SENIOR PROJECT - GETTING BACK TO THE 3 Rs:
RIGOR, RELEVANCE AND RELATIONSHIPS

Emily Sullivan Brandenburg

A Thesis Submitted to the
University of North Carolina Wilmington in Partial Fulfillment
Of the Requirements for the Degree of
Master of School Administration

Watson School of Education

University of North Carolina Wilmington

2005

Approved by

Advisory Committee

Amanda Hobbs   Catherine R. Nesbit

Marc J. Sosne
Chair

Accepted by

_____
Dean, Graduate School

TABLE OF CONTENTS

ABSTRACT

Educators and legislators at all levels are searching for strategies to reform and improve the public high schools so that our students graduate better prepared to compete and succeed in an ever-changing, technological and global society. Part of the reform movement is to increase the rigor of the curriculum and instruction and strengthen the relevance of the curriculum to the students' lives while focusing on the relationships within the school's community. In North Carolina, one approach toward addressing these key elements is to implement and possibly mandate a senior project program. This thesis examines the history of public secondary schools to identify past trends in reform principles. Data relevant to the effect a senior project program has on the teaching and reinforcement of thinking and employability skills is also considered. Finally, the thesis suggests a rationale for employing senior projects in our high schools while proposing a seven step implementation process.

ACKNOWLEDGEMENTS

I am most grateful to my husband who has exercised great patience during these past two years of graduate study. Brian has played a critical role in the conception, research, discourse and reading of this thesis. Most importantly, he has been a tremendous support, always offering encouragement and often sacrificing his own needs to accommodate my own.

Special thanks must go to Amanda Hobbs and Dr. Marc Sosne. Without their direction and guidance, I may have never settled on a topic. Their input and feedback has been most valuable.

DEDICATION

I would like to dedicate this thesis to my parents, Richard and Mary Sullivan. They have

been and will always continue to be a constant support in my life's pursuits. I thank them for

creating me, and most importantly for encouraging and modeling life-long learning.

LIST OF FIGURES

LIST OF TABLES

CHAPTER 1. INTRODUCTION

In October 2004, the North Carolina State Board of Education approved the use of five end-of-course exams along with a senior project to form the framework for the new high school exit standards. High school students will be required to pass five of the state's end-of-course exams before they may earn their diploma: English I, Algebra I, Biology, Civics and Economics, and U.S. History. This requirement would be consistent for every student in every public high school seeking a career prep, college tech prep or college/university prep diploma.

Within the near future, North Carolina legislators, following the national trend, will consider passing legislation that will require every high school senior in the state to complete a senior project before he or she can graduate with a diploma. The purpose of the project is for a senior to demonstrate an adequate knowledge and utilization of writing, speaking, research and documentation skills. The senior project will be a performance-based component that may include service-based or work-based learning experiences. The senior project will be developed, monitored, and scored locally using state adopted rubrics ("High School"). The rationale behind the project's implementation is to combat the infamous senioritis syndrome by keeping students motivated through their senior year. However, senioritis is the result of multiple factors facing high school students across America, specifically here in North Carolina. Students perceive school to be about standardized tests, bubble sheets, memorization, playing by the rules, socialization and extra-curricular activities and not about critical thinking, solving life's conundrums, making meaningful connections, or pursuing personal interests.

The Problem

  In my opinion, the problem with our high schools today is that they are failing our students and, more importantly, our society. Students are not being prepared with the necessary skills to succeed in post-secondary environments or in society in general. Students themselves perceive a lack of preparation or focus in the following areas: employability skills, information retrieval skills, language skills, communication skills, computer knowledge, teamwork, and thinking or problem-solving skills (Bond, Egelson, Harman, & Harman, 2003). These areas will be discussed more specifically in the section titled FINDINGS. Evidence of this failure can be seen in the increasing number of high school and college dropouts. According to the Department of Education, 50 percent of all students who go on to college are insufficiently prepared and have to take remedial courses. More than 25 percent of four-year college freshmen and nearly 50 percent of two-year college freshmen drop out before the sophomore year (Dunn, 2001). Only 58 percent of University of North Carolina system students complete a bachelor's degree within six years of enrolling their freshmen year ("North Carolina Action"). UNC students are considered to be North Carolina's cream of the crop. What does this suggest about the average North Carolina student who struggles daily against social, intellectual, and economic challenges?

  During the 1999-2000 school year, in the United States, five of every 100 young adults dropped out of our school systems. Though the percentage of student dropouts has fluctuated from year to year, that number has remained relatively consistent since 1987. In 2000, approximately 75.8 percent of the student dropouts were between the ages of 15 and 18. During the 1990s, between 347,000 and 544,000 10th- through 12th-grade students left school each year without successfully completing a high school program (National Center for Education Statistics). According to Bill Gates, only 40% of those dropouts have jobs (Warner, 2005).

Considering North Carolina statistics, only 6 out of 10 students graduate from high school within four years and are usually not adequately prepared ("North Carolina Action"). The most recent numbers are from the 2003-04 school year: 20,035 high school students (grades 9-12) left school, yielding a 4.86 percent dropout rate. In a midsize school with a student population of 700, that's a total of 34 students per academic year. Though the number of high school dropouts has been on the decline since 2000, these numbers reflect a slight increase over the previous year's data. The 2002-03 data showed a 4.78 percent dropout rate in grades 9-12. Breaking the data down by ethnicity illustrates a continued decline in white dropouts, but an increase in Black and Hispanic. In the 2003-04 NCDPI dropout report, state superintendent Patricia Willoughby stated, "Every student who drops out of school represents lost potential for the student, for his or her family, for the community and for the state." Considering total dropout events in grades 1-12, the following statistics are notable: 59% males, 52.08% White, 35.05% Black, 7.9% Hispanic, 33.56% Grade 9, 26.09% Grade 10, 21.65% Grade 11, 13.46% