-sustaining within five years of founding.

Since 2001, the ECHS network has received more than \$124 million in support from the funding partners. Foundation officials estimate that by 2008, the early college network will have grown to include 170 schools and serve more than 65,000 students (Hendrie, 2005).

The Early College High School programs have adopted measures to increase student engagement. These measures are designed to keep students motivated, on-task, goal-oriented, and achievement-oriented. Signs of increased levels of engagement include: high levels of participation, enthusiasm for learning, more time expenditure on tasks in class and at home, and community, social, and extracurricular involvement (Finn & Voelkl, 1993). Studies (Cothran & Ennis, 2000; Bennett, 2006; and Klem & Connell, 2004) indicate that students who lack engagement withdraw from class and school participation. Further, students who withdraw from participation are often at risk for a number of long-term consequences, including disruptive behavior, absenteeism, truancy, juvenile delinquency, and dropping out (Finn & Voelkl, 1993). According to Finn and Voelkl, these behaviors are more commonly found among minority students or those from low income homes, the very students targeted by the Early College High School Initiative.

### **Purpose of the study**

The purpose of this study is to investigate how practices of the Early College High School Initiative impact student engagement. Research on student engagement demonstrates a clear relationship between engagement and academic achievement (Finn & Voelkl, 1993). Finn and Voelkl (1993) cite two sets of school characteristics that may promote engagement: (a) structural environment, and (b) regulatory environment. A school's structural environment includes school size, class size, and the racial/ethnic composition of the school population. A school's regulatory environment is the degree of structure and rigidity of school procedures and the degree of punishment of the school's discipline system, each of which has the potential for affecting student engagement levels.

This descriptive mixed-method study utilizes personal interviews, class observations, writing prompts, questionnaires, and field notes to examine the impact of these school characteristics on student engagement, as well as extant data from the district and state on student performance and teacher working conditions. This impact will be measured and described by demonstrable traits such as academic achievement, morale, satisfaction, attendance rates, and extracurricular and social activities.

### **Significance of the Study for Research and Practice**

Lack of school engagement among students in the United States is a concern that can have serious consequences. Research indicates that a lack of student engagement has a negative impact on individuals and society as a whole. For example, low student

engagement manifests itself in several ways, including an increased risk for dropping out, substance abuse, teenage pregnancy, and criminal activity (Caraway, Tucker, Reinke & Hall, 2003). Additionally, student engagement directly impacts academic outcomes, such as grades and aptitude test scores, and appears to be the foundation of academic achievement motivation (Skinner, Zimmer-Gembeck, & Connell, 1998; Fredericks, Blumenfeld & Paris, 2004; Tucker, Zayco, Herman, Reinke, Trujillo, Carraway, Wallack & Ivey, 2002).

Studies in school reform are beginning to reveal an emerging consensus regarding the factors that contribute to academic success. These factors include a meaningful pedagogy and engaging curriculum, professional learning communities among faculty and staff members, personalized learning environments, and cooperation between education professionals and parents (Klem & Connell, 2004). Attempts to incorporate these aspects of learning have been shown to increase the levels of student engagement in education (Klem & Connell, 2004; Newmann, 1989; Kenny, Blustein, Haase, Jackson, & Perry, 2006). This study was designed to explore the impact of the educational approach of the Early College High School Initiative on student engagement.

This study has several implications for practice. First, the vast majority of research regarding student engagement explores the phenomenon from the characteristics of individual students (Finn & Voelkl, 1993), but is lacking in studies of institutional factors that influence student engagement. This study explores these institutional factors through the examination of how an innovative educational program approaches the issue of student engagement. The exploration of this approach may provide insights that enable

other schools to incorporate practices that increase student engagement. This study may also provide information that education programs may incorporate as part of their training and curriculum, especially in programs for administrators. The findings of this study may also encourage leaders in the education community who have a mind for reform to re-examine traditional education paradigms and to promote practices that stimulate student engagement.

The study's findings also have implications for further research. Researchers who study student engagement, relatedness, belongingness, and achievement, may formulate a comprehensive theory regarding the relevance of these factors in student achievement and their relative importance in future education and school models. Also, as Early College High School programs continue to spread, more educational research resources may be directed toward studying the efficacy of their educational approach.

### **Conceptual Framework**

The theoretical and conceptual framework of this study is based on several cognitive theories of motivation. Tollefson (2000) asserts that students' levels of engagement reflect their personal, implicit theories about the variables that produce success or failure in school and is based upon the judgments they make about the personal characteristics that are necessary for success. Because student engagement is a multi-faceted and complex educational construct, these theories provide a lens to examine various aspects of engagement, such as motivation, goal orientation, behavior, self-efficacy, expectations, and academic achievement. This study will consider student engagement within the



frameworks of expectancy X value theory, self-efficacy theory, goal orientation theory, and attribution theory.

### *Expectancy X Value Theory*

Expectancy X value theory proposes that the degree to which a student will expend effort on a task is related to (a) expectations that he/she will be able to perform the task successfully and obtain the rewards associated with the completion of the task and (b) the value that the student places on the rewards associated with the successful completion of the task (Feather, 1969). This theory proposes that the amount of effort invested is a product of the expectation of success and the value of the reward. In part, therefore, students' motivational engagement is a reflection of their attitudes toward the subject matter and their willingness to expend effort on school tasks (Tollefson, 2000).

### *Self-efficacy Theory*

Individuals' beliefs about their abilities make up their sense of self-efficacy (Tollefson, 2000). According to Bandura (1991), self-efficacy beliefs are important determinants of whether students will expend effort on a task and persist when faced with the prospect of difficulty. Bandura states that while students with high self-efficacy will attempt difficult tasks, students with low self-efficacy expend little effort and often give up easily. Bandura's (1991) theory relies on two assertions: (a) students set goals based upon personal interpretations of their past accomplishments and failures and (b) students set individual goals that become their personal standards for evaluating their performance. According to Bandura, people in general tend to avoid situations that they

believe exceed their capabilities, but engage those challenges that they perceive themselves as capable of successfully negotiating. Bandura asserts that internal rewards for goal attainment more heavily influence effort than external rewards, such as praise or grades.

Tollefson (2000) states that students who hold high self-efficacy expectations approach academic chores with confidence and are more persistent in their attitudes because they believe that success is possible and that they personally possess the abilities and skills to be successful. Students with low self-efficacy do not believe that expending effort will lead to success in school and are unwilling to put effort into their work. According to Bandura (1991), four variables influence one's personal sense of efficacy: (a) performance accomplishment, (b) observation of the performance of others, (c) social influence, and (d) states of physiological arousal. For efficacy expectations to be enhanced, mastery of a task needs to be attributed to amount of effort or ability. According to Bandura (1991), when students master a task, their expectations that they will master similar tasks in the future are enhanced.

### *Goal Orientation*

According to Dweck (1986), two types of achievement goals interact with students' self-efficacy beliefs and influence the amount of effort they expend on schools: performance goals and learning goals. Performance goals emphasize positive evaluations from others. Learning goals focus on gaining new skills and knowledge, even when faced with possible failure. Dweck (1986) states that students with performance goals are

likely to interpret failure as a sign of low ability, while students with learning goals construe failure as a an indication to change their strategy for completing the task. Students with performance goals withdraw effort in the face of failure, while students with learning goals see failure as a cue to increase their efforts.

### *Attribution Theory*

Attribution theory asserts that differences in effort expenditure can be explained by differences in how the students attribute their school-based successes and failures (Tollefson, 2000). Successful students attribute success to ability and effort, and failure to lack of effort or unstable external factors. Attributing success to effort and ability evokes feelings of pride and continued expectations of success (Tollefson, 2000). Attributing academic failures to lack of effort allows students to maintain their views of themselves as competent because levels of effort are under control of the students. Students who fail and attribute their failure to lack of interest in the task can maintain their views of themselves as competent because they could have been successful if they had been interested in the task and expended the necessary effort (Tollefson, 2000).

### *Cognitive Theories and Engagement*

Cognitive theories of motivation can provide educators with the insight to understand why and how students become and remain engaged in learning and may assist educators in formulating policies, paradigms, practices and instructional strategies that effectively promote and enhance student engagement. These cognitive theories may also help teachers to recognize traits of engagement and disaffection and provide a theoretical platform for examining personal practices and philosophies. Tollefson (2000) asserts that

knowledge of motivation theory and experience in creating classroom environments that foster student motivation and engagement in the learning process need to be important components of pre-service and in-service educational programs if teachers are to develop strong efficacy beliefs and help students develop strong efficacy beliefs.

### **Summary**

This chapter presented the background information, conceptual framework, research purpose, and significance of this qualitative study. The study investigates the impact of the Early College High School Initiative on student engagement. This study seeks to contribute to the body of literature on student engagement as well as the scant body of literature regarding Early College High School programs.

## CHAPTER TWO: REVIEW OF THE LITERATURE

### **Introduction**

The purpose of this study is to examine the impact of the Early College High Schools' approach to education on student engagement. Research has strongly suggested that engagement improves performance and validates positive expectations regarding academic abilities (Skinner, Zimmer-Gembeck, & Connell, 1998). Behaviors such as on-task behaviors, study behaviors, class attendance, and participation in class discussions are behavioral indices of engagement, while cognitive indices of engagement include task mastery, assignment strategy employment, attention, and a preference for challenging tasks (Caraway et al., 2003). Research also reveals that engagement is a good predictor of long-term academic achievement in school (Skinner et al., 1998). The Early College High School Initiative is an innovative education program that is designed to increase student engagement ([newschoolsproject.org](http://newschoolsproject.org)). From employing smaller class sizes to fostering a cooperative learning environment that includes faculty, administrators, students, and parents, early college high schools attempt to enhance student engagement and success by giving attention to affective and family needs as well as academic objectives.

### **Student Engagement Defined**

Although the term "engagement" can be used broadly to include concepts such as motivation and attention span, for the purposes of this study, engagement will be narrowly defined as "active, goal-directed, flexible, persistent, focused interactions with the social and physical environments" of the classroom or institution (Furrer & Skinner,

2003). Engagement, therefore, refers to a host of indicators of student investment in and attached to education. These indicators may be cognitive, behavioral or emotional, and they provide the context through which other educational variables, such as self-efficacy perception and teacher behaviors, influence success (Tucker, Zayco, Herman, Reinke, Trujillo, Carraway, Wallack, & Ivery, 2002).

Engagement, as an educational construct, has been the focus of recent research for its potential in explaining the relative success or underachievement and even dropout rates of students in many public urban high schools (Cothran & Ennis, 2000). While engagement is characterized by positive attitudes toward school and various aspects of the learning environment, disengagement describes students who perceive school as alienating, hostile, boring, or irrelevant (Fredericks, Blumenfeld, & Paris, 2004). According to Fredericks et al. (2004), school engagement is closely allied to academic motivation and a willingness to invest psychologically in education.

### **Student Engagement and the Disenfranchised**

Emerging research is continuing to reiterate the importance of engagement for ethnically diverse and socio-economically disadvantaged students (Tucker et al., 2002). Given the criticisms and charges against standardized testing performances of minority students, engagement may be a more accurate indicator of academic achievement. Some studies suggest that African-American students have fewer positive educational experiences and a less degree of school engagement than white students, thus implying

that race and culture may operate in ways that subsequently affect school engagement among ethnic minorities (Bennett, 2006). Upon the completion of a study of low-income African-American students across the country, Connell et al., concluded that engagement was “the most proximal point of entry for reform efforts designed to enhance the educational chances” of these students (1994). Moreover, the research clearly demonstrates that inequities in educational achievement are most detrimental for ethnic minorities who disproportionately attend public schools located in large urban centers (Kenny et al., 2006).

Some research indicates that racial and ethnic diversity in school is linked to increased academic and school engagement among minority populations (Bennett, 2006). Feelings of alienation and marginalization, in contrast, are shown to impair student engagement and academic achievement. Bennett (2006) states that a sense of futility is, therefore, fostered in marginalized African-Americans at school which, in turn, may cause these students to be less motivated to perform well academically and less likely to be engaged in the various aspects of school life.

### **Engagement and Academic Success**

Research indicates that regardless of socioeconomic status, student engagement is a reliable predictor of student achievement and behavior (Klem & Connell, 2004). Students demonstrating a high degree of engagement earn higher grades in the classroom and on standardized tests. Conversely, low levels of student engagement are manifested in a variety of adverse behaviors, including class disruption, low attendance, poor grades, and dropping out (Klem & Connell, 2004).

Being engaged in the classroom is the foundation for several variables that influence academic success. Students who are engaged in learning are willing to expend more effort on tasks (Tollefson, 2000). High levels of engagement lead students to feel that they are a conspicuous part of school and that education is an important aspect of their lives (Finn & Voelkl, 1993). Students, therefore, derive intrinsic and external rewards from academic achievement. High levels of engagement may explain why even high-risk students succeed academically. Students who are disaffected in their own education or who withdraw from participating in school will not have access to the curriculum and are unlikely to attain any meaningful levels of learning (Finn & Voelkl, 1993).

### **Educational Factors That Influence Engagement**

Because learning requires committed effort by students, engagement is essential, yet difficult to realize. Further, successful teaching depends a great deal on the amount of effort students are willing to dedicate to prescribed tasks whose benefits may not be evident to the students in the short term (Newman, 1989). Psychology and sociology research has identified five factors that are integral for enhancing student engagement in schoolwork (Newmann, 1989):

1. Need for competence: when efforts to act competently are successful, students continue to make a personal investment in learning, and the cycle continues. According to Newmann (1989), achieving cognitive understanding and skill mastery are personally rewarding, especially when they allow people to influence the outside world.
2. Extrinsic rewards: when students recognize that academic achievement leads to



rewards that they value and when they believe that their own hard work will result in academic achievement, their engagement increases (Bishop, 1989).

Examples of extrinsic awards may include high grades, college admission, increased income, status, etc...

3. Intrinsic interest: the degree of interest for students in academic tasks determines to a great extent the amount of energy they are willing to invest in the material or task. Their interest may depend on the manner in which the material is presented or their prior experience with the concept.
4. Social support: perceived support or disapproval from institutions and people that surround students influences engagement. This factor helps to frame and contextualize the previous factors of extrinsic rewards and intrinsic interests. This sense of relatedness to a community can be affirming and help to build confidence and self-esteem. According to Newmann (1989), fear of failure may suppress engagement in academic work and divert the need for competence to other activities that are more comfortable.
5. Sense of ownership: student engagement with learning depends largely on students' ability to "own" the work rather than following teachers' predetermined routines. Being able to influence concepts, evaluations, or execution of work allows students to produce knowledge in their own way rather than mimicking the language and processes of others.

Engagement is more than motivation or desire to succeed in school. Engagement helps to activate underlying motivation and generate new motivation (Brophy, 1987). The five

factors mentioned above increase engagement and personalize learning, which builds a sense of ownership and enhances interest in, and valuing of, what is being taught.

### **Types of Engagement**

Recent research in school engagement is generated by the premise that engagement reflects an interaction between students and environment and the notion that this interaction can be enhanced through reform (Federicks et al., 2004). To understand why some students are engaged while others are apathetic, and before any reform measures can be expected to be meaningful, engagement must be addressed and understood in terms that represent more than mere motivation. Generally, engagement can be typified in three general categories: behavioral engagement, cognitive engagement, and motivational engagement (Linnebrink & Pintrich, 2003).

#### *Behavioral Engagement*

Behavioral engagement involves observable behavior (Linnebrink & Pintrich, 2003). Teachers can discern behavioral engagement by observing students' effort, persistence, and help-seeking. According to Linnebrink and Pintrich (2003), students who put forth more effort, endure tasks longer, and seek instrumental help are more likely to achieve at higher levels. Reliable indicators of behavioral engagement include whether students work diligently at a task, or give minimal effort, and if they persist at a task rather than surrendering easily.

#### *Cognitive Engagement*

Cognitive engagement involves using learning strategies to increase understanding of materials and tasks (Linnenbrink & Pintrich, 2003). Because student cognition takes

place in students' heads, however, it is difficult for teachers to recognize critical and creative thinking. Students can provide clues that indicate levels of cognitive engagement, such as what they say or questions they ask, language use, maintaining focus in small learning groups, comments in class discussions, and answers provided to class questions (Linnebrink & Pintrich, 2003). While quantity of effort reflects behavioral engagement, the quality of cognitive engagement reflects the quality of students' efforts in the task.

### *Motivational Engagement*

Motivational engagement includes the expression of personal interest, positive emotions, and utility value (Eccles, Wigfield, & Schiefele, 1998), which represents the usefulness that students assign to tasks. Affective experiences are considered to be an important part of motivational engagement in that positive emotions, such as pride and happiness, are believed to reflect value beliefs regarding educational content (Linnebrink & Pintrich, 2003). Although value beliefs, like importance and utility, may not have a direct effect on achievement, research suggests the increased levels of motivational engagement can lead students to engage in future tasks and experience strong self-efficacy (Linnebrink & Pintrich, 2003).

Research suggests that these three components of engagement (behavioral, cognitive, and motivational) are related (Linnenbrink & Pintrich, 2003). While students who are cognitively and motivationally engaged are likely to be behaviorally engaged also, educators often mistake behavioral engagement as an indicator of student interest in the material or motivation to learn. Further, elevated levels of student engagement are

proportionately related to higher self-efficacy, higher academic achievement, and positive affective dimensions (McCarthy & Kuh, 2005).

### **Predictors of School Engagement**

The identification of psychological variables or “self-variables” that facilitate or hinder students’ levels of school engagement contributes to the understanding of how to increase students’ psychological well-being and achievement motivation (Carraway, Tucker, Reinke, & Hall, 2003). Three variables that frequently appear in achievement motivation literature are self-efficacy, goal-orientation, and fear of failure.

Self-efficacy is an individual’s perception of his/her ability to perform satisfactorily in a given circumstance. According to social cognitive theory, individuals’ perceptions of self-efficacy influence many aspects of their lives, including goals, decision-making, effort exerted in accomplishing tasks, level of perseverance, level of stress in demanding situations, positive or negative thought patterns, and level of vulnerability to depression (Bandura, 1991).

Goal orientation works in conjunction with self-efficacy to increase motivation. According to researchers, students who perceive themselves to be effectual set more challenging goals for themselves and maintain higher levels of commitment to those goals. As goals are achieved, self-efficacy is enhanced and levels of engagement are elevated (Caraway et al., 2003).

Fear of failure often accompanies low self-efficacy (Caraway et al., 2003). This self-variable refers to the impulse to avoid failure because of the potential of experiencing

shame or embarrassment. Students who doubt their abilities or experience fear of failure are less likely to establish goals, thus failing to establish any opportunities to increase levels of self-efficacy or engagement. Contrary to the positive correlation that researchers attribute between self-efficacy and goal orientation with student engagement, fear of failure is most often associated negatively with school engagement and indicative of high dropout rates, problem behaviors, and high absenteeism (Caraway et al., 2003).

### **Teacher Support**

Research indicates that as many as 40%-60% of students become chronically disengaged from school (Klem & Connell, 2004). Schools can adopt conditions, however, that are more favorable to student engagement, including high standards of learning and conduct, meaningful and engaging curricula, and personalized learning environments. Research suggests that in order to take advantage of these conditions, students must first experience a feeling of support from those adults with whom they interact in school (Klem & Connell, 2004). Students who report a satisfaction with caring and supportive interpersonal relationships in school are more engaged academically and demonstrate more positive attitudes.

In a study of how various aspects of school culture affect student achievement, Pritchard, Morrow, and Marshall (2005) found that one's cultural category of Social/People was a predictor of significant difference in achievement. Their study indicated that eighth and eleventh grade students showed that positive attitudes toward one's social environment at school led to achieving higher grades and experiencing higher academic success.

Klem and Connell (2004) report that students who perceive teachers as creating a caring, well-structured environment where expectations are high, clear, and fair are associated with higher levels of attendance and test scores. Their research indicates that links between student engagement and teacher support hold true for all levels of schooling. Conversely, students reporting low levels of teacher support were twice as likely as the average student to be disaffected (Klem & Connell).

### **Early College High School Initiative**

The priority of the Early College High School Initiative is to serve low-income, at-risk students of color who are statistically underrepresented in higher education and of whom society expects little in terms of academic achievement ([www.earlycolleges.org](http://www.earlycolleges.org)). According to Marcy (2006), the Early College High Schools offer “active and rigorous” learning communities, offering not only introductory college courses in specific disciplines, but a demanding core curriculum that conveys a message of high expectations for academic standards. Early College High Schools offer college courses at postsecondary institutions to improve the likelihood of college entrance by these marginalized populations, to endow them with effective studying, learning and thinking habits, and to make the financial burden less of a factor for those who wish to attend college but find the prospects financially prohibitive.

According to Jacobsen (2005), the programs are expected to work in a way that is counterintuitive. Early College High Schools target students who may be performing at below grade level and try to “slingshot” them ahead with a combination of administrative and teacher support and a rigorous curriculum. These schools are designed to keep at-

risk, traditionally underachieving students from dropping out by providing more personal attention and better addressing their needs than traditional high schools.

The Bill and Melinda Gates Foundation has contributed over \$124 million to the Early College High School program, which currently consists of 40 campuses across the United States (Jacobsen, 2005). The Gates Foundation has announced plans to sponsor 130 new schools, which would serve 65,000 students nationwide (Marcy, 2006). The foundation aspires to change the course for students of low-income families who historically have attended college at a rate of less than 20%. Because the program continues to grow, statistics on actual enrollment were not available from the foundation.

Admission to the Early College High School is based on a transcript review, writing and math assessment, and a personal interview (Chmelynski, 2004). The Early College program allows students to simultaneously earn both a high school diploma and two years of transferable college credit. This approach makes attending college more financially feasible, which is encouraging to low-income minority students (Chmelynski, 2004). Sharing instructors and facilities with colleges, the Early College High School not only saves students two years of college tuition, but teaches them critical thinking and writing skills to better prepare them to meet the expectations of further education at four-year colleges and universities.

In their overview of the ECHSI, the Gates Foundation recognizes that drop-out rates plague African-American, Native American, and Hispanic students ([www.earlycolleges.org](http://www.earlycolleges.org)). The foundation targets these groups and hopes to reverse that

historical trend by providing guidance and support from adults, reconceptualizing academic work, offering a coherent focus, including parents in an educational partnership, and implementing “best practices,” such as: student-center advising, peer collaboration, hands-on learning, teaching study skills, receiving timely feedback from professors, and establishing learning communities ([www.earlycolleges.org](http://www.earlycolleges.org)).

### **The Early College High School Approach**

Engagement is more than motivation or the general desire to succeed in school (Newmann, 1989). Engagement helps to activate underlying motivation and can generate new motivation. Early college high schools are innovative educational institutions designed to address those issues of student engagement that traditional public schools struggle to address ([newschoolsproject.org](http://newschoolsproject.org)).

Early college high schools are designed to incorporate practices that are consistent with the research on increasing student engagement. In part, these characteristics are: small class sizes, personal attention, goal-orientation, rigorous curricula, and consistent staff development. Marcy (2006) states that early college high schools enhance student engagement by providing avenues for academic and personal challenges. These schools promote emotional and intellectual engagement, Marcy (2006) states, because they employ many of the approaches to liberal arts education that have proved to be the most effective. The current study is designed to investigate if these characteristics hold true from the points-of-view of students, teachers, and administrators at one ECHS site.



### **Summary**

This chapter cited research literature on student engagement. This literature review examined types of student engagement, engagement and academic success, predictors of school engagement, and factors that influence student engagement. This chapter serves to undergird the research in terms of identifying and explaining the phenomena that emerge throughout the study. Chapter 3 will describe the research design that was employed in this study and give detailed descriptions of the data collection, participants, ethical issues, and data analysis.

## CHAPTER III: METHODOLOGY

### **Introduction**

This chapter describes the research design utilized in this study. The research goals and questions are presented and a description of the research site, participants, methods of data collection, and analysis will be explained. Validity, reliability, generalizability, and triangulation of the data are also presented. Ethical issues and limitations of the study conclude this chapter.

### **Pilot Study**

The current study is an outgrowth from a pilot study conducted by the researcher as part of a qualitative methods class at North Carolina State University. The focus of the pilot study was the potential of the Early College High School programs to address the achievement gap that American Indians students overwhelmingly experience in public high schools. As part of the data collection, the researcher became familiar with the philosophies and practices of these high schools and, with the recommendation of his doctoral committee, decided to expand on the study's findings, which suggested that these practices were practical for American Indian students. With this in mind, many of the methods and approaches utilized in the pilot study were reproduced and broadened for this study along with an expansion of the study group.

### **Research Goals and Questions**

This is a mixed methods research study. A phenomenological qualitative research design was employed to answer Research Question I and its subquestions. A descriptive qualitative and quantitative design was used to answer Research Question II and its

subquestions. The guiding research question for the phenomenological part of the study was: What is the impact of the educational methods and strategies of one Early College High School program on student engagement? The subquestions for Research Question I are:

1. What levels of engagement do ECHS students experience?
2. What measures do ECHS programs undertake to increase engagement?
3. How does the level of student engagement manifest itself?

Research Question II was: How does student engagement at the ECHS compare to student engagement in traditional public schools? The subquestions for Research Question II are:

1. How does the ECHS compare with traditional public high schools in terms of academic performance?
2. How does the ECHS compare with traditional high schools in terms of engaged behavior?
3. How does the ECHS compare with the traditional public high schools in terms of teachers' working conditions and class size?

The researcher determined that a mixed methods approach was needed to address both research questions to utilize both qualitative and quantitative data. Onwuegbuzie and Leech (2006) define this approach: "Mixed methods research involves collecting, analyzing, and interpreting quantitative and qualitative data in a single study or in a series of studies that investigate the same underlying phenomenon" (p.474). In this study, the shared underlying phenomenon is student engagement.

The qualitative approach was the appropriate research method for addressing Research Question I and parts of Research Question II because these questions are descriptive and concerned with “meaning.” Bogdan and Biklen (2003) state that qualitative research is concerned with how people make sense of their lives. The qualitative approach, unlike positivistic research, is focused on theory generation rather than theory testing. Because qualitative research involves inductive analysis, researchers do not search out evidence to prove or disprove a hypothesis, rather the hypotheses are built as that data are gathered and analyzed (Bogdan & Biklen, 2003). This approach utilizes multiple data sources, is naturalistic, involves inductive analysis, and utilizes descriptive data.

For a study regarding engagement, a case study approach is appropriate for capturing the participants’ perspectives and for understanding how they interpret their experiences. Bogdan and Bilken (2003) define a case study as “a detailed examination of one setting” that may involve a specific group of people or a particular place (p. 54-55). The case study focused on one Early College High School and utilized student writing, transcripts of personal interviews, questionnaires, field notes, observation notes, and document analysis to collect information. Because virtually no research has been conducted regarding the Early College High School Initiative, the theoretical substance was allowed to emerge from the data collection process.

Research Question II utilized the qualitative approach on interviewing, but it also entails analyzing quantitative data that are beyond the one case of ECHS in comparing

ECHS to the other traditional public high school in the district and state. Research Question II utilized extant data provided by the state, such as student performance on the state standardized tests and the Teachers' Working Conditions Survey conducted by the state. Such comparisons led to reviewing multilevel data. However, only simple, aggregate data comparisons could be utilized due to lack of access to raw data from the state and incomplete data from the ECHS because it is a new school with no accumulated history.

### **Research Site**

The site for this study was an early college high school located on a community college campus in a rural county in a state in the southeastern United States. This site was selected because of its proximity to the researcher's home and the county's diverse population. The convenience of location allowed the researcher to have prolonged and extensive engagement in the field. The diversity of the county, which is 40% American Indian, 35% Caucasian, and 25% African American, produced the likelihood that Americans Indians, who are rarely included in educational research, would participate in the study. Part of the ECHS mandate is that the composition of the high school reflects that of the surrounding community, and the program targets those minority populations who have traditionally been underserved in public education. Further, the county ranks at the bottom of the state's counties in per capita income. One stated purpose of the Early College High School Initiative is to provide educational opportunities to those students who are underprivileged economically.

The ECHS in the study is in its second year as an educational institution. At the time of the study, the total enrollment was 107 in grades 9-12. By class, the enrollment was 22 seniors, 28 juniors, 27 sophomores, and 30 freshmen. The ECHS limits class enrollment to 100. Also, the racial composition was nearly 1/3 each for Caucasians, African-Americans, and American Indians. The senior class, the focus of this study, will be the first to graduate from the program.

### **Participant Selection**

This study included the participation of students, teachers, and administrators at the Early College High School. Because the community college partnership is integral to the ECHS program, instructors and administrators from the college also participated in the study.

#### *Student Participants*

Because the high school is only in its second year of existence, the purposeful sample was based on the criteria that (a) the participant must be a graduating senior and (b) the participants must have completed at least their junior year and part of their senior year (until the date of the study) at the high school. Because the total senior class enrollment was 26, the researcher petitioned all seniors in the hope that enough would volunteer to participate so that a meaningful sample could be obtained.

In order to contact all twenty-six enrolled seniors, a description of the proposed study was distributed in English classes. Students were read a brief description and purpose of the study. Following the description and assurances of confidentiality and

anonymity, students were provided packets containing a large sealable envelope, a participant and guardian consent form containing a detailed description of the study, a validated writing prompt, to which they would respond, and a personal information contact card (See appendices). Students were instructed to complete the card with the contact information only if they would agree to follow-up personal interviews.

Two weeks later, when the sealed envelopes were collected, fourteen included responses to the writing prompt, three were returned blank, and nine were not returned. Of the fourteen responses that were returned, eleven (79%) were from female students and three (21%) were from male students. By gender, the composition of the senior class was fifteen females and eleven males. Of the fourteen essays that were returned, five had completed the personal contact card that signified a willingness to be interviewed. All of these potential interviewees were female. These five students were the sources of the student interview data that was collected for this study.

#### *Faculty and Administrator Selection*

The community college and high school instructors who participated in this study were purposefully chosen based on the following criteria: a.) They had taught in the Early College High School program since its inception; b.) They taught a course that was required by a majority of the students. c.) They had a minimum of two years' experience teaching in public schools. These criteria were established to take advantage of the instructors' knowledge of the program's philosophies and educational practices, the maximum possible teaching experience in the program, and their familiarity with as

many students as possible. Possessing teaching experience in public schools and the ECHS, these instructors provided a unique perspective that brought a comparative knowledge of the diverse approaches and philosophies. Those six teachers who met these criteria were solicited by e-mail, and those four who volunteered were assigned a number for a random drawing to select the participants. These four teachers were the sources of the data collected from the teacher interviews and questionnaires.

The two community college and two high school administrators who participated in the study were purposefully chosen based on their degree of involvement with the Early College High School program. The high school and college administrators are responsible to a great degree for the daily practices, unforeseen dilemmas, and ultimate success of the program. These administrator evaluations were determined by the researcher following an analysis of their involvement and policy influence with the ECHS. The researcher concluded that administrator participants would be the most knowledgeable about the policies and intricacies of the program and be best suited to answer very specific questions with depth and specificity.

### **Student Interview Participant Description**

The composition of the students who volunteered to be interviewed, all seniors at the time of the study, was as follows: All five are female; 1 Caucasian, 1 Native American, and 3 African-American. All of the participants began the program at the start of their junior year. One lived in the city limits, which put her in close proximity to the high school. The other four traveled more than fifteen miles to get to school each morning. All five attended public schools in the county prior to their admission into the ECHS. .



Two students described themselves as “poor” performing prior to entering the program, while two described themselves as “average” and one as “good.”

### **Teacher/Administrator Description**

Both community college and high school instructors participated in the study. The two community college instructors who participated in the study each held a Master of Arts degree and had eight years of experience each. Both instructors taught at public high schools before moving to the community college level, one instructor for two years and the other for four.

The two high school instructors who participated in the study had both been at the ECHS since its inception. One instructor served a dual role of teacher and administrator. The other participant had more than ten years experience in the public school system in two different school systems.

The two college administrators who participated in this study each hold a doctorate in education and have worked for more than twenty years in the education field. Both described involvement with the Early College High School as an important part of their administrative duties.

Two high school administrators participated in the study. Each had spent more than five years in education, serving in several teaching and administrative positions. Both had the responsibility of supervising day-to-day activities of the school and dealing with students’ crises and grievances.

The total number of participants who were interviewed in the study was thirteen. Of these, five were students, four were high school or community college instructors, and four were high school or community college administrators.

### **Access and Consent**

After receiving permission from the Institutional Review Board at North Carolina State University on March 27, 2007, the researcher sought and received permission for the full study from ECHS officials who were authorized to grant permission and who had cleared the particular dynamics of the study with the necessary authorities. The officials were provided with a detailed written proposal several days in advance of a personal conference. Following the conference and several phone conversations regarding specific questions about the study, permission was granted on March 30, 2007.

Because the early College High School students hold dual-enrollment with the community college, permission was also required from community college officials. In order to secure permission, the researcher provided a senior administrator with a written proposal and scheduled a personal appointment to discuss questions or other matters. Following this appointment, permission was granted on April 2, 2007,

### **Methods of Data Collection**

The sources of data for this study include samples of student writing, personal interviews, questionnaires, class observations, field notes, and document analysis, as well as extant data on student performance at the state and district levels, and data from the Teacher Working Conditions State-wide Survey. The researcher began collecting data on April 4, 2007, with the distribution of the writing prompts to the Early College High

School senior class. The writing prompts were distributed during English classes and were collected fifteen school days after distribution. All of the student interviews were conducted in a classroom on the community college campus during the students' free time before or after school. In an attempt to maintain a time continuity between student, teacher, and administrator responses, administrators and instructors were e-mailed a questionnaire. The responses were returned in e-mail form over a period of ten days. Follow-up interviews were conducted by phone via the contact information provided by the participants.

#### *Student Writing Prompt*

The initial phase of the study involved distributing writing prompts to the senior students during their English classes. The essay prompt was developed and validated as a research instrument in prior studies regarding student attitudes toward school culture (Pritchard & Marshall, 2002; Pritchard, Morrow, & Marshall, 2005). The prompt asked students to write to a friend about aspects of their school and explain why that student would or would not recommend their school to that friend (See appendices). The prompt was personal, yet in the expository mode (Pritchard, et al., 2005), and allowed students of various writing abilities to address the prompt in several acceptable ways. According to Pritchard, et al. (2005), this format is ideal for allowing students the use their personal voice as confirmation or refutation of indicators of student engagement and allowing the students to express their experiences without the confines of certain categories.

#### *Interview Questions*

The secondary source of data from the students was personal semi-structured

interviews. This method was employed because it gave the researcher the ability to gather pertinent information and follow up on themes that emerged in the writing responses while also giving the interview participants the freedom to elaborate on ideas that had surfaced in their writing and express their thoughts regarding any issues about which they had strong feelings. Bogdan and Biklen (2003) state that good qualitative interviews allow subjects to feel at ease and talk freely about their points of view.

The interview format followed a general interview guide. Besides the ten questions that were prepared in advance (See following), researcher reflections after examining the writing samples, student phrases and concepts that merited elaboration, and researcher probing were also utilized during the interviews. All of the participants provided written consent to having the interviews recorded on a digital voice recorder. Before the interviews were conducted, the participants were assured anonymity and confidentiality and advised that they would have oversight over any material that was gathered during the interviews.

The interviews lasted between 15-25 minutes each. Students were interviewed during a week when classes were operating on an atypical class schedule. This allowed the researcher to conduct interviews at a discrete campus location and at times that allowed the interviews to be conducted inconspicuously.

The interview questions were open-ended to ensure that the participants were able to elaborate on their answers. Some responses warranted follow-up questions from the researcher. Questions were clarified or rephrased as needed. The interviews were framed by the following questions:

1. What interested you in the ECHS program?
2. What are your feelings about your education at ECHS?
3. Discuss your level of classroom participation.
4. Discuss your level of out-of-class participation
5. What is your family's response/attitude to your school/education?
6. Discuss how your experience may influence/impact your future plans.
7. Discuss the level of rigor/difficulty in your courses.
8. Discuss any incentives to staying in/giving effort/doing well in the ECHS
9. What is your impression of students/counselors/faculty/administrators?
10. Discuss any aspects of your program that you feel were not touched on or about which you would like to state your feelings.

These questions were created to gain the students' impressions of the program before, during, and after their participation. Questions #1 and #2 were posed to gauge students' expectations of the program and their real experiences. Questions #3 and #4 were posed to help the researcher detect various aspects of engagement. Questions #5, #7, and #9 were posed to determine the consistency of ECHS claims and the actual student awareness of various aspects of the program, including academic rigor, parental involvement, and faculty and staff support. Question #6 and #8 were posed to determine the impact of earning an Associate of Arts degree, an integral part of the program, on the students' future plans. Question #10 was intended to allow students to speak freely regarding any parts of the program about which they felt strongly or felt were not adequately addressed earlier in the interview.

The interview guide for the students was designed to provide the researcher with information regarding the consistency of student impressions and insight with the cognitive theories of engagement that form the conceptual framework of the study. The questions contained in the interview guide were consistent with Patton's (2002) recommended general function for interview questions:

1. Opinion and value questions reveal how participants view and think about their own behaviors and experiences.
2. Feeling questions seek to determine how participants feel or react emotionally about their personal experiences.
3. Knowledge questions seek to find what participants know.
4. Experience and behavior questions seek to discover what participants have done.
5. Background questions seek to learn personal details about the participants.

To ensure accuracy and validity, each interview was transcribed verbatim. The researcher also offered member checks to the participants to ensure accuracy and to certify that comments retained their original and intended content.

#### *Instructor/Administrator Questionnaire*

In order to triangulate the data, the researcher collected information from administrators and teachers at the Early College High School. To obtain multiple perspectives from those charged with implementing the ECHS policies and practices, the researcher collected information reflecting the views and attitudes about student engagement from instructors and administrators from both the high school and college points of view.

Because of end-of-term time constraints with exams, end-of-course testing, grade calculations, and other tasks for these officials, the researcher sent e-mail attachments of the interview questions to the teachers and administrators. These participants provided contact information for the researcher to follow-up on the responses that were provided. The participants signed consent forms and were assured of anonymity and confidentiality. The responses were delivered to the researcher via e-mail over the course of ten days. Subsequent follow-up questions and questions of clarity were conducted via telephone calls to the various respondents' residences.

The questions in the questionnaire were open-ended and were designed to allow the participants to elaborate on their feelings and attitudes regarding their roles and the overall effectiveness and impact of the Early College High School program on student engagement. The eight questions presented were:

1. Describe ECHS definition of student engagement.
2. What is considered an acceptable level of student engagement?
3. What is your role in ensuring student engagement?
4. How does your approach to student engagement compare to those of public schools?
5. What has been student reaction to efforts to increase their engagement?
6. Compared to other mandates in your charter, how important is increased student engagement?
7. Where does student engagement reveal itself most?
8. What factors indicate successful student engagement?

#### 9. Any additional comments?

This questionnaire was designed to solicit instructors' and administrators' perspectives on student engagement. Questions #1 and #2 were posed to acquire knowledge of individual participants' definition of student engagement. Questions #3 and #4 were posed to gain insight into the faculty participants' strategies for increasing student engagement as compared to those outlined in the ECHS goals. Questions #5, #7, and #8 were designed to acquire an understanding of how these participants identify student engagement or what student actions or characteristics they attribute to or classify as evidence of engagement. Question #6 was posed to gauge the priority the subjects placed on student engagement. Question #9 allowed the participant to elaborate further on any aspect he/she perceived as pertinent to the subject. These open-ended questions were also consistent with Patton's (2002) recommendations for conducting qualitative research interviews.

#### *Rating Responses*

Two trained raters, both college English instructors, independently read and evaluated the quality of the student writing prompt responses using a validated 6-pt rubric (see appendix) created by English teachers participating in the National Writing Project (Pritchard, et al., 2005). These raters were trained using anchor essays (see appendix) that represented the various tiers of the rating scale. The training scores were consistent to within one point. A score of 6 on the scale indicated an essay as "highly effective, well-written," while a rating of 1 indicated "poorly written." These ratings were used in creating student profiles. The raters were also charged with rating the essays as positive,



negative, or neutral overall, revealing all students' attitudes toward school. These ratings were used to classify student experiences and attitudes about the ECHS.

### *Field Notes*

Extensive field notes were recorded immediately following each interview session. As Bogdan and Bilken (2003) recommend, the researcher employed descriptive field notes to strive for accuracy. Descriptive field notes involve recording thoughts and observations in great detail rather than summarizing. Also, recording these thoughts and observations immediately following interviews and observations allows for greater accuracy and requires the researcher to depend less on subjective or imperfect memory (Bogdan & Bilken, 2003). Shorthand notes and keyword notations were employed to aid in the recording of the field notes in a word processing program in the researcher's office immediately after departing the interview site.

In order to strive for "rich data," the researcher also employed reflective field notes. These field notes are utilized to reflect on the researcher's personal feelings, problems, ideas, impressions, prejudices, and speculations (Bogdan & Bilken, 2003) regarding the study. According to Bogdan and Bilken (2003), these self-reflective field notes are not only valuable in the accurate recording of methods, procedures, and evolving analysis, but are necessary for the researcher because he/she is a central instrument in qualitative research and must be aware of his/her relationship to the setting and of the "evolution of the design and analysis." Reflections on analysis and reflections on method were utilized extensively to ruminate about emerging themes and to record thoughts and issues related to procedures and strategies.

### *Classroom Observation*

In order to acquire firsthand knowledge of student engagement as it is demonstrated in a classroom setting, the researcher observed two classes prior to administering the student writing prompts or conducting the subjects' interviews. The first of these classes was a ECHS English class, and the second was a community college English class with a high concentration of ECHS students.

In these classroom observations, the researcher recorded extensive notes regarding various elements of engagement, such as behavior, class participation, attention to instructions and tasks, and effort levels. Further, the researcher noted the teachers' pedagogical approach, the nature of the students' work and assignments for that class period, the teachers' willingness to answer questions and provide personal assistance and establish rapport, and the level and nature of the interactions between the students and the teachers.

Immediately following these classroom observations, the researcher transcribed and organized his hand-written notes and thoughts into a more detailed, better organized type-written format. This transcription was utilized for clarity and to retain any information that may have been compromised over time if only committed to memory and bullet points.

### *Document Analysis*

As part of the data collection, the researcher obtained various types of documents to assist in developing an understanding of ECHS practices, policies, and procedures. Among the documents collected and examined were class syllabi, a student handbook,

communication forms between school official and parents, official records that reflect attendance, and performance levels, as well as internal forms and documents that reflect student disciplinary records, college classes undertaken, and progress reports.

Documents were also examined regarding a traditional high school in the same community concerning academic achievement, class size, teacher workplace satisfaction and student behavior. Finally, extant statistical data from state-wide studies were reviewed for student performance on state assessments and teacher responses to Teacher Working Conditions Survey.

### **Validity**

Because the researcher is the primary instrument in qualitative studies, validity must be seen from the “perspective of the paradigm” through which the research has been executed (Merriam, 2002). Because the goal of qualitative research is not to establish laws, questions of validity and reliability should be addressed in ways that are dissimilar to quantitative research.

In this study, validity issues were addressed that were consistent with those strategies suggested by Merriam (2002). The researcher used multiple sources of data to achieve triangulation. The sources in this study were student writing, personal interviews, questionnaires, observation, field notes, and document analysis. This incorporation of multiple data sources confirms, to the extent that it can be confirmed, that what was conveyed was perceived as truthful and reported truthfully.

The researcher also employed member checks to establish validity. In this study, the interviewees and questionnaire respondents were allowed to verify transcripts and field notes pertinent to their participation to verify the events and responses as recorded.

Consistent with Merriam's (2005) proposed use of subjectivity statements, the researcher included a statement of bias in this study. In this subjectivity statement, the researcher documented personal feelings and encounters with the subjects being studied, the setting that was used for the study, and motivations for undertaking the study. The researcher also documented any personal relationships that he maintained with individuals who are employed or involved with the institution being examined.

The data from the state were previously validated when the state administered the standardized tests and teacher survey. Pritchard and Marshall (2002) established the validity of the essay prompt for gathering authentic student opinions about their schools.

### **Reliability**

Reliability in positivistic studies refers to the assumption that repeated measures and methods will produce like results. Reliability is a problematic question in qualitative research. Because human behavior is not static (Merriam, 2002), and personal interaction and behaviors are never consistent, even under nearly identical situations, the notion of reliability should be better applied in terms of "dependability." In this study, the researcher sought to employ "thick description" to convey human behavior and interactions as they took place. Thick description involves providing enough information of the phenomenon being studied to enable readers to determine how closely their situations match the situation described in the study (Merriam, 2002). The state had

previously determined the reliability of the standardized state tests. Further, prior researchers (Pritchard & Marshall, 2002) determined the reliability of the essay prompt for students of the same age as in this study.

### **Generalizability**

Qualitative research is primarily concerned with the accurate recording of what actually occurs in a research setting rather than with determining if the findings hold up beyond the specific research subjects and settings involved in a particular study (Bogdan & Biklen, 2003). Because of the small sampling and static setting of this study, the researcher acknowledges the limited generalizability of this study. Further, there are no compelling reasons to determine if the students and faculty participants are typical or atypical of other Early College High Schools across the country. Central to this uncertainty is the attitudes of the students in the study, the ethnic composition of the ECHS, the attitudes, focus, and philosophy of the community college partner, and the relative adherence to Early College High School national mandates. The generalizability determination is, therefore, left to subsequent research and professionals conducting like research to conclude its fit into the general scheme of their work (Bogdan & Biklen, 2003).

### **Triangulation**

Triangulation is the use of multiple data sources in a study (Bogdan & Biklen, 2003). Multiple student subjects were interviewed for this study using the same criteria and interview guide. Faculty and administrators answered questionnaires and were contacted by phone and e-mail for follow-up questions. These responses were tape recorded for

thorough and multiple examinations, and field notes related to the interviews were taken and examined multiple times.

The researcher also employed personal observation to obtain data for this study. During the classroom observations, the researcher recorded detailed notes of student and teacher behavior, subject matter, classroom setting, verbal exchanges, body language, pace of instruction, teaching style, and time management. Immediately following the observations, the researcher enhanced his notes and further elaborated on what was observed while the information was fresh rather than risking the compromises of memory and elapsed time.

Another source of data that the researcher utilized for triangulation purposes was document analysis. As recommended by Bogdan and Biklen (2003), the researcher accumulated several types of documents for analysis (see appendix). These documents included:

1. Official documents: documents produced for specific kinds of consumption.

These documents provided the researcher with an “official perspective” of the subject. In this study, these documents are policy documents, codes of ethics, and statements of philosophy for the ECHS.

2. Internal documents: documents that are used for internal communication within an organization. They provide the researcher with information that circulates through the chain of command and often reveal an organization’s priorities or mandates. For this study, these documents are syllabus requirements and internal memos.

3. External documents: documents that are produced for public consumption.

External documents may provide the researcher with insights into that information that the organization feels is vital to its public image, advertisements, or strategies for gaining or maintaining public or fiscal support. For this study, these documents were press releases, advertisements, pamphlets, newsletters, and web-pages. Further documents included information from the Gates Foundation about early college high schools nationally, and state and district reports on students achievement and teachers' working conditions.

Student writing was another form of data. The researcher used responses to a prompt for analytic induction to explore emergent themes related to student engagement that originate from the students themselves. These themes were used as the focal point of follow-up questions and as a point of comparison with administrator/instructor perspectives.

The administrator and instructor questionnaire guides were utilized to gain the perspective of those responsible for administering and following the ECHS mandates and philosophy. Besides examining these responses for emergent themes, the researcher used the questionnaires as a springboard for follow-up questions.

These methods of data collection allowed the researcher to examine the research questions from multiple perspectives. The multiple data sources permitted the researcher to draw conclusions and make determinations regarding the question of the impact of the ECHSI on student engagement. Further, this triangulation helped to enhance the validity

of the researcher's findings. The researcher could ask: (1) to what extent do the qualitative and quantitative data converge? (2) to what extent do the interviews with students, faculty, and administrators confirm each other (use of multiple levels of inquiry) and (3) to what extent do the documents confirm the interviews?

### **Data Analysis**

Because this mixed methods study involved multiple data sources, the researcher employed a constant comparative method of analysis (Bogdan & Biklen, 2003). For Research Question I: What is the impact of the educational methods and strategies of one Early College High School program on student engagement?, the constant comparative method was used. This method is characterized by beginning formal analysis early in the study and nearly completing it by the end of the data collection. Using this method, the researcher continuously and recursively compared the data collected from the various sources for emerging themes and patterns. As the research progressed, new themes emerged and were added to the master list of themes and patterns. Continuing this process, the researcher was able to obtain a broad spectrum of categories. Using the constant comparative method, the researcher refined these categories and began to formulate theories.

In the context of student engagement, the researcher found it necessary to add to and refine the research questions in order to demonstrate relevance between the emerging data and the narrow purpose of the study. Themes emerged as a result of the researcher becoming familiar with the data and making logical associations between the data collected and the review of literature. As new themes continued to emerge, the



researcher also found it necessary to expand the probing of documents and information for the review of literature. Throughout the stages of the study, these themes moved from a low level of abstraction to major themes embedded in the evidence provided by the data. When the data no longer uncovered new ideas, theoretical saturation was reached and coding was ceased.

Research Question II was: How does student engagement at the ECHS compare to student engagement in traditional public schools? To address this question, the researcher examined comments made in administrator and instructor interviews, particularly to the direct question: How does your approach to student engagement compare to those of public schools? In addition, student interviews were gleaned for spontaneous comments where the students at ECHS volunteered information about their prior experience in the district traditional high schools. Data available from the public high schools and ECHS concerning dropout rates, class size MORE were analyzed. Finally, data from the district and state on student achievement on standardized tests and teacher working conditions were compared with data gathered about ECHS.

### **Interpreting Data**

In this study, the researcher read responses to the student writing prompts multiple times to probe for emerging themes. He also reviewed the raters' notes regarding the same responses. The researcher contacted each rater for clarification of some terms and to coordinate terms that were identified by each but labeled in a different fashion. The researcher then reviewed faculty/administrator responses for concepts and terms that had emerged in the student responses. As additional terms emerged from the faculty

responses, the researcher re-examined student responses for like concepts that may have been previously overlooked.

The researcher spent multiple sessions listening and reading the transcripts to the personal interviews. These recordings and transcripts were probed for terms that matched those noted in the written responses or for themes that had not emerged in the written data.

These concepts, and those mined from observations, memos, documents, and field notes, were placed into categories and their origins were recorded. The origins of the terms and concepts were categorized and recorded according to participant:

*S*-Student *A*-Administrator *I*-Instructor *R*-Researcher

The medium that elicited the terms were also noted:

*WP*-Student writing prompt; *Q*-Faculty/Administrator Questionnaire;

*PI*-Personal Interview; *FI*-Follow-up Interview; *N*-Researcher Notes

The following categories occurred consistently throughout the data analysis. These categories were used to group similar ideas that the data sources referenced in the collection process.

1. Faculty/Administration: references to adult officials in the ECHS program
2. Policy: rules, regulations, and codes enforced or expected by the school officials
3. Academics: references to grades or activities within the academic disciplines
4. Extracurricular activities: references to clubs, organizations, or activities that are supplemental to academic endeavors
5. Environment: references to affective and social aspects in response to

characteristics of the school (class size, teacher attitudes, etc...).

In the data analysis, the researcher evaluated these comments to determine how they coincided with Newman's (1989) factors that influence student engagement. The researcher also used these themes to determine which of Linnebrink & Pintrich's (2003) engagement categories that they typified.

### **Ethical Concerns**

#### *Informed Consent*

Prior to taking part in the study, participants were provided with a precise description of data collection methods. The researcher was explicit about the procedures and how the results would be used. Further, the voluntary nature of the study was emphasized. These descriptions were reproduced on the consent forms (See appendices). This information was reiterated for those participating in multiple phases of the study at each phase of the data collection.

#### *Risks and Vulnerability*

To protect the rights of the participants in this study, the researcher procured the authority of the Institutional Review Board for the Use of Human Subjects in Research at North Carolina State University to conduct the research. IRB approval was granted for the study on April 5, 2007.

There were no risks involved to the participants in this study. Student participants were advised that neither their participation nor the study results would influence their grades. They were also advised that there would be no adverse consequences for not

participating in the study. The adult participants were assured that there would be no professional repercussions for their participation, or lack thereof, and that the study was being conducted independently of college and high school administrators and supervisors.

### *Confidentiality*

Participants in this study were promised that their responses and participation would remain confidential. The following measures were taken to ensure the confidentiality of the study participants:

1. Data collected during the study were stored in a location to which only the researcher had access.
2. The identities of the respondents were coded and erased before submitting the student essay to the raters.
3. The identities of the student interviewees were kept confidential and pseudonyms were used when the findings were recorded
4. The instructors and administrators were kept anonymous.
5. The name and location of the institution were not revealed.
6. Any data that could compromise the confidentiality of the participants were destroyed upon the completion of the study.
7. Interview appointment times and places were undisclosed.

### *Compensation*

Neither the institutions nor the participants involved in the study were

compensated for their contributions. At no point was compensation, monetary or otherwise, offered or inferred during the course of the research.

### *Researcher Bias*

Because the researcher is the primary data collection instrument in qualitative studies, the issue of subjectivity, or researcher bias, is a foremost concern. For this study, the researcher had to acknowledge certain biases and expectations that were formed while conducting the pilot study. Assumptions and preconceived notions regarding expectant findings and attitudes were noted and referenced as the study proceeded. These reflections were shared with members of the dissertation committee who monitored the study and were alert for evidence of bias.

For purposes of disclosure, the researcher acknowledges maintaining a personal relationship with several faculty members at the community college. For fear of corrupting the study, and for confidentiality assurances, the researcher did not discuss any aspects of the study with those individuals. Further, the researcher is now an employee of the college at the research site, but his position was procured after, and separate from, conducting the study

### **Limitations**

In researching the impact of the Early College High School Initiative, this study employed a small sample of participants. As part of the school's philosophy, the population being studied is strategically small. This is limiting to the study because even a small number of non-participants leaves the study sample slim. This restricts the

ability of the researcher to mine further themes, probe emerging patterns, and gain deeper perspective. The interview participants in this study, for example, are all female, which denies the researcher any insight that may have been provided by male students. Also, having twelve students to not participate depleted the potential sample by nearly 50%. It is possible, therefore, for a similar study conducted with a larger sample to produce different results.

Another limitation of this study is the lack of statistical data available from the high school. Because the school is only in its second year of existence, meaningful statistics such as graduation rates, standardized test scores, and other academic measures were not available. This information would be helpful when comparing the students' achievements with that of students in other schools in the county. While these statistical data would not alone provide conclusive evidence about student engagement, one could use them to further draw educated conclusions about the impact of the early college high school.

### **Summary**

This chapter provided a description of the research design employed in this qualitative study. The setting and participants in the study were described and issues of validity and ethical concerns were addressed, as well as the limitations of the study. This chapter also detailed data collection methods and outlined the research questions that guided the study. Chapter 4 will offer profiles of the student participants and discuss the research questions that buttress this study.

## CHAPTER IV: RESULTS AND DISCUSSION

### **Student Profiles**

The first section of this chapter offers the profile of the five students who participated in the individual interviews. These profiles contain self-described characteristics along with observations made by the researcher. Some information was acquired through the participants' responses to prepared questions in an interview guide, through essay writings that the researcher examined prior to interviews, during direct questions that arose from the students' answers to the questions, or from informal conversations that took place before conducting the formal interview. Other descriptions are observations, characterizations, and impressions taken from observer's notations as recorded during and immediately following the interview sessions.

The proceeding sections in this chapter analyze the responses to the writing prompts, describe the statistical characteristics of the essay responses, and examine the research questions that were addressed in this study. Further, the researcher will explain how the data collected in this study were relevant to the research questions and how the data were utilized to draw conclusions that are stated in this study.

#### *Beth*

Beth is an outgoing, vivacious young lady with an infectious laugh. She demonstrated a very curious nature by immediately asking questions upon entering the interview room. Rather than having a cautious nature to these questions, Beth sought information about why "anyone would be curious enough" to conduct a study of her school. She listened

intently and carefully, and considered the answers that were given by the researcher regarding his study and his “curiosity.”

Beth described herself as “a good student.” In her response to the writing prompt and during her interview, Beth revealed that her interest in the Early College High School was sparked by its promise of academic rigor. She considered herself an underachiever in her previous public schools because she knew she could “get over.” She characterized her previous high school learning experience as marked by high absenteeism and end-of-the-semester pushes to earn passing grades. Beth was uninterested and “bored” with her previous school because of the “slow pace” of learning and “constant fighting and interruptions.” In that learning environment, Beth had “very serious doubts” about continuing her education in college.

The greatest appeal of the Early College High School, to Beth, is its original approaches to learning. She stated that lecture as a pedagogical practice is minimal. Beth stated that group projects, hands-on learning, and authentic tasks with assignments (i.e. creating newsletters and newspapers as part of English class) were stimulating. She also viewed the rigorous curriculum as challenging and said she felt “pushed.” She added that tutoring, mandatory library time, and advisement classes helped her to meet the challenges of the academic expectations.

In describing the faculty and staff at the school, Beth had mostly positive feelings. She described her teachers as “nice” and “caring.” She felt that the school’s principal was “reasonable” in administering punishment, a subject to which she is sensitive because of the frequency of behavioral problems at her previous school. Beth described



her classmates as “focused” and “concerned with more than just passing.” Her only criticism regarding personnel regarded the liaison administrator who bridges the interests and practices of the Early College High School and the community college. She felt that the administrator, who is in her first year in the role, was indifferent to student needs and rarely acted on student requests and student needs. Beth’s overall attitude was deemed positive by the researcher during her interview and by the rater who assessed her responses to the writing prompt. Beth’s essay was graded a “4” on overall quality.

Beth sees herself as “transformed” because of her experiences at the Early College High School. She has taken advantage of career management classes offered by the school, where students learn to create resumes and practice for job interviews. She plans to apply to several local four-year colleges and work part-time. Beth will earn her diploma and Associate of Arts Degree at graduation. She anticipates her schooling will help with acceptance and scholarship applications.

### *Christina*

Christina is a shy, withdrawn, guarded American Indian student of Lumbee decent who admitted up front that she was “not a people person.” While she offered very direct answers to the interview questions and considered them carefully before slowly responding, she rarely made eye contact with the researcher and seemed uneasy with the one-on-one interview format. When asked why she agreed to participate in the interview, she softly replied that she felt strongly about her school’s impact on her education and life. Christina squirmed in her seat and fidgeted with her notebook throughout the

interview. Noting her level of discomfort, the researcher resisted lengthy probing or following-up with this student.

When asked about her previous experience at a county public high school, she stated that race riots had occurred three times during her two years there and she feared for her safety. She also stated that she felt “invisible” because she was not vocal or outgoing. She felt strongly that these characteristics hampered her academically and socially. She noted that she “never” volunteered answers in class or raised her hand to ask for clarification or help. She felt she was allowed to “exist” because she did not “cause any trouble.” She characterized herself as a “very poor” student prior to changing schools. Christina stated that her motivation for applying to the Early College High school was “safety.”

Christina’s response to the writing prompt response was succinct. She included no negative comments and, indeed, her response was rated positive, although she received a “3” on quality. Christina’s short reply emphasized that ECHS presented an “opportunity” for her. She explained in her personal interview that she was being raised by a single, low-wage-earning mother who prepared her early in her education for the financial prohibitions concerning a college education. She admitted that this played a prevailing role in her apathy with her public school education. Besides safety issues, she felt compelled to apply to the Early College High School program because a brochure that she obtained from a school guidance counselor highlighted “one-on-one” educational practices and tutoring opportunities.

Christina stated that she is “challenged” by the Early College High School program. She finds the curriculum to be demanding but now takes advantage of the opportunities to gain assistance. She feels that teachers and administrators “generally care” about student achievement and describes her teachers as “patient,” “fair,” and interested in students’ goals. She is particularly fond of the small class sizes. One teacher regularly gives Christina a ride to campus for Saturday School, which is a voluntary extra day available for extra tutoring and counseling. Although Christina is not a student in this teacher’s class, the teacher approached her with the offer of transportation. She regularly assures Christina that the “lift” is no burden, and she regularly engages in conversation regarding her progress in school.

When asked at the end of the interview what she would like to add, Christina stated that her decision to attend ECHS “saved me.” After her father’s death, she had very few positive experiences in her life. She states that her family is “proud” of the person she has become. She has ambitions to attend a four-year university and eventually become a veterinarian. At graduation, she will be the first in her family to earn a high school diploma. She states that she is happy that she met her first “best friend” at the Early College High School and that this friendship provides her with moral support, a person to talk to about personal “girl issues,” and someone to “hear” her.

### *Sondra*

Sondra is an animated, social, vocal, African-American whose phone conversation ended in the interview room with the statement, “I’m gonna tell this N.C. State doctor all about our school. I’ll call you after.” She then pulled her chair up closely to the interview

table, placed both elbows on it and both hands under her chin, and quipped, ‘I’m going to tell you everything.’ Sondra was ambivalent about her experiences at the Early College High School and she was ready to unburden herself, but not enough to turn off her phone, which was set to “vibrate” and had to be checked frequently during the interview.

Sondra arrives to school every day via a van that is dispatched from the school to her home twenty minutes away. She stated that her initial interest in the Early College High School program was economic. The ability to obtain a two year degree tuition-free was attractive to her because the idea of “money for school books and tuition” was already weighing on her single parent. She admitted, however, that leaving her previous school, only blocks away from her home was difficult because it meant leaving life-long friends.

Sondra considers herself an average student, but she maintains a very active extra-curricular involvement. She is currently involved in school clubs, such as Future Business Leaders of America and Student Government Association, as well as civic organizations which are devoted to community service projects.

Sondra’s response to the writing prompt was rated as “negative” by the rater and the researcher. Her essay received a quality rating of “2.” She described her feelings about attending the Early College high school as “frustrating” and “disappointing.” While she was happy with the learning environment, especially with the teachers, whom she described as “very helpful” and “different than what I was used to,” she discussed the administration in negative terms. Sondra described counselors and other administrators as “not engaged,” “not in touch with students,” and “consistently rude.”

According to Sondra, in her interview and writing prompt response, many details about acquiring credits, scheduling, and graduating, were “not revealed” before she arrived in the program. She claims that the information she received before becoming a student has been revised multiple times since her arrival. She now finds herself lacking the required number of credits needed to graduate with her Associate of Arts degree. Efforts to establish the source of the confusion or the misinformation were met with the same general vague response-“...because they messed up my schedule...”

Sondra, disillusioned about not achieving her Associate’s Degree by graduation, has decided to return to her first public school to graduate in 2008 with her life-long friends. Discovering that a “13<sup>th</sup>” year would be required at the ECHS and that college tuition for that year would be her responsibility, she has put her plans on hold for attending East Carolina University. She has mixed feelings about her experiences over the past two years and states adamantly that she would not recommend the Early College High School program to others, at least not until “they get their mess together.”

### *Jasmine*

Like Sondra, Jasmine is ambivalent about her experiences in the Early College High School program. Suspicious, she had to be reassured several times throughout the interview that her statements would remain confidential. An African-American female who describes herself as an “average” student, Jasmine transferred to the program to “try something different” and because she “was tired of the routine” in her traditional high school. She commutes about fifteen minutes to school each day from the home that she

terms is “in the projects.” Her essay was rated “negative” overall and received a quality rating of “2.”

Jasmine appreciates the cooperative approach to learning in the ECHS classes. She admits that she likes “to be a leader” and “take charge” in groups. She states that many of her assignments are project-oriented and that she is enthusiastic about working in groups or teams. Jasmine describes taking college and high school courses simultaneously as challenging. She attends tutoring every day and takes advantage of any additional opportunities that are presented. Jasmine praises her teachers and college instructors for being personal, working on a one-on-one basis, and being “helpful and nice.”

However, Jasmine, like Sondra, was less charitable with her characterizations of the administration. She contends that “they keep secrets from you” and “don’t reveal things at the beginning.” When probed for an example, Jasmine said, “Like if you fail a college course, you have to pay for it.” She also stated that achieving a diploma and Associate of Arts degree is not always synchronous, something that she was not informed about upon applying. She describes the administration as “unorganized about everything you can think of.” She stated that, ultimately, she regrets leaving her traditional high school.

Applying to nearby four-year colleges, Jasmine plans to transfer the college credits she has accumulated toward a Bachelor’s degree. She stated that overall she was dissatisfied with her experience at the ECHS. “At first,” she said, “the idea of someone else paying for college sounds good, but when you learn the truth about everything, it is very disappointing.”

*Vanessa*

Vanessa is a soft-spoken African-American female who describes herself as “reinvented” by the Early College High School. Self-described as previously “a very poor student,” she stated that she has felt invigorated by the demands of the program. She commutes by school van twenty minutes to school every day, passing her former traditional high school, which she characterized as “not a challenge.” Vanessa said her interest was piqued when she discovered she could get “a free college education.” Vanessa stated that the availability of teachers and college instructors to answer questions and address concerns has made her a better “more responsible” student. She described her teachers and instructors as “respectful, caring, and personally invested.” She stated that she viewed the counselors on campus as being people “you can go to for anything.” Being able to tackle challenges and succeed is a source of pride for Vanessa. She stated that the impact of succeeding in a “real educational” environment has made her more confident in her educational aspirations.

After spring graduation, Vanessa will earn her diploma and her Associate of Arts degree. In the fall of 2007 she plans to attend a local university and major in education. She added that besides being able to save her family two years of college tuition, she was able, through the assistance of counselors at the ECHS, to obtain scholarships and grants that would also ease the economic burden in pursuing her Bachelor’s Degree. The rater of her writing prompt response and this study’s principal researcher determined that Vanessa’s writing prompt response was “positive,” and it received a quality rating of “3.” when asked to describe any negative aspects of the Early College High School program,

she only shook her head. “It’s a good program,” she said, “especially if you know what you want coming in.” When asked if one did not, indeed, know, Vanessa stated, “Well, then they will help you find out.”

### *Summary of Student Profiles*

The preceding profiles were a small representative sample of the Early College High School students. According to the school’s official web-site,

*The students are a representation of the County School System.*

*Early College High Schools are designed for motivated students who are typically underrepresented in post-secondary education, but have shown a potential in middle school--first generation college attendance, students for whom the cost of college is prohibitive, single parent home, etc...*

According to this description, the students who participated in the personal interviews were “typical” of the students at the county’s ECHS campus. Each of these students expressed financial or family difficulties, previous underachievement at traditional public high schools, and a desire to achieve a college degree. Most report being underserved, disengaged, or alienated in their educational experiences prior to applying to ECHS.

Each reported financial circumstances as a motivating reason for applying to the school.

The students who participated in this study are consistent with the target groups that the Early College High School Initiative seeks to serve. According to the official web-site:

*The ECHSI is designed to “serve low-income young people, first-generation college goers, English language learners, and students of color, all of whom are statistically*



*underrepresented in higher education and for whom society often has low aspirations for academic achievement. The initiative will increase the number of these young people who attain an Associate's degree or two years of college credit and the opportunity to attain a Bachelor's degree.*

The student subjects in this study are also consistent with the following descriptions of students that the ECHSI targets ([www.earlycolleges.org](http://www.earlycolleges.org)):

- Nearly two-thirds of the enrollment is African-American
- Native Americans are targeted and served on this campus
- These students were largely unsuccessful in traditional schools
- A majority of the participants are the first to attend college
- 60% of ECHS students qualify for free or reduced lunch

The students who were interviewed for this study offered a consensus of positive sentiments about the teachers at the ECHS. They also uniformly viewed their enrollment as “an opportunity” and beneficial to their educational futures. Some expressed displeasure with administrators and counselors, and others felt that they were ill-informed or misinformed regarding the policies and intricacies of achieving academic credits. All of the interview participants found the curriculum to be academically challenging, and while some expressed regret about their decisions to leave their traditional high schools, all of the participants perceived their education at the school as beneficial to their lives.

### **Students' Voices**

This objective of this study was to ascertain the impact of the ECHSI on students' engagement levels, based largely on their own testimony and perspectives from within

the program. A qualitative approach was appropriate because the newness of the program prohibited the collection of meaningful quantitative data. Although principles and philosophies of the program were available through administrator interviews and program documents, without students' voices these intentions were not verifiable. While teachers and college instructors who are charged with educating these students have pedagogical philosophies and approaches to teaching, their efficacy could not be verified without the students' contributions. Thus, student essays and interviews were a principal source of information for triangulation purposes and, more importantly, to gain the perspective of the recipient of this innovative educational approach.

Because of the prominence of the students' perspective in this study, it is constructive to examine the students' responses in depth to gain a comprehensive understanding of the students' perspective and insights into their experience. The student essays were characterized by the following information:

- Fourteen of the twenty-six seniors responded to the writing prompt (54%).
- Of these, eleven respondents were female (79%) and three (21%) were males.
- Of the eleven female responses, three (27%) were rated "negative," two (18%) were "neutral," and six (55%) were rated as "positive."
- All three of the male responses were rated as "positive."
- Overall, nine (64%) of the responses were "positive," three (21%) were "negative," and two (14%) were rated "neutral."
- The quality of expression ratings ranged from 1-5, with 5 being highest.

- Of these, one (7%) was rated a 1; four (29%) received a 2; four (29%) received a 3; four (29%) received a rating of 4; and one (7%) received a rating of 5.
- Females earned the highest (5) and lowest (1) scores.

### *Negative Essay Responses*

Twenty-one percent of the essays received a “negative” attitude rating. Those students who wrote essays that received a “negative” evaluation wrote extensively about schedule-related disappointment or resentment. According to the essays, failure to achieve a diploma when expected or failure to earn a synchronous college degree was attributable to the failures of school administrators. The students expressed anger over what they perceived to be misinformed or inadequate information. These responses were rated “negative” because the students stated that they would not recommend the ECHS to friends because of these administrative failures. For these students, the irritation over scheduling took precedence over the positive aspects of the ECHS that they cited. The positive aspects mentioned most prominently in the negative essay responses were teacher support, small class sizes, and free college tuition.

Two of the three authors of the essays rated as negative also participated in the personal interviews. Although they expressed their disillusionment with the program during the interviews, they also offered valuable insights and elaborated on many other aspects of the program. During the interviews, Sondra and Jasmine expressed awareness and appreciation of the education they received at the Early College High School. According to these subjects, however, a sense of “betrayal” was the prevailing sentiment regarding their overall experience.

The researcher did not discover any correlation between negative essay responses and low student engagement. While students who had written negatively about the program overall had “soured” on the program because of very specific experiences, their responses to interview questions that were unrelated to those specific issues indicated that their engagement levels in the classroom learning environment were consistent with higher levels of academic engagement. In particular, the essay responses revealed high levels of motivational achievement and goal-orientation despite the negative overall sentiments of their essay responses.

#### *Positive Essay Responses*

The positive aspects of the student essays have been well-documented in this study. The writing prompt allowed for negative and positive aspects of school, so even “positive” rated essay responses documented negative impressions. The most frequently mentioned negative aspects referenced by students with an overall positive impression were: no sports teams, lack of social activities, and longer school days. The most prominent positive aspects that were cited echoed the positive aspects mentioned in the “negative” essays and student interviews. These essay responses featured small class size, one-on-one teacher attention and hands-on learning as the most significant characteristics of their school. Most of the positive essays mentioned only one negative characteristic, devoting nearly all of the essay space to positive aspects. In contrast, the “negative” essays devoted approximately half of the essay space to positive and negative aspects.

### *Neutral Essays*

Both of the essays that were rated as “neutral” were written by two females. Neither of these respondents participated in the personal interviews. In a conference with an essay rater, the researcher discovered that one essay was rated “neutral” because the author gave equal weight to positive aspects (small classes, teacher respect) and negative aspects (no extra-curricular activities, program is of greater benefit to ninth graders) and made no recommendation to the reader. Instead the author urged the “friend” to “make up your own mind.” The other “neutral” essay featured a list of topics that lack any “positive” or “negative” distinction. Further, in conference, neither the rater nor the researcher could decipher much of the handwriting. In both cases, the researcher concurred with the “neutral rating.

### *Essay Prompt Summary*

Regardless of ratings, most student essay responses cited positive aspects of their school that coincided with ECHS teachers’ and administrators’ pedagogical and philosophical intentions to elevate the levels of student engagement. Further, these student essays affirmed and validated, to a large degree, ECHSI efforts to take an innovative approach to education that was based on educational research and undertaken to raise the students’ level of engagement. Fundamental facets of the initiative surfaced prominently in students’ characterizations, descriptions, and evaluations that the student writing prompts provided.

### **Research Questions**

This section of the chapter discusses how the themes that emerged from the data address the guiding research questions detailed in Chapter III. These results will be presented by relating the identified themes to the research questions to illuminate the impact of the Early College High School on student engagement. Utilizing the information obtained through multiple data sources and through a careful analysis of the information gathered through this study's review of literature, consistencies and conflicts will be examined and discussed.

Research Question I asked: What is the impact of the educational methods and strategies of one Early College High School program on student engagement? The subquestions for Research Question I are:

1. What levels of engagement do ECHS students experience?
2. What measures do ECHS programs undertake to increase engagement?
3. How does the level of student engagement manifest itself?

Subquestion 1: What levels of engagement do ECHS students experience?

In order to address this subquestion, one has to contextualize the meaning of engagement by referring to Linnebrink and Pintrich's (2003) three general categories of engagement.

#### *Behavioral Engagement*

While only five of the fourteen (36%) student responses to the writing prompts referred to behavior or conduct, using terms like "less drama" and "less acting out" to describe their learning environment at the Early College High School, each of the five

interview participants mentioned student behavior in classes as a positive aspect of their school. The participants characterized their classmates as “serious,” “more mature,” “want to learn” and “focused.” Also, when these students referenced student behavior, each mentioned the contrast between their current school environment and that of their traditional high schools. Klem & Connell (2004) assert that high levels of student engagement are characterized by diminished adverse behaviors. These characterizations were verified by the researcher during classroom observations. Researcher field notes indicate that minimal student discussions and activities not related to the content of the classes were observed.

A review of the 2006-2007 student handbook revealed an outline of behavioral expectations. The outline highlights aspects that are “essential in a healthy learning environment.” The behavioral bullet points include: coming to class prepared, focusing total attention on the topic, tolerating diverse points of view, and listening politely while others are speaking. The consequences of disruptive behavior are also outlined in the handbook and include procedures that range from verbal reminders to expulsion, depending on severity and frequency.

Although the term “behavior” was not utilized in the faculty/administrative questionnaires, all high school and college participants mentioned “behavior” as an important and conspicuous indicator of student engagement. Respondents described high levels of student engagement as students “exhibiting model behavior,” “being prepared,” and “being a leader in the classroom as far as participation and behavior are concerned.” Teachers and instructors maintain that achieving behavioral engagement consists of

explaining consequences. In fact, each teacher/instructor mentioned in follow-up questions that stipulations regarding rules of behavior, behavioral expectations, and examples of unacceptable behavior were vital to establishing class order on the very first day of each new class.

In follow-up interviews regarding comments related to behavioral engagement, each teacher/instructor stated that behavioral engagement was crucial to academic achievement. Faculty participants on the college and high school side of the Early College High School stated that this was indicated by class preparedness, courtesy to others, completing homework assignments, low absenteeism, and a low rate of tardiness. These faculty members noted that in general they were very satisfied with the exhibition of behavioral engagement that was demonstrated by the ECHS students. They reported that a very minimal part of their class/instruction time is spent enforcing behavioral codes of conduct. They also felt that strong administrative support and clear behavioral policies contributed to acceptable student behavior.

### *Behavioral Engagement Discussion*

The student and faculty reports recognizing low levels of behavioral problems suggest elevated levels of engagement in ECHS. Faculty and student testimony and researcher observation show evidence of elevated levels of student engagement, as described by Finn and Voelkl (2003), which is a demonstration of high levels of participation on tasks and the absence of adverse and disruptive behaviors. Faculty and administrative comments and archival documents indicate that maintaining a strict



behavioral code to enhance student engagement is a matter of policy, a theme which emerged during the data analysis.

Students at the Early College High School report an ability to focus on tasks because of the emphasis on acceptable conduct. Student participants, especially those students who reported high levels of violence in their traditional high school, indicated an acute awareness of the policy and its consequences, and an appreciation for its enforcement. Faculty members stated an appreciation of administrative support regarding discipline and emphasized the disparity between the amount of effort needed to maintain order in the Early College High School and traditional high schools where they had previously taught.

Klem and Connell (2004) state that high standards and expectations of student conduct are conducive to student engagement. The willingness of these students to conform to behavioral policies coincides with Tollefson (2000), Finn and Voelkl (1993), and Klem and Connell's (2004) assertions that engagement positively correlates with students who are traditionally considered at-risk. Newmann (1989) states that social support at home and school and the perceived disapproval from others, including classmates, prompts students to conform to behavioral expectations. Further, students can expect this conformity to result in extrinsic rewards (praise, better grades, etc...), which Brophy (1987) states increases student engagement and motivation. Also, with ten of the fourteen (71%) writing prompt responses and each of the interview participants mentioning "opportunity" as a reason for applying to the ECHS program or remaining in good standing, the extrinsic rewards are obvious and tangible.

### *Cognitive Engagement*

Linnenbrink and Pintrich (2003) state that signs of cognitive engagement include participating in discussions, asking questions, focusing on tasks, and being actively engaged in class and small group activities. In this study, 100% of the faculty and administrator questionnaire responses referenced similar terms, indicating that cognitive engagement was both a strategic instructional concern and a prominent policy initiative. The administrators who participated in the study stated that the ECHS educational approach was to center much of the student work around “project-based” and “work-based” learning. The goals of this approach are to have students “actively and consistently involved in their learning,” and “to create independent learners who seek knowledge in an active manner.” One administrator stated that this type of student engagement is “most revealed during interactions with instructors.”

Instructors stated that they employed classroom assignments and activities that “appeal to various learning styles and diverse learners.” The idea, according to their responses, is not only to “get students to think about their learning,” but to “bring them out of their shell,” “teach them to work collaboratively,” and “to take the initiative” in the learning process. These faculty members state that strategies to enhance cognitive engagement are feasible at the Early College High School because of distinctions that set the school apart from public school. One high school teacher in the program stated that she was able to construct active and interesting learning activities in her classroom because, unlike working in public schools, she did not have “the pressure of EOC testing and the standard course of study.” Each instructor credited small class sizes and the

ability to interact with students on a more personal level as fundamental to enhancing cognitive engagement.

As Linnenbrink and Pintrich (2003) state, student cognition takes place in students' heads and is difficult, therefore, to measure or recognize. The student essays, likewise, were difficult to gauge for levels of cognitive engagement. While some students mentioned terms that researchers associate with cognitive engagement, they were mentioned in a descriptive context. Terms such as "challenging," "encouraged to ask questions," and "serious about learning" were mentioned in seven of the fourteen (50%) of the essays, but were related to instructional approaches, classroom activities, or teacher attitudes. While recordings of researcher classroom observations confirmed frequent questioning by students, collaborative activities, and participation in classroom discussions, there was no way to ascertain the level of focus or effort, or even if these efforts were typical due to the problem of observer effect, which Bogdan and Biklen (2003) state is the change in behavior of those subjects being studied that is caused by the presence of an observer.

The researcher probed the student interview participants with questions designed to determine cognitive engagement, but the responses were generally descriptive of the classroom environment or depictions of teaching methods. After rephrasing questions several times to discover if, or to what degree, ECHS students think about their learning, the researcher abandoned further probing for fear of leading the subjects.

### *Cognitive Engagement Discussion*

Newmann (1989) states that fashioning assignments and projects that allow students to produce knowledge in their own way provides them with a sense of ownership, which has a positive influence on cognitive engagement. While analyzing the data, cognitive elements and terms occurred most in the context of “environment,” which was one of the emergent categories. While the data strongly indicated the existence of an educational philosophy and pedagogical practices intended to stimulate cognitive engagement, the fulfillment of these intentions is difficult to assess.

Although teacher and researcher observations indicate focused attention, participation, and active inquiry, one cannot presume that creative or critical thinking is taking place. As Linnenbrink and Pintrich (2003) assert, behavioral engagement may often be mistaken as an indicator of cognitive engagement or student interest in the material. Also, because behavioral engagement and cognitive engagement are related (Linnenbrink & Pintrich, 2003), one cannot conclusively attribute observed behavioral engagement as indicating that students are cognitively immersed.

### *Motivational Engagement*

Affective experiences are considered to be an important part of motivational engagement (Linnenbrink & Pintrich, 2003; Eccles, et al., 1998) and predictors of goal setting and attainment. Positive emotions, such as pride and happiness, have a direct effect on achievement and manifest themselves in terms of goal-setting, enthusiasm for completing tasks, and setting high standards for oneself. Six of the fourteen (43%) student essays employed positive terms and concepts that researchers associate with

motivational engagement. These essays were all rated as “positive” regarding the learning environment and ranged from 3-4 on the 6-point quality scale. Establishing and achieving goals was a common theme.

The most common mention of “goals” was in association with completing the ECHS program with an Associate of Arts degree and establishing study and work habits that would translate into success in future educational endeavors at four-year colleges. This behavior is consistent with Bandura’s (1991) assertions that goal orientation works in conjunction with motivation in that achieving goals leads to higher self-efficacy and enhanced levels of engagement, which leads to setting long-range and more challenging goals.

The personal interviews revealed more of the affective terms related to motivational engagement. Experiencing pride or satisfaction in their work or having relatives express a sense of pride was discussed in depth in all but one interview. Only Sondra, who had become disenchanted with the ECHS program failed to mention “pride” in any context. Although Jasmine was also disillusioned with school, she spoke openly of how proud she was of her own efforts and achievements. “Pride” was the centerpiece of Christina’s interview as she spoke of parental pride, growing self-esteem, the pride she would feel in future educational endeavors, and pride in “overcoming obstacles.” Marie and Beth echoed sentiments of pride as it related to how others felt about their progress in the Early College High School.

Other positive affective-related terms that surfaced in these interviews were “satisfied,” “happy,” and “pleased.” Conversely, four of the fourteen (29%) essays that

were rated “negative” mentioned terms that are typical of disassociation. Sondra and Jasmine referred to “regret” and “disappointment” at length in their prompts and interviews. Others also referred to being “sorry” over their decision to attend the ECHS and “sad” about their current educational condition as compared to their traditional high school. Finn & Voelkl (1993) state that negative educational experiences lead to a lack of motivation, disengagement, and withdrawal from participation.

Data from faculty and administrators coincide with researchers’ (Newmann, 1989; Klem & Connell, 2004; & Tollefson, 2000) descriptions of motivationally engaged students. Administrators in the study state that they strive to motivate students to “demonstrate initiative in their studies,” and “develop an intrinsic sense of responsibility for academic work.” Teachers and instructors stated that “clear and attainable” objectives help to build students’ “self-esteem and confidence.” As Bandura (1991) and Tollefson (2000) maintain, self-efficacy beliefs determine whether students will expend effort on a task and pursue and persist with difficult tasks. These faculty members claim that the evidence of self-efficacy and motivational engagement manifests itself in on-time task completion, completed homework assignments, and utilizing tutoring and other available academic aids to a great extent.

### *Motivational Engagement Discussion*

The data suggest a correlation between administrative intentions, instructional objectives, and student responses regarding motivational engagement. Administrators voiced aspirations to produce students who are engaged in their tasks and display high efficacy traits. Teachers and instructors support these aspirations with goal-oriented

projects designed to build self-esteem and motivational engagement. Students report participating in engaging assignments and being challenged to achieve at a high level. Newmann (1989) states that the need for competence is a compelling factor in becoming motivationally engaged. The data imply that ECHS students who are oriented toward attaining a degree or transferable credits recognize the utility value of academic tasks (Eccles, Wigfield, & Schiefele) and are compelled to exert effort into the timely and proficient completion of those tasks.

### **Summary of Subquestion 1**

This subquestion of Research Question I asked: What levels of engagement do ECHS students experience? An analysis of the data suggests that the level of engagement, defined as “active, goal-oriented, flexible, persistent, focused interactions with the social and physical environments of the classroom” (Furrer & Skinner, 2003), is elevated for ECHS students. Student interviews and essays, teacher and instructor testimony, researcher observation, and administrative policy mandates coincide with Caraway et al.’s (2003) psychological variables that facilitate higher levels of student engagement.

Studies (Caraway et al., 2003; Bandura, 1991; & Klem & Connell, 2004) identify self-efficacy, goal orientation, and teacher support as good predictors of student engagement. The data analysis in this study revealed self-reported elevated levels of self-efficacy by students and testimonies of high student self-efficacy by ECHS high school teachers and college instructors. Student goal-setting is inherent with application to the high school, and a majority of subjects cite a “free college education” and transferable

college credits as motivation for striving for academic success. Likewise, a vast majority (93%) of student essays and interview participants (100%) mentioned teacher support as a conspicuous and motivating factor in their willingness and ability to strive for academic excellence.

Linnenbrink and Pintrich (2003) regard the three components of engagement as intertwined. They contend that students who exhibit behaviors typically associated with one type of engagement are essentially demonstrating a product of collective engagement. So while it is difficult or impractical to attribute student conduct and achievement to a parsed derivation of a single mode of engagement, it is important to note that a single behavior or a single facet of learning more likely exemplifies the existence of several facets of student engagement in the Early College High School.

Subquestion 2: *What measures do ECHS programs undertake to increase engagement?*

The Early College High School employs measures that research identifies as integral to student engagement and achievement ([www.earlycollege.org](http://www.earlycollege.org)). These characteristics include small class size, teacher support, rigorous curricula, faculty collaboration, mastery goal orientation, and parental involvement. Each of these characteristics and their research keystones will be discussed in this section.

*Class Size*

Over the past twenty years, studies have documented greater achievement gains for students in small classes, especially members of minority groups, compared to students in larger classes (Halbach, Ehrle, Zahorik & Molnar, 2001). One aspect of the ECHS that was featured prominently in all areas of data collection was “small class size.” Besides



being mandated to maintain a charter (Brotherton, 2003), small student-to-teacher ratios are conducive to student engagement because the amount of time and attention devoted to each student potentially increases. Class size is part of a school's structural environment that Finn & Voelkl (1993) state influence engagement. "Class size" is also a component of the "environment" category that emerged during the data analysis.

Seven of the fourteen (50%) student essay responses mentioned class size as a positive aspect of school. Nearly all of the references to smaller classes cited more personal time with teachers as a beneficial product of small class sizes. Some students' remarks included the following:

- "The classes are small so the teacher has more time to stop and explain any of the problems that we may be experiencing at the time."
- "Smaller class sizes allows the teachers to work one on one with the students."
- "Our classrooms are small, making it easier for learning to take place."
- "You learn better with smaller classes and there is less drama."
- "Being in small classrooms gives each student a better chance at making good grades and more one on one with the teachers."

No student references to small class sizes, even in the essays that were rated as "negative," deemed it as a negative characteristic of the ECHS.

The student interviews corroborated the sentiments expressed in the essay prompts. In her interview, Christina stated, "Smaller classes helps you get to know people. That's important when these are the people you work with on projects and stuff." She added that she felt less self-conscious about asking questions. Vanessa felt that smaller classes

allow the teacher “to teach in depth,” and Beth commented that smaller classes allowed her to “focus and retain information better.” Like the essay responses, the student interviews revealed an affinity for the small class sizes at the Early college High School and the intimate relationships with teachers that this characteristic allows. Research indicates that increasing students’ engagement is favorable in personalized learning environments (Klem & Connell, 2004).

Early College High school teachers praised smaller class sizes for enhancing their ability to interact on a personal level with students and “focus more fully on academic needs.” These teachers state that students are more likely to “participate vocally and seek help,” “apply themselves,” and “put more energy into completing assignments.” When asked how small class sizes contribute to these behaviors, one teacher replied, “There are fewer distractions and disruptions in the smaller classes.” All teachers, in fact, commented that teaching in the smaller class environment allowed them to be more effectual. One teacher added, “I can be more clear and go more in depth than was thinkable in my public school job. This is what is needed from me for teaching and learning to take place.”

College and high school administrators highlighted the advantages of smaller class sizes and drew distinctions between the Early College High School classes and public high school classes. High school administrators perceive large class sizes in public schools as “a way for students to either hide or get lost.” They assert that students are more engaged in small classes because “they feel more like a part of the learning environment.” College administrators assert that small class sizes “give students a

chance to demonstrate their abilities,” and “allow students to have the confidence to participate in the learning process.”

Although small class size alone does not enhance academic achievement, the other aspects that accompany smaller class sizes strongly correlate with attainment. Research suggests that the following products of small class sizes help maximize learning potential (Halbach et al., 2001):

1. Fewer discipline problems: teachers get to know students better and can address problems immediately.
2. More time for instruction: teachers can delve deeper into subject matter.
3. More content and depth: teachers are more likely to cover the curriculum, and students develop a better and deeper understanding of concepts because they have more opportunities for practice and feedback.
4. More time for individualization: fewer students means increased dialogue. As students exhibit their level of understanding, teachers can target their assistance.
5. Varied instructional strategies: teachers have more flexibility and can choose instructional strategies that keep students actively engaged.

Small class sizes, therefore, are the conduits that allow teachers to address behavioral, cognitive, and motivational engagement issues that can generate achievement gains.

### *Teacher Support*

Research by Klem and Connell (2004) indicates that links between teacher support and increased levels of student engagement holds true for all levels of schooling. In this study, “teacher support” was mentioned prominently in 100% of the student writing

prompt responses, regardless of positive/negative or quality ratings, 100% of the student interviews, and all faculty and staff questionnaires. Although the definitions and perceptions vary, the consensus among the student participants at the Early College High School was that the teachers were the distinction between their current school and their former traditional high schools.

The Early College High School students, regardless of their overall satisfaction with the program, praised teachers for their personal approach to teaching. The following was characteristic of the student writing prompts:

“The teachers here are excellent to work with. Here, we get one on one time with our teachers. The environment is great for learning. The teachers make you feel as if you can do anything. When we don’t understand something they are willing to go over it until we get it. When I came to this school I didn’t really like school, but the teacher made me feel like I could do any thing. This school really gets to know there (sic) children.”

Although this essay received a quality rating of “5,” other essays which were rated low on quality because of “listing” rather than employing a narrative response, also placed “great teachers” on the “positive” list.

Teacher support has been linked to students’ motivational engagement. Research suggests significant connections to student help-seeking, coping strategies, and self-perception (Marchand & Skinner, 2007). According to the college instructors in this study, ECHS students demonstrate a quicker transition to college course work than many traditional high school students. One instructor at the college stated, “The Early College

students that I have had experience with seem better prepared, for the most part, than a lot of the students I see.” The instructor said that these students, generally, participate in class and regularly ask questions. She speculated that this is attributed to practices that are encouraged in the high school.

Teachers in the ECHS state that demonstrating academic, moral, and emotional support is a conspicuous objective. One teacher described her style of support as “positive and affirming, yet practical.” When asked if her approach was grounded in research, she said, “No, I think it’s a combination of common sense, intuition, and training.” Her approach does have research support, however. Marchand and Skinner (2007) stated that students who do not sense or experience teacher support become disengaged and conceal their need for help despite it being readily available in the classroom.

One college administrator stated that part of the mission of the ECHS was to make students aware that help and support were available on many levels and that the concept of promoting this to the staff at the high school and college was a priority. Further, a liaison between the college and high school programs is assigned the duty of being an advocate for the students. This liaison serves as an advisor and a mediator. The result of this, according to one high school administrator, is that students establish a network of support, starting with classmates and extending to administration. Newmann (1989) asserts that this network support influences engagement and helps to build confidence and self-esteem.

*Rigorous Curricula*

Some researchers attribute disengagement with school and low achievement with a lack of academic rigor and expectations (Tomlinson & Cross, 1991). Students' perceived academic limitations and "fear for their academic esteem" cause many teachers to excuse them from hard work and high expectations. This sends a message of "inability" to the students, which ensures that they will not acquire the skills necessary to succeed academically, or the confidence (Tomlinson & Cross, 1991).

Eight of the fourteen (57%) student writing prompt responses referred to "rigor" or the difficulty of school work. Each of these was rated "positive" by raters. This is noteworthy because none of the "negative" responses mentioned the demands of the ECHS curriculum, making it logical to presume that their negative responses were due to other aspects of the program. This observation is consistent with Washor and Majkowski's (2007) assertions that rigor in school projects leads to a "love of learning" and an elevated level of engagement.

Many of the students who included "rigor" in their essays noted the benefits of indulging in more challenging activities. Comments like, "In order to do the work, you have to be disciplined and responsible," and "The hard work prepares us for the challenges of college," were typical in the writing prompt responses. Students stated that the work was "hard but doable," "encourages us to think," and "is part of an excellent education." The remarks coincide with Washor and Majkowski's (2007) contention that rigor in the classrooms increases the students' motivational engagement and sense of pride in respect to their ability to meet high academic demands.

The students' personal interviews coincided with the reactions expressed in the writing. Jasmine stated that the amount of work was "intimidating at first," but admitted that group work helped to ease the burden. Christina echoed Jasmine's sentiments about the workload, but stated that ample tutoring opportunities helped her manage. Sondra said that work at the ECHS was different than work at her traditional high school because it "requires more working and studying." Beth stated, "I would not recommend this school to anyone who isn't disciplined. It takes a lot of work out of class to get it all done. It's hard to balance your high school courses with the college courses unless you are motivated." Each of the students who gave interviews described themselves as "B/C" students.

College and high school administrators reported that a rigorous curriculum was designed to keep students engaged and to develop rudimentary study and work habits. While rigor is designed to engage students, one administrator admitted that it can also have a disassociative effect. "Students will leave the program because the work is too much or too hard. Some are trying to work part-time and it's hard to keep up with everything. But those who accept the challenge begin to develop skills in time-management and a stronger work ethic, and that will serve them well for the rest of their lives, academic and otherwise," he said. Others mentioned that completing challenging coursework and projects helps build self-esteem and changes how students may perceive themselves. A high school administrator noted that these challenges prompt students to become more engaged because asking questions and seeking help is "more of a necessity than a luxury." This statement was reinforced by a college instructor who said, "Students

run into trouble when they register for a class for which they are not prepared, and this basically forces them to interact with their instructor.”

Washor and Majkowski (2007) contend that pushing students to the edge of their competence can “bring forth an extraordinary depth and breadth of learning.” They assert that schools and classrooms need to enhance students’ abilities to bring rigor to their own learning. Public schools, as indicated by the use of various standardized and end-of-course tests, apply grade-level expectations uniformly to entire classes (Washor & Majkowski, 2007). Data from this study indicates that the Early College High School Initiative programs use rigorous curricula to challenge all students to demonstrate mastery at or above grade level and to stimulate their learning engagement

#### *Staff Development and Cooperation*

An analysis of the data indicates that staff development and faculty collaboration at the Early College High School are outgrowths of the staff development philosophies and practices of its community college partner. According to the interviews with administrators, ECHS teachers collaborate extensively to align high school content and community college expectations. In order to streamline this collaboration, an ECHS liaison is assigned to meet regularly with college and high school faculty and advise students on measures that these instructors propose in order for students to succeed.

Staff development practices emerged as an integral part of the community college approach in the 1970’s to improve overall effectiveness, become more competitive, and to answer demands for accountability (Watts & Hammons, 2002). More importantly, community colleges have implemented staff development plans to better cope with



increasingly diverse enrollments and a growing percentage of “at-risk” students attending the colleges (Watts & Hammons, 2002). Sharing students with the Early College High School has increased the number of “at risk” students being served by the college, as well as augmenting an already diverse student body.

Azinger (2000) and Watson (1993) state that this interinstitutional collaboration is beneficial to students, teachers, and educational institutions. For the students, the transition to college is less traumatic because they have been made aware of college level expectations (Watson, 1993) and, because of curricular alignment, they have benefited from “content scaffolding.” This allows students to use prior knowledge to accumulate and contextualize new knowledge. These collaborative efforts, theoretically, decrease the number of students in need of remediation. This collaboration allows high school teachers to avoid chasms in their course content design and permits community college instructors to establish a “running start” with the ECHS

### *Goal Orientation*

Studies suggest that achievement goals influence engagement, which, in turn, influences academic engagement (DeBacker & Crowson, 2006). Achievement goals refer to the reasons that students have for engaging in academic tasks. The Early College High School teachers maintained that their focus in the classroom was “task mastery.” Research implies that mastery goal orientation leads students to be intrinsically motivated and strive for task mastery and personal improvement (Debaker & Crowson, 2006). In contrast, studies indicate that “performance goal orientation,” which is practiced in public

school settings, generally, prompts students to focus outwardly on task outcomes and social comparisons. According to Debaker and Crowson (2006), students who pursue mastery goals will most likely choose challenging tasks rather than easy ones. Further, these students use effective learning strategies and persist with academic challenges.

In their interviews, the ECHS teachers expressed frustration with the “teaching to the test” that occurred in their previous public high school teaching positions. One teacher stated, “There is so much pressure from administrators to reach or maintain certain year-end test levels that the subject content gets overlooked or minimally engaged.” According to researchers, this approach is characteristic of performance goal orientation because the focus of instruction is grades or external assessment (Debaker & Crowson, 2006). Because mastery goal orientation is often linked with effort rather than ability when explaining task success, researchers believe this type of goal orientation to be more related to engagement than performance goal orientation (Debaker & Crowson, 2006).

Student interviews affirm the ECHS teachers’ assertions. Beth stated, “The teachers give us time to get our work done and make sure it’s right.” Christina added, “In my other school, we went over things real fast and then took a test.” When asked about her current experience, she stated, “The teachers here are patient with you. They want you to understand and learn.” Vanessa said, “I was surprised that the teachers wouldn’t let you give up on stuff. Because our classes are small, they constantly check on us to see how we are doing before we take any tests or anything. After a while, you want to try to get it yourself to show the teachers that you are learning.”

Each high school teacher and college instructor made references to some aspect of “task mastery” or goal orientation, as did most of the administrators. One high school teacher stated, “It’s important for students to feel that they have accomplished something meaningful in the classroom. I think it really helps to build their self-esteem and confidence. I think that the excitement that they demonstrate is not so much based on grades. And the reaction that you get from students when they realize that they have actually learned something is really gratifying.” Another teacher added, “Many students will seek outside help from tutors or counselors. Some attend workshops to help improve their study skills and be a more effective student. These are the ones that realize that mastery requires a lot of effort on their part also.” One college administrator stated, “We want the high school students to arrive as independent learners. Our goal is to have students genuinely acquire knowledge of their subjects in high school that they can readily apply in their college classes.”

Nichols, Jones, and Hancock (2003) state that task mastery goal orientation is learner- driven while performance goals are school- or teacher-driven. Their research indicates that performance goal orientation, such as focusing on standardized or end-of-course tests, causes anxiety about academic performance and standing among one’s peers, avoidance behavior, and being less actively engaged in the learning process. Mastery goal oriented students are more cognitively engaged and aware of their learning strategies and positively motivated toward learning (Nichols et al., 2003).

### *Parental Involvement*

Parental involvement is an important strategy for increasing student engagement and motivation (Driessen, Smit, & Sleegers, 2005). Strengthening the cooperation between schools and parents can be especially important to ethnic minorities and students of low socioeconomic status. According to Driessen et al. (2003), parental involvement has been found to influence students' social and cognitive engagement, and minority parents have historically been absent in school participation and commonly place the exclusive responsibility for their children's education on the schools. Their research also suggests that parental involvement promotes improved behavior, teacher-pupil relations, higher achievement aspirations, and motivation to seek higher levels of education. Research (De-Hass, Willems, & Holbein, 2005) also indicates that active parental involvement positively influences engagement indicators such as attendance, attitude, academic achievement, homework readiness, and reduced levels of dropout. Administrators and school documents affirm that interacting with parents on a meaningful level is part of the ECHS philosophy.

Administrators and teachers at the ECHS and community college state that "parental involvement begins with parental advisement." Personal interviews revealed that reports to parents on student progress and regularly scheduled meetings with parents were part of the educational process. Teachers indicated that parents of students who had encountered academic or behavioral difficulties were required to meet more frequently or at requested times to address these difficulties or to provide progress updates.

Community college administrators who oversee ECHS program stated that parents are regularly consulted as members of various committees and to elicit feedback on various school initiatives and proposals. Committees such as student activities, curriculum and assessment, and community services include administrators, teachers, counselors, parents, and community college representatives. High school administrators emphasized that “Family input is absolutely essential to what we do. It’s not just posturing. What parents participate in is substantive.”

### **Summary of Subquestion 2**

The Early College High School in this study employed educational measures that research suggests enhances the levels of student engagement. These measures include smaller class sizes, teacher support, rigorous curricula, collaboration between the high school and community college faculties, mastery goal orientation, and parental involvement. The student interviews and essays revealed an acknowledgement and appreciation of most of these measures. Only faculty collaboration, which would be unknown to the students, did not appear as a topic in the student interviews or essays. Faculty responses and interviews indicate a deliberate strategy to utilize the combination of these education components that potentially enhance various aspects of student engagement to achieve a student body that is thoroughly engaged in all recognized facets.

### **Subquestion 3: How does the level of student engagement manifest itself?**

According to the data, ECHS students who participated in this study demonstrate evidence of elevated engagement by: (a) aspiring to attend institutions of higher education and/or citing college plans as a priority of their high school education; (b)

demonstrating a personal investment in their school work; and (c) demonstrating academic achievement levels in postsecondary classes that compare to older, traditional college students. These indications of increased engagement are consistent with the aspirations of most public school reform efforts (Skinner et al., 1998). Nine of the fourteen (64%) essay responses mentioned a college degree or transferable college credits as positive aspects of their high school. All five of the students who were interviewed for this study aspired to achieve a college degree at some level. According to the Department of Education's National Center for Educational Statistics ([www.nces.ed.gov](http://www.nces.ed.gov)), 63% of 18-19 year-olds were enrolled in post-secondary educational institutions nationally at the end of 2006. This number decreases significantly when "at-risk" categories, such as low socioeconomic status (SES), single parent households, and low parent education levels were factored into the study. According to U.S. Department of Education statistics, only 36% of student of low SES had expectations of achieving a college degree.

According to ECHS administrators, by applying high academic standards and expectations to increase the level of engagement of this target group, involving the family in educational endeavors, and offering individualized classroom attention, the early college high schools aspire to "change the mindset" of at-risk youths who feel disenfranchised by school or fail to see the relevance to their future. Accordingly, 100% of ECHS students are enrolled in college classes, which is indicative of academic motivation. Student engagement is characterized by this willingness to invest

psychologically in education (Fredericks et al., 2004). Further, with the student body being composed entirely of academically “at-risk” students and mostly ethnic minorities, maintaining post-secondary educational aspirations is an even stronger indication of student engagement (Finn & Voelkl, 1993).

In 2005, Indiana University conducted a survey on student engagement in public schools using the High School Survey of Student Engagement (HSSSE) to measure affective, cognitive, and behavioral engagement for over 170,000 students enrolled in grades 9-12 (McCarthy & Kuh, 2006). Some of the key findings were:

- 75% of students were bored in class because the material was not interesting
- 40% of students felt that material being taught was not relevant to their lives
- 73% of students considered dropping out because they did not like the teachers or because they did not see the value in the work they were asked to do.
- 80 % of students reported that group projects were more exciting and engaging.
- 43% of students stated that they spend less than one hour per week on homework.
- 55% stated that they spend less than one hour per week reading or studying for class.

The researchers recommended the following to enhance student engagement in public schools: rigor in school work, expanding teacher and peer-tutoring availability, and extending reading and homework assignments (McCarthy & Kuh, 2006).

Despite the overwhelming sentiment regarding boredom in public schools, the data collection in this study is notably absent of “boredom” as a complaint, an observation, or

a negative aspect of the Early College High School from the students' perspectives. There were no references to "boredom" in the student essays. In the student interviews, "boredom" emerged twice. Beth's comment when asked about the biggest difference between the ECHS classes and traditional high school classes was, "These classes aren't boring." When asked if the workload was unreasonable, Jasmine stated, "It's a lot. But it's better than being bored."

An analysis of the teacher responses unveils a purposeful design that attempts to address many of the struggles identified in the Indiana University study. Academic rigor has been adopted as a means of elevating student engagement, challenging students' capacity to "master" school work, and to extend students' thinking about their learning beyond the time limits of the classroom. This emphasis on academic rigor and high academic standards, along with the emphasis on cooperative and project-driven tasks, addresses McCarthy and Kuh's (2006) report that students find high school work to be uninteresting and unworthy of even moderate amounts of time and energy. Connell and Klem (2006) cite rigorous, engaging teaching and learning as critical to any efforts at school reform.

According to McCarthy and Kuh (2006), one-quarter of students in four year colleges require substantial remedial work. McCarthy stated that the results of the Indiana University study should serve as a "wake-up" call to public schools for more rigorous course work and for students to work harder. According to ECHS teacher questionnaires, rigorous coursework at the school is designed to keep students engaged and prepare them for college classes. One college instructor who participated in the study stated that "The



Early College students are some of my best students. There is not a lag between what they are used to in high school and what they experience in college.” Another instructor observed, “Because they take college and high school classes simultaneously, the transition is seamless.”

McCarthy and Kuh (2006) suggested that the Indiana University research on student engagement exposes a need for more academic support services. An analysis of the data in the current study reveals a palpable institutional practice of providing extensive academic tutoring and support services. Eight of the fourteen (57%) of the student essays referred to tutoring and academic assistance as a positive aspect of their school. Four of the five (80%) of the students who were interviewed for the study stated that they utilized tutoring services regularly. Christina attributed her academic “turn-around” to the availability of Saturday School, which is a program available for students to receive remediation in trouble areas of school. Christina admitted to traveling over 20 minutes to school on “nearly every” Saturday morning to take advantage of this service.

Most of the Early College High School students, according to one college administrator, have embraced the rigorous curriculum and taken advantage of the accessibility of the ECHS faculty. This administrator stated that the rigor of school work was implemented to prepare the students for “real world” expectations and that faculty members were there to help “remove obstacles” that may prevent students from realizing their academic potential.

The educational practices that have been implemented by the ECHS are consistent with those identified by researchers (Connell & Adena, 2006; Tucker et al., 2002;

Newmann, 1989; and Klem & Connell, 2004) as enhancing student engagement. The students' responses to these practices contrast with the sentiments that students expressed in the Indiana University study. The data, therefore, imply that ECHS students experience a higher degree of engagement, generally, than do public school students.

Table 4.1 shows the academic performance levels of ECHS students in their community college classrooms. According to community college and ECHS administrators, the overall grade point average (GPA) earned by the Early College High School students is comparable to students enrolled in the college on a full-time basis.

**Table 4.1**

**ECHS Student Performance in College Classes Spring 2006-Summer 2007**

<b>Semester</b>	<b>Number of Students</b>	<b>Number of Courses</b>	<b>Overall GPA</b>
Spring 2006	15	25	2.60
Summer 2006	14	21	2.50
Fall 2006	48	132	2.40
Spring 2007	56	135	2.30
Summer 1 <sup>st</sup> Mini 2007	36	48	3.17
Summer 2 <sup>nd</sup> mini 2007	9	11	3.0
Summer 9 weeks 2007	20	23	2.70

The table reflects students of all grades who were enrolled in college classes. The overall GPA reflects the cumulative average of these students for a given semester. The significance of the data is that ECHS students demonstrate an ability to achieve approximately a "B" average in college courses while being dually enrolled in high school and being younger than average college students. These results may be considered remarkable considering the fact that these students were considered at-risk in

their former schools, and most have overcome these at-risk characteristics to succeed academically.

### **Summary of Subquestion 3**

Subquestion 3 asked: How does the level of student engagement manifest itself? The data indicate that despite being formerly labeled as academically “at-risk,” experiencing a low SES, and living predominantly in single-parent households, ECHS students aspire to achieve a post-secondary degree. This conflicts with Department of Education statistics for students with these academic and economic designations. Further, ECHS students seek to take advantage of institutional services to realize their academic potential and enhance their performance in the classroom. These findings contrast with a national survey of student engagement which indicated disassociative behavior on the part of public high school students. According to 2006-2007 statistics, ECHS students also demonstrate an ability to achieve in college courses at levels that are competitive with traditional students.

The engagement level that ECHS students experience manifests itself in a willingness to invest psychologically in their educational endeavors. Despite disadvantages that research indicates are historically detrimental to high levels of engagement and academic achievement, ECHS demonstrate behaviors that indicative of elevated levels of all types of engagement.

Research Question II: *How does student engagement at the Early College High School compare to student engagement in public schools?* The subquestions for Question II are:

1. How does the ECHS compare to traditional high schools in terms of academic performance?
2. How does the ECHS compare to traditional high schools in terms of adverse behavior?
3. How does the ECHS compare to traditional high schools in terms of teacher workplace satisfaction and class size?

Subquestion 1: How does the ECHS compare to traditional high schools in terms of academic performance?

Academic achievement is one indicator that may be used to measure or assess student engagement. The data used to address this question were derived from interviews with instructors, administrators, and students, as well as through ECHS, district, and state documents

#### *Academic Achievement*

Whether through political fiat or governmental mandates, academic assessments, particularly standardized tests, are used as the ultimate measures of academic achievement. While student engagement is better measured by criteria other than standardized tests (Tucker et al., 2002), in the end, academic performance is the most salient and obvious indicator of academic engagement. Table 4.2 below represents the 2007 report of student achievement in the Early College High School as compared to students in the same district and in the same state. It should be noted that the results indicate the standardized testing outcomes for the entire 107 students enrolled

in the school. It should also be noted that the district is comprised of ten high schools, including the ECHS. Also, “N/A” represents an enrollment of fewer than five students in a given course.

**Table 4.2**

**Performance on each course of the A-B-C’s End-of-Course Tests**

*Percentage of students’ scores at or above grade level*

	Eng	Al g I	Alg II	Geom	Biol	Chem	Sci	Phys	Civics	Hist
ECHS	92.1	95	92.3	58.1	51.6	N/A	84.2	N/A	34.5	27.6
District	71.7	80.5	82.6	65.6	56.9	76.6	66.6	77.3	46.2	39.0
State	82.8	85.6	80.3	98.8	63.4	77.1	69.1	85.1	60.1	56.8

The table indicates that although ECHS students were formerly described as “at risk” and experienced academic difficulties at their previous schools, their achievement on End-of-Course tests are comparable to district and state results in four of the eight categories in which they tested. Further, because the school enrollment is composed of two-thirds ethnic minorities, consistent with the ethnic diversity of the county, the results are more significant. Research indicates that members of minority cultures significantly lag behind their Caucasian counterparts on standardized test scores (Tucker et al., 2002). This level of achievement at the ECHS is contrary to research which notes the underachievement of these at-risk groups, generally, in public schools.

Besides comparisons to academic achievement in public schools, the researcher obtained statistical data from community college officials to compare the ECHS students’ academic performance with that of students who are more typical of community college

students in terms of age and previous education. The data revealed a college course pass rate of 96.1%. Further, the cumulative GPA of the various grade levels taking college courses was: (a) 9<sup>th</sup> grade, 2.7 (b) 10<sup>th</sup> grade, 3.0 (c) 11<sup>th</sup> grade, 2.9. This compares favorably with an overall cumulative GPA of traditional college-age students of 2.71 for the 2006-2007 academic year. These results are further contextualized by the detrimental conditions of mostly low SES, mostly single parent households, and 122 of the 147 students attending the ECHS that are first generation college students.

#### *Summary of Subquestion 1*

Research (Tucker et al., 2002; Bennett, 2006; Klem & Connell, 2004) strongly suggests that social factors such as low SES, belonging to an ethnic minority group, having neither parent with a college degree, and being from a single-parent household adversely affect academic performance. These factors represent a profile of the students that the Early College High Initiative targets and a majority of the students are, indeed, influenced by these educationally detrimental factors. Despite these conditions, ECHS students have demonstrated academic achievement levels that are comparable to state and district levels on state standardized test scores, as well as being on par with more traditional community college students in college courses according to cumulative GPA. The data collected in this study suggest that elevated levels of motivational and cognitive engagement may account for the academic success despite the presence of several at-risk factors.

Subquestion 2: How does the ECHS compare to traditional high schools in terms of adverse behavior?

To address this question, this study considers two very important aspects that research (Rosenfeld, Richman, & Bowen, 1998; Klem & Connell, 2004; Linnebrink & Pintrich, 2003) suggests heavily influence student performance and indicate levels of student engagement in the educational process, dropout rates, and adverse student behavior.

### *Dropout Rates*

According to the Department of Public Instruction ([www.dpi.state.nc.us](http://www.dpi.state.nc.us), May 26, 2007), the 2006 dropout rate for the county represented in the study was 7.46%. This was the third most in a state with over 100 county and city school districts. Statewide, 79.4% of the dropouts were between the ages of 16-18. In 2006, 22% of the dropouts were in their junior year and 15% in their senior year. The state Department of Public Instruction reported that Native American students dropped out at a rate of 8.4%, African American students at 5.6%, and Caucasian students at 4%.

A report by the Department of Education, entitled “The Condition of Education 2004,” recognized that low SES is a strong factor in student dropout rates. The report stated that 11% of students from low income families drop out of school, compared to 5% from middle income families and 2% from high income families. Despite a student body comprised of students who are traditionally “high risk” for dropping out, the ECHS that was the subject of this study has not experienced an occurrence since its inception.

Dropping out of school is indicative of low student engagement and feelings of futility or indifference toward education (Klem & Connell, 2004). Student persistence,

especially among minority students (Bennett, 2006; Linnebrink & Pintrich, 2003) indicates increased academic and school engagement. According to interview data, ECHS teachers and administrators attribute this willingness to persevere to a rigorous curricula and “high academic standards and expectations,” which research has shown to foster higher levels of engagement (Marcy, 2006).

### *Adverse Behavior*

According to the State Department of Public Instruction Report on School Crime and Violence for 2007, the county that was the setting of the study experienced 245 incidents of crime or violence in the county’s public schools. Among these incidents were 76 episodes of weapons possession, 150 occurrences of illicit substance possession, and five assaults on personnel. The 2007 state report card reflected one act of crime or violence at the ECHS campus that was observed in this study. The number of discipline incidents occurring for the entire student body for the school year was 11, representing 31 days of suspensions.

Research indicates that “acting out,” disruptive behavior, and other anti-social behavior is indicative of low levels of engagement (Finn & Voelkl, 2003). The Early College High School in this study places a strong emphasis on personal conduct. The policies and consequences are clearly illustrated in the student hand book, information that is disseminated to parents, and in individual class syllabi (see attachments). According to Tollefson (2000), Finn and Voelkl (1993), and Klem and Connell’s (2004) research, the willingness to conform to behavioral guidelines positively correlates with



students who experience high levels of school engagement. Administrators in this study report disruptive behavior in the school to be “minimal.”

Besides academic achievement, student engagement may be measured by high levels of personal conduct, consistent attendance, a willingness to persevere, and ability to recognize and utilize one’s educational opportunities as a conduit for future academic endeavors. The data in this study suggest that these engagement indicators are demonstrated in the students who were the subject of this study. Further, the findings in this study are consistent with the recommended educational approaches and student profiles that are characterized in the review of literature.

### **Summary of Subquestion 2**

Student behavior is a significant indicator of student engagement. The correlation between adverse behavior and low student engagement is documented in this section and in the review of literature for this study. Two prominent reflections of student behavior are student attendance and conduct. Despite being influenced by several “at risk” factors, ECHS students demonstrate behavior that requires school disciplinary action at rates lower than state and district public school in terms of number of incidents and number of incidents proportional to the student population. Class attendance demonstrates a willingness to personally invest in one’s education and an acknowledgement or recognition of the benefits of an education, whether short-term or long-term. ECHS students registered zero long-term suspensions and zero expulsions for the 2006-2007 academic year, and achieved an attendance rate of 96%. These behaviors, according to

the data collected in this study, suggest elevated levels of motivational and behavioral engagement.

Subquestion 3: How does the ECHS compare to traditional high schools in terms of teacher workplace satisfaction and school and class size?

This study examined the satisfaction of ECHS teachers according to their responses on a state-wide survey. This component relates to student engagement because research (Rinehart & Short, 1994) indicates that teacher efficacy is largely influenced by teachers' relative satisfaction with their jobs, the amount of input they have in policy decisions, and the flexibility to personalize their pedagogical methods.

The study also examines class size in this comparison because research (Handley, 2002; Finn & Voelkl, 1993; Halbach, Zahorik & Molnar, 2001) indicates that besides having a direct impact on student engagement, class size has a bearing on the ability of the teacher to maximize best teaching practices and to personalize instruction. The ECHS instructors who participated in this study each indicated that small school and class sizes had a positive impact on their teaching strategies, student assignments, and job satisfaction. Each also expressed a preference to class size at the ECHS compared to class size at their previous public schools.

### *Teacher Empowerment*

Studies indicate that teachers' feelings of empowerment affect their job satisfaction and their teaching efficacy. While there is no research that demonstrates the direct relation to teachers' feelings of empowerment to student engagement, studies suggest

correlation between feelings of empowerment and job satisfaction and efficacy (Rinehart & Short, 1994).

The Governor's Teacher Working Conditions Initiative, 2007 is a detailed report that reflects teachers' satisfaction with various aspects of their job, school, and school system. The initiative displays the results of a state-wide survey that considers such categories as time, facility and resources, empowerment, leadership, and professional development. According to the report, 91% of the Early College High School teaching faculty responded to the survey. The report also shows how the results of the school compared to state and district responses. Table 4.3 compares the results.

**Table 4.3**

**Teacher Working Conditions Survey**

*On a scale of 1-5, with 1 being the lowest and 5 being the highest*

School/Area	Time	Fac/Resources	Empowerment	Leadership	Prof Devel
ECHS	4.08	4.05	4.06	4.24	3.80
District	3.19	3.62	3.51	3.65	3.66
State	3.12	3.65	3.44	3.60	3.41

The results indicate that ECHS teachers feel empowered in their jobs. According to Rinehart and Short (1994), there is a strong correlation between feelings of empowerment and job satisfaction. Further, a strong positive relationship exists between job satisfaction and productivity and effectiveness. According to Rinehart and Short (1994) teacher empowerment is characterized by: (a) decision making, (b) professional growth, (c) status, (d) self-efficacy (e) autonomy, and (f) impact. Teachers experiencing

satisfaction in these areas of their workplace should respond with enhanced motivation and work effectiveness. Rinehart and Short (1993) also report that a disempowered faculty has been cited by studies as a principal reason for student dropouts and underachievement. In contrast, teachers who feel empowered and satisfied in their jobs put more energy into work, are willing to give more individual help to students, are more encouraging to students, and hold positive attitudes about student work and study habits.

The Likert-scale survey offers detailed results in each of the domain areas, with options ranging from “strongly disagree” to “strongly agree.” For the purposes of this study, only the domain of “Empowerment” was examined because of its immediate relevance to teachers’ roles in student engagement. Further, only those elements of empowerment that relate to classroom activities, pedagogy practices, and assessment were examined.

According to the report card, 80% of ECHS teachers agreed or strongly agreed that they were centrally involved in decision making about educational issues. This contrasts with 57% for the district and 53% for the state that perceived themselves as centrally involved. Ninety percent of the ECHS teachers agreed or strongly agreed that teachers are trusted to make professional decisions about instruction, compared to 76% for the district and 72% for the state. The report also indicated that Early College High School faculty demonstrated high satisfaction ratings in the areas of problem-solving processes (90%), selecting instructional material (100%), devising teaching techniques (100%), grading and assessment practices (100%), and determining the professional development

content (80%). The largest disparity between the ECHS and its state and district counterparts was in the areas of devising teaching techniques and grading and assessment practices. District and state data indicate only 50% of the teachers felt they played a large or primary role.

These findings are consistent with student responses collected from student essays and personal interviews in the current study. Students in this study held overwhelmingly positive attitudes toward teachers at the ECHS. Teachers were considered “kind,” “caring,” good,” “positive,” “helpful,” and “patient.” Students lauded teachers for providing one-on-one assistance, being available for additional assistance and information. “Teachers” was the most commonly mentioned “positive” aspect in the student writing. Likewise, the students who held negative feelings about the ECHS overall, still referenced teachers in high regard.

#### *School and Class Size*

According to the state department of public instruction ([www.dpi.state.nc.us](http://www.dpi.state.nc.us)), the ECHS in this study averaged 14 students per class. This contrasts to an average class size of 26 in a local public school and a state average class size of 21 students. Besides smaller class size, the student body population of 107 in the ECHS contrasts with an average of 941 in the state and with 2,054 at the local public high school in the same area.

Bracey (2001) suggests that small school and class size may contribute to student engagement by

- Raising student achievement; especially for minority and low-income students;
- Reducing violence and disruptive behavior;

- increasing attendance and graduation rates;
- increasing parent involvement, and
- elevating teacher satisfaction.

Bracey (2001) cites other studies that indicate that small size influences learning by offering “more intimate and personal social relations among teachers and students.” These studies also indicated that small school and class sizes contribute to teacher satisfaction.

The ECHS teachers who participated in this study mentioned school and class size as a positive factor that contributes to their job satisfaction. One teacher compared her ECHS classes to public school classes by stating, “Teaching here (ECHS) is about teaching, and teaching in public school was about crowd control.” In interviews, these teachers also remarked that getting to know their students on a more personal level allowed them to be more aware of their needs and to offer personal attention.

### **Subquestion 3 Summary**

Teacher efficacy is largely influenced by workplace satisfaction. Research indicates that the feeling of empowerment motivates teachers to pursue excellence in the classroom. One contributor to the feeling of empowerment is small class size. Studies suggest that small class size allows teachers to incorporate best teaching practices and this, in turn, may contribute to increased student engagement. ECHS teachers report very high satisfaction with their working conditions and extol the advantages of teaching in a small school environment with small class sizes.

### **Chapter Summary**

This chapter provided a profile of the students who agreed to be interviewed for this study and their perceptions of the Early College High School. This chapter also addressed the research questions that were to be answered during the investigation. The chapter concluded with the state high school achievement report card and the results of the ECHS teachers' workplace survey.

The students who participated in this study were representative of the students that the Early College High School Initiative targets. Although very different in most respects, all of the subjects were from families with low SES, experienced academic underachievement in public school, applied to the ECHS program because of the college benefit, and felt better served by the school. Some regretted their decision to attend the program, ultimately, due to perceived administrative failures. Others expressed no negative feelings with the experience. All of the participants felt strong positive emotions about the teachers, and all aspired to attend four year colleges or universities.

This chapter discussed the behavioral, cognitive, and motivational engagement characteristics of the ECHS students according to students, teachers, college instructors, college and high school administrators, and document analysis. The data suggest that the students experience elevated levels of all types of engagement that may be attributed to various procedures and policies held by the ECHS. The data indicate these levels of engagement are consistent with the research that has been conducted in these areas of student engagement.

Chapter four examined the measures that Early College High Schools undertake to increase student engagement. These measures include small class size, teacher support, parental involvement, rigorous curricula, mastery goal orientation, and teacher collaboration. These practices aid, encourage, and enable students to become engaged in their own learning and are consistent with research assertions that each, taken separately, could increase student engagement. ECHS officials attribute the elevated levels of engagement observed in this study to the inclusion of all of the factors.

The question of comparison between the ECHS and public schools in the same county were addressed in this chapter. The data suggest that students at the Early College High School experience higher degrees of engagement. This chapter contained survey information that stated that public school students are often bored in class, spend little time on school work and homework, and see little relevance between their lives and the content of their classes. The Early College High School students reported different experiences in their school, demonstrating, instead, higher levels of engagement. ECHS administrators and teachers attribute the engagement experienced by their students to rigorous curricula and project-related tasks, tutoring, and high academic standards.

Evidence of how student engagement manifests itself in the ECHS was presented in this chapter. The data reveal students with higher education aspirations, low levels of behavioral problems, low drop out rates, and academic persistence. Research indicates that these elements are often indicative of higher levels of student engagement in school.

A state survey of teacher working conditions was included in this chapter along with research findings that stated feelings of empowerment in the workplace led teachers to be



more satisfied in their jobs, which leads to greater efficacy and motivation. One school characteristic that factors into job satisfaction for ECHS faculty is small class size. The habits of empowered and motivated teachers, according to the cited research, are more likely to produce greater student engagement in the classroom. Because the Working Conditions Survey indicated a high level of satisfaction for ECHS teachers, one may logically presume that the feelings of satisfaction and empowerment benefit Early College High School students and contributes to the elevated levels of engagement and academic achievement by ECHS students.

Chapter 5 will discuss the major findings discovered in this study and the conclusions that were drawn regarding the correlation between student engagement and the ECHS educational factors. Implications for further research will also be discussed.

## CHAPTER V: FINDINGS AND CONCLUSIONS

This study investigated the impact of the Early College High School Initiative on student engagement. Students, high school teachers, college instructors, and high school and college administrators participated at one ECHS campus participated in this investigation to determine if the practices and philosophies of the program influenced students' behavioral, cognitive, and motivational engagement. The Early College High School Initiative is an innovative national educational program that is funded by the Bill and Melinda Gates Foundation and its corporate partners. This initiative targets underachieving and underserved minority students and affords them the opportunity to achieve a high school diploma and an Associate of Arts degree simultaneously. The ECHSI employs research-based policies and pedagogy that are designed to increase student engagement and academic success.

A qualitative approach using student essays, personal interviews, questionnaires, document analysis and classroom observation were employed.

This study was guided by the following questions:

1. What levels of engagement do Early College High School students experience?
  2. What measures do ECHS programs undertake to increase engagement?
  3. How does student engagement at ECHS compare to student engagement in public schools?
1. How does the level of student engagement manifest itself?

The study identified several policies, philosophies, and pedagogical approaches that coincide with prior research findings and recommendations regarding improved engagement.

### **Major Findings**

This study confirmed research from previous studies that indicated a correlation between the three types of student engagement, factors that influence engagement, and educational factors that suggest elevated levels of student engagement.

Table 5.1 illustrates the influences and educational factors that were revealed in this study.

**Table 5.1**

#### **ECHS Engagement Factors**

<b>Engagement type</b>	<b>School Factor</b>	<b>Manifestation</b>
Behavioral	Conduct codes Small class size Parental involvement	Socially accepted behavior Task focus Attentiveness Effort
Cognitive	Personal instruction Mastery orientation Teacher support Small class size	Class participation Asking questions Seeking help Persistence
Motivational	Teacher support Rigorous curricula Small class size Parental involvement	Self-efficacy Academic Achievement Completed assignments Attendance

In the research, data indicate that ECHS policies and practices positively influence student engagement. The educational approach adopted by the program addresses the

various types of engagement that have been identified in the research (Fredericks et al., 2004; Linnebrink & Pintrich, 2003). For the previously underachieving or at-risk students at the ECHS, this combination of factors contributing to higher levels of engagement translates to higher academic achievement (Skinner et al., 1998; Caraway et al., 2003; Tucker et al., 2002; Bennett 2006; Fredericks et al., 2004; Cothran & Ennis, 2000).

Class size, teacher support, and parental involvement were themes that were pervasive throughout the data analysis. These three factors had the more obvious impact on student engagement because they: a) affect all three types of engagement; b) are the avenue through which many of the ECHS practices are feasible, and; c) present the most conspicuous disparity between the ECHS program and public schools.

### *ECHS and Educational Factors*

The ECHS addresses Newmann's (1989) factors that influence student engagement. Table 5.2 illustrates the five educational factors that Newmann's research suggests influences engagement.

**Table 5.2 Educational Factors**

<b>Factor</b>	<b>ECHS Strategy</b>
Need for competence	Target underachievers/at risk Task mastery orientation
Extrinsic rewards	Improved grades College admission
Intrinsic interest	Project-oriented tasks One-on-one presentation
Social support	Teacher acknowledgement Parental acknowledgement
Sense of ownership	Project presentations College transition

According to the data, ECHS students' engagement reflects an interaction between the students and the educational environment, which is what research (Fredericks et al., 2004) recommends as a first step toward educational reform. Finn and Voelkl (1993) assert that students who are disaffected in their own education are deficient in engagement factors and are unlikely to attain any meaningful levels of learning. In contrast, even students who are deemed "at-risk" will succeed academically if these engagement factors are addressed in their schools.

#### *Essay Prompt Summary*

Regardless of ratings, most student essay responses cited positive aspects of their school that coincided with ECHS teachers' and administrators' pedagogical and philosophical intentions to elevate the levels of student engagement. Further, these student essays affirmed and validated, to a large degree, ECHSI efforts to take an innovative approach to education that was based on educational research and undertaken to raise the students' level of engagement. Fundamental facets of the initiative surfaced prominently in students' characterizations, descriptions, and evaluations that the student writing prompts provided.

#### **Implications for Practice**

The findings in this study correspond to reform measures suggested by research. By implementing measures that increase and sustain high levels of behavioral, cognitive, and motivational engagement, academic achievement should ensue. Although, the ECHS students are emerging from an academic deficit situation to achieve at levels approaching county and state standards in many categories, implementing these practices designed to

engage students could prevent students from suffering from underperformance or disassociation.

Rather than lowering standards and inflating scores, schools and teachers should adopt a more rigorous and relevant curriculum that increases student engagement and offers content with practical applications. Teaching approaches should emphasize task mastery and challenge students to develop valuable work ethics and high levels of self-efficacy that are associated with academic rigor and high academic standards. Research suggests that a rigorous curriculum prepares students better for post-secondary education, relates positively to student dropout rates, and elevates cognitive and motivational engagement (Washor & Majkowski, 2007)

Efforts to establish collaborative learning communities should be considered at all levels of education. Empowering teachers and parents in the decision-making process in the classroom and establishing policies widens the students' support system, raises family awareness and involvement, and endows teachers with the input and authority to create a meaningful and personalized curriculum. Further, collaborative learning communities may increase teachers' job satisfaction and efficacy, and allow parents to engage in meaningful academic activities that raise their awareness of their children's academic needs and responsibilities away from school.

The data in this study suggest that class size is a vital aspect to student engagement because it is the foundation for many other practices that have a bearing on student engagement. Seven of the fourteen (50%) student essays mentioned "class size" as a positive aspect of their school. All of the students and teachers who were interviewed for

the study mentioned “small class size” as an advantage of the ECHS program. Teachers indicated that small class sizes allowed them to get to know students and their needs on a deeper level and the ability to address individual needs. Students stated that obtaining help from the teacher was easier with smaller class sizes and indicated an ability to get to know their classmates and establish friendships through project interactions.

The research regarding class size is compelling and some states, such as South Carolina, have mandated (Blair, 1999) smaller class size as part of the provisions of education reform laws. A meta-analysis conducted by Pedder (2006) indicated that research associated class size with the following variables: grouping practices, classroom discipline, teacher stress and enthusiasm, atmosphere/ethos, assessment, peer relations, teacher-pupil interaction, knowledge of children, tasks and the curriculum. Many of the practices that were related to elevated student engagement in this study, such as individualized attention, project-oriented tasks, and teacher support, may be considered an outgrowth of the small ECHS classrooms, which average approximately eleven students. The 9th-12th enrollment for the 2006-2007 was 107 students. While there are plans for growth in the coming years, administrators maintain that small class size will remain a cornerstone of the program.

Although some concepts were outside the scope of this study, one may consider some elements of the ECHS as augmentative to education in other school settings. Research on parental involvement, for example, suggests that students with involved parents will achieve at a higher rate than students whose parents are less engaged. This

particular factor is worth noting because part of the selection criteria of the ECHS includes parents who will be educational partners with their children.

### **Recommendations for Research**

In order to contextualize the ECHS students' levels of engagement in achievement measures, the researcher recommends undertaking a statistical comparison of data that were unavailable during this study. Graduation rates, dropout rates, standardized test scores (S.A.T.), parent involvement and the like, would provide a convenient means of compiling meaningful data to determine patterns, progress, and parity among public schools, other ECHSI schools, and other educational initiatives. In addition, one could statistically track percentages of ECHS students who attend and graduate from four year universities to compare with graduates from public schools and other programs.

A future study should track ECHS students' success in college. Not only would this study test the habits, behavior, and motivation of students pursuant to the attainment of their high school diploma and Associate of Arts degree, but allow the researcher to draw conclusions about college preparedness as it was addressed in the ECHS program. The similarity or disparity between four-year universities and the aspects utilized to increase student engagement at the ECHS could account for their relative success or failure.

Replications of this current study should begin with a longitudinal inquiry that monitors engagement levels of freshmen students at the ECHS over the course of their secondary educational career. This approach would provide more than a "snapshot" view of the program that was accomplished in the current study. Further, the number of



subjects could be expanded and any matriculation or emigration could be documented and accounted for in terms of student engagement.

Finally, additional studies should compare ECHS programs in different parts of the state or country. Because the ECHS programs, theoretically, reflect the composition of the county, one could examine ethnicity, SES, and culture of a given location as compared to the same elements in another location or locations.

### **Summary**

Connell and Klem (2006) state that secondary educational reform needs to begin with: a) personalized learning environments: b) partnerships between schools and families; and c) high quality teaching and learning. The instructional goals that are necessary for reform are engagement, alignment, and rigor. High academic standards, better relationships between students and teachers, hands-on activities, and individual instruction are also recommended for serious reforms efforts (Connell & Klem, 2006).

This study illustrated the measures that the ECHS undertakes to achieve these reform objectives. Because much of what research recommends to elevate student engagement has been in place since the program's inception, it is evident that these policies and practices are able to achieve results.

## References

- Azinger, A. (2000). A K-12 perspective on partnerships with community colleges. *New Directions for Community Colleges*, 111, 17-21.
- Bandura, A. (1991). Social cognitive theory of self-regulation. *Organizational Behavior and Human Decision Processes*, 50, 248-287.
- Bennett, D. (2006). Cultural resources and school engagement among African-American Youths: The role of racial socialization and ethnic identity. *Children & Schools*, 28 (4), 197-205.
- Bishop, J.H. (1989). *The Causes and remedies of student docility and parental apathy in education reform: Social change of political rhetoric?*. Newton, MA: Allyn & Bacon.
- Blair, Julie (1998). South Carolina approves school reform package with class-size Provision. *Education Week*, 17 (40), 25-28.
- Bogdan, R., & Biklen, S (2003). *Qualitative research for education: An Introduction to theories and methods*. Boston: Pearson Education.
- Bracey, G. (2001). Small schools, great strides. *Phi Delta Kappan*, 82 (5), 413-415.
- Brophy, J. (1987). Synthesis of Research on strategies for motivating students to learn. *Educational Leadership*, 45 (2), 40-48.
- Brotherton, P. (2003). SECME Inc. partners with minority-serving institutions to Create alternative high schools to increase high school, college completion rates. *Black Issue in Higher Education*, 20 (8), 20-24.
- Connell, J.P. & Klem, A.M. (2006). First things first: A framework for successful

- secondary school reform. *New Directions for Youth Development*, 111, 53-68.
- Connell, J.P., Spencer, M.B. & Abner, J.L. (1994). Educational risk and resilience in African-American youth: Context, self, action, and outcomes in school. *Child Development*, 65, 493-506.
- Cothran, D. & Ennis C. (2000). Building bridges to student engagement: Communicating respect and care for students in urban high schools. *Journal of Research and Development in Education*, 33, 83-95.
- Debacker, T.L. & Crowson, M.H. (2006). Influences on cognitive engagement: Epistemological beliefs and need for culture. *British Journal of Educational Psychology*, 76, 535-551.
- Driessen, G., Smit F., & Sleegers, P. (2005). Parental involvement and educational achievement. *British Educational Research Journal*, 31 (4), 509-532.
- Dweck, C.S. (1986). Motivational processes affecting learning. *American Psychology*, 41, 1040-1048.
- Eccles, J., Wigfield, A., & Schiefele, U. (1998). Motivation to succeed. Handbook of childhood psychology: Vol. 3. Social, emotional and personality development. 5<sup>th</sup> ed. New York: Wiley.
- Feather, N. T. (1969). Attribution of responsibility and valence of success and failure in relation to initial confidence and task performance. *Journal of Personal and Social Psychology*, 13, 129-144.
- Finn, J. D., & Voelkl, K.E. (1993). School characteristics related to student engagement. *Journal of Negro Education*, 62 (3), 249-268.

- Frederick, J., Blumenfeld, P., & Paris, H. (2004). School engagement: Potential of the concept, state of the evidence. *Review of Educational Research*, 74, 59-109.
- Furrer, C. & Skinner, E. (2003) Sense of relatedness as a factor in children's academic engagement and performance. *Journal of Educational Psychology*, 95, 148-162.
- Gonzalez-DeHass, A.R., Willems, P.P., & Holbein, M.F. (2005). Examining the Relationship between parental involvement and student motivation. *Educational Psychology Review*, 17 (2), 99-111.
- Governor's Teacher Working Conditions Initiative (2006). *N.C. Teachers' Working Conditions Survey*. Retrieved July 1, 2007, from [http://www.northcarolinatwc.org/Reports/report\\_main](http://www.northcarolinatwc.org/Reports/report_main).
- Halbach, A., Ehrle, K., Zahorik, J., & Molnar, A. (2001). Class size reduction: From promise to practice. *Educational Leadership*, 58 (6), 32-35.
- Handley, P. (2002). Every classroom teacher's dream. *Educational Leadership*, 59 (5), 33-36.
- Hendrie, C. (2005). Gates Foundation expands support for "Early College" high schools. *Education Week*, 24 (16), 9-10.
- Kenny, M., Blustein, D., Haase, R., Jackson, J. & Perry J. (2006). Setting the stage: Career development and the student engagement process. *Journal of Counseling Pedagogy*, 53, 272-279.
- Klem, A.M. & Connell, J.P. (2004). Relationships matter: Linking teacher support to student engagement and achievement. *Journal of School Health*, 74, 262-273.
- Linnenbrink, E.A. & Pintrich, P.R. (2003). The role of self-efficacy beliefs in student

- engagement and learning in the classroom. *Reading and Writing Quarterly*, 19, 119-137.
- Marchand, G. & Skinner, E.A. (2007). Motivational dynamics of children's academic help-seeking and concealment. *Journal of Educational Psychology*, 99 (1), 65-82.
- Marcy, M. (2006). The lessons of "Early Colleges." *Chronicle of Higher Education*, 52 (23), B16-B16.
- McCarthy, M. & Kuh, G. (2006). Are students ready for college? What student engagement data say. *Phi Delta Kappan*, 87 (9), 664-669.
- Merriam, Sharan (2002). *Qualitative research in practice: Examples for discussion and analysis*, New York: Jossey-Bass.
- National Center for Educational Statistics (2004). *The Condition of Education*. Retrieved July 28, 2007, from <http://nces.ed.gov/pubs2004/2004077.pdf>
- Newman, F. (1989). Student engagement and high school reform. *Educational Leadership*, 1, 34-36.
- Nichols, W.D., Jones, J.P., & Hancock, D.R. (2003). Teachers' influence on goal orientation: Exploring the relationship between eighth graders' goal orientation, their emotional development, their perceptions of learning, and their teachers' instructional strategies. *Reading Psychology*, 24, 57-85.
- North Carolina Department of Public Instruction (2006). *North Carolina School Report Cards*. Retrieved July 28, 2007, from <http://www.ncdpi.state.nc.us>  
from <http://www.ncreportcards.org/src/servlet/src>.
- Onwuegbuzie, A., & Leech, N. (2006) Linking research questions to mixed methods data analysis procedures. *The Qualitative Report*, 2 (3), 474-498.

- Patton, M. (2002). *Qualitative Research and Evaluation Methods*. Thousand Oaks, CA: Sage Publications.
- Pedder, D. (2006). Are small classes better? Understanding relationships between class size, classroom processes, and pupils' learning. *Oxford Review of Education*, 32 (2), 213-234.
- Powell, L.A. (1992). Keeping it live: Staff development as an essential part of the Change process. *Assessment and Evaluation in Higher Education*, 17 (2), 153-163.
- Pritchard, R. J., & Marshall, J. C. (2002). Professional development in 'healthy' vs 'unhealthy' districts: Top 10 characteristics based on research. *School Leadership and Management*, 22 (2), 113-141.
- Pritchard, R., Morrow, D. & Marshall, C. (2005). School and district culture as reflected in student voices and student achievement. *School Effectiveness and School Improvement*, 16 (2), 153-177.
- Rinehart, J.S. & Short, P.M. (1993). Teacher empowerment and school climate. *Education*, 113 (4), 592-598.
- Rinehart, J.S. & Short, P.M. (1994). Job satisfaction and empowerment among teacher leaders, reading recovery teachers, and classroom teachers. *Education*, 114, 570-581.
- Rosenfeld, L., Richman, J.M. & Bowen, G. (1998). Low Social Support among At-Risk Adolescents. *Social Work in Education*, 20 (4), 245-260.
- The Early College High School Initiative (2006). *Overview and FAQ*. Retrieved December 2, 2006, from <http://www.earlycolleges.org>.

- Tollefson, N. (2000). Classroom Applications of Cognitive Theories of Motivation. *Educational Psychology Review*, 12 (1), 63-83.
- Tomlinson, T.M. & Cross, C.T. (1991). Student Effort: The key to higher standards. *Educational Leadership*, 49 (1), 69-73.
- Tucker, C., Zayco, R., Herman, K., Reinke, W., Trujillo, M., Carraway, K., Wallack, C., Ivery, P. (2002). Teacher and child variables as predictors of academic engagement among low income African-American children. *Psychology in the Schools*, 39, 477-487.
- Washor, E. & Wajkowski, C. (2007). Rigor: How the prevailing view falls short. *Educational Leadership*, 64 (4), 84-87.
- Watson, L. (1993). Working with schools to ease student transition to the community college. *New Directions for Adult and Continuing Education*, 82, 53-58.
- Watts, G.E. & Hammons, J.O. (2002). Professional Development: Setting the Context. *New Directions for Community Colleges*, 120, 1-6.

## APPENDICES



## APPENDIX 7A

North Carolina State University is a land-grant university and a constituent institution of The University of North Carolina

**Office of Research  
and Graduate Studies**

Sponsored Programs and  
Regulatory Compliance  
Campus Box 7514  
1 Leazar Hall  
Raleigh, NC 27695-7514

919.515.7200  
919.515.7721 (fax)

From: Debra A. Paxton, IRB Administrator  
North Carolina State University  
Institutional Review Board

Date: March 30, 2007

Project Title: The Impact of the Early College High School on Student Engagement

IRB#: 79-07-3

Dear Mr. Roberts;

The project listed above has been reviewed in accordance with expedited review procedures under Addendum 46 FR8392 of 45 CFR 46 and is approved for one year from its date of review. **This protocol expires on March 21, 2008, and will need continuing review before that date.**

NOTE:

1. This board complies with requirements found in Title 45 part 46 of The Code of Federal Regulations. For NCSU the Assurance Number is: M1263; the IRB Number is: 01XM.
2. The IRB must be notified of any changes that are made to this study.
3. Your approval for this study lasts for one year from the review date. If your study extends beyond that time, including data analysis, you must obtain continuing review from the IRB.

Please provide a copy of this letter to your faculty sponsor. Thank you.

Sincerely,

Debra Paxton  
NCSU IRB

## APPENDIX 7B

**INFORMED CONSENT FORM for RESEARCH**

Title of Study :The Impact of an Early College High School Program on Student Engagement

Principal Investigator: Michael Roberts

Faculty Sponsor : Dr. Ruie Pritchard

We are asking you to participate in a research study. The purpose of this descriptive study is examine the impact of the ECHS on students' engagement in learning and in the school.

**INFORMATION**

If you agree to participate in this study, you will be asked to respond to questions in a personal interview format and reply to an email to verify the researcher's understanding of your contributions.

**RISKS**

There are no foreseeable risks to participating in this study.

**BENEFITS**

The potential benefit of this study is adding to the body of research knowledge for educational practitioners.

**CONFIDENTIALITY**

The information in the study records will be kept strictly confidential. Data will be stored securely in a secured place in the home of the researcher. No reference will be made in oral or written reports which could link you to the study.

**COMPENSATION**

For participating in this study you will receive no monetary compensation or class credit. There is no penalty for withdrawing from this study

**EMERGENCY MEDICAL TREATMENT**

This is a qualitative research study that will not require any deviation from normal routines or settings.

**CONTACT**

If you have questions at any time about the study or the procedures, you may contact the researcher, Michael Roberts at 910-739-2907 or coachroberts@nc.rr.com. If you feel you have not been treated according to the descriptions in this form, or your rights as a participant in research have been violated during the course of this project, you may

contact Dr. David Kaber, Chair of the NCSU IRB for the Use of Human Subjects in Research Committee, Box 7514, NCSU Campus (919/515-3086) or Mr. Matthew Ronning, Assistant Vice Chancellor, Research Administration, Box 7514, NCSU Campus (919/513-2148)

### **PARTICIPATION**

Your participation in this study is voluntary; you may decline to participate without penalty. If you decide to participate, you may withdraw from the study at any time without penalty and without loss of benefits to which you are otherwise entitled. If you withdraw from the study before data collection is completed your data will be returned to you or destroyed at your request.

### **CONSENT**

"I have read and understand the above information. I have received a copy of this form. I agree to participate in this study with the understanding that I may withdraw at any time."

**Subject's signature** \_\_\_\_\_ **Date** \_\_\_\_\_

**Parent of Guardian's Signature** \_\_\_\_\_ **Date** \_\_\_\_\_

**Investigator's signature Michael Roberts** \_\_\_\_\_ **Date** \_\_\_\_\_

## APPENDIX 7C

### Writing Prompt for Student Essay

**INSTRUCTIONS:** You should take approximately 45 minutes to plan, write and recopy your essay on the following topic. Do your prewriting and compose your essay on a separate sheet of paper and then copy it over on this sheet. You may use additional sheets of paper if needed. Please do not write on the back of this paper.

Every school has something that makes it special. This can be people, activities, what you study, the building, or its location, for example. Think about what makes your school a good place for young people to attend. Pretend that you are telling a friend why he or she should move to your area and enroll in the school that you attend. What will you mention to this person as good reasons for coming to your school? In your essay, tell why your friend would enjoy coming to your school.

## APPENDIX 7D



Student interview questions:

1. What interested you in the ECHS program?
  2. What are your feelings about your education at ECHS?
  3. Discuss your level of classroom participation.
  4. Discuss your level of out-of-class participation
  5. What is your family's response/attitude to your school/education?
  6. Discuss how this experience may influence/impact your future plans.
  7. Discuss the level of rigor/difficulty in your courses.
  8. Discuss any incentives to staying in/giving effort/doing well in the ECHS
  9. What is your impression of students/counselors/faculty/administrators?
  10. Discuss any aspects of your program compared to programs in the public schools (differences in curriculum, expectations, feelings of comfort, etc.)
- (If the student brings up topics or ideas not anticipated, the researcher will probe if these are relative to the study.)

## APPENDIX 7E

## Teacher/Admin Questions

1. Describe ECHS 'definition of student engagement.
2. What is considered an acceptable level of student engagement?
3. What is your role in ensuring student engagement?
4. How does your approach to student engagement compare to those of public schools?
5. What has been student reaction to efforts to increase their engagement?
6. Compared to other mandates in your charter, how important is increased student engagement?
7. Where does student engagement reveal itself most?
8. What factors indicate successful student engagement?

(If the student brings up topics or ideas not anticipated, the researcher will probe if these are relative to the study.)

## APPENDIX 7F

**ONE COUNTY EARLY COLLEGE HIGH SCHOOL****MEMORANDUM**

**TO:** Selected OCC Teaching Staff

**FROM:** Carol Smith, College Liaison – One Cty. Community College  
Pam Strong, School Counselor – One Cty. College High School

**DATE:** June 27, 2007

**SUBJECT:** Communication regarding Early College High School Students taking  
College Classes

We are very proud of our Early College High School Students who are working toward completing their high school diploma and college credits. ***This semester we have 19 students who are taking 68 credit hours at Robeson Community College.*** We want all of them to work hard and do well in their courses. This semester we will begin monitoring more closely the progress of our college students. Even though they are taking college classes, they are still considered high school students. **This memorandum is being written to notify you that we need your support in communicating with us regarding student attendance and grades in your class.**

Students and Parents have signed off on contracts, which give us permission to discuss and receive information from instructors and Robeson Community College (see enclosures). **Since we are less than 4 weeks away from the end of the semester, please submit the following information for each Early College Student:**

- \*Student Class average**
- \*Number of classes missed**
- \*Number of missed classes which will place a student in “warning” status**
- \*Any issues or concerns you have regarding a Early College Student**

As college liaison, Ms. Smith will be responsible for maintaining communication with you regarding Early College Students. Please find an enclosure with a listing of Early College High School Students who according to our records are in your class. **If there is someone on your list who is not in your class and/or to provide information concerning a student, please let Carol Smith know via email or my calling ext.**

## APPENDIX 7G

**Early College High School  
English IV Honors Syllabus  
Fall 2006**

**Instructor:** Ms. K. Martin

**School Phone Number:** (910) 737-5232

**Email:** [merrittk.earlycollege@roberson.k12nc.us](mailto:merrittk.earlycollege@roberson.k12nc.us)

**Course Description:** Students in English IV will integrate all the language arts skills gained throughout their education. The curriculum both affirms these skills and equips the students to be life-long learners. Students continue to explore expressive, expository, argumentative, and literary contexts with a focus on British Literature. The emphasis in English IV is on argumentation by developing a position of advocacy through reading, writing, speaking, listening, and using media. Students will:

- Express reflections and reactions to texts.
- Explain principles inspired by the curriculum.
- Interpret and qualify texts.
- Research and address issues of public or personal concern.
- Create products and presentations which maintain standard conventions of the written and spoken language

**Major works that will be covered in this course are:**

**Grading Policies:**

**A:** 100-93

**B:** 92-85

**C:** 84-77

**D:** 76-70

**F:** 69 and below

**Class work** (group work, peer review, in class assignments)

**20%**

**Quizzes**

**15%**

**Tests/Projects**

**20% Homework**

**10% Compositions/Essays**

**20%**

**Midterm** (1<sup>st</sup> Nine weeks)/ **Final**(2<sup>nd</sup> Nine Weeks)

**15%**

**Total**

**100%**

**Exemptions-** If a student who is a senior receives an A in a class and has not missed more than three days from the course he/she may be exempted from the exam. If the senior student has a B in the course and has not missed more than two days he/she may also be exempted from the exam.

**Extra Credit-** Throughout the semester students will be given the opportunity to earn points that may be added to the test scores of one's choice.

**Make-up Work-** If for any reason a student does not submit (an) assignment(s) due to an absence, he/she must submit a written note as to why he/she was absent and is RESPONSIBLE for making arrangements to complete the assignment(s) within three (3) days of returning back to school in order to receive full credit. If he/she fails to follow this procedure he/she will receive a zero (0) for the assignment.

If the student knows that he/she will be absent it is the student's RESPONSIBILITY to receive the assignment(s) before being absent. If a student is aware that he/she will be absent during the time that an assignment is due the student is responsible for submitting the assignment prior to being absent. If he/she fails to do so, the assignment will be treated as it would be had the student been present and failed to turn in the assignment on its due date.

If a student is present and does not turn in an assignment it can be submitted within three (3) days; however, ten (10) points will be deducted each day and after three (3) days the student will receive a zero (0).

### **Materials Needed:**

- College Rule Loose Leaf Paper
- Three Ring Binder 2" or greater
- Blue or Black Ink Pen, Red Pen, and #2 Pencils
- Pack of Divider Tabs (labeled):
  - Class work/Journals
  - Quizzes
  - Composition/Essays
  - Notes/Handouts
- Pack of Colored Pencils
- Highlighting Markers
- 3 x 5 in. Index Cards
- Box of Tissue (for extra credit)

Homework

\*More materials may be needed throughout the Semester due to special projects that may be required.

### **Rules and Discipline:**

The rules outlined in the Student Handbook will apply in this course. As will the Discipline Policy. This includes the policies for absences and tardies.

### **Webpage:**



A webpage has been created to provide each student with supplementary materials, access to assignments (due dates, instructions, etc.), and help after school hours. One can access the webpage by:

**Public Schools of Robeson County website > Sign In (using specified username) > Early College High School > Teacher Websites > Karmin Martin > Click on the Appropriate Link**

There may be assignments that can only be completed on the webpage and may be time sensitive. However, one will be notified in advance so that one may be able to make arrangements if one does have access to the internet outside of school.

*I am looking forward to working with each and every student! If at any time one has a question or comment, feel free to contact me by phone or e-mail. Some information on the syllabus may change; however, one will be notified in advance. Let's have a **GREAT** Semester!!!*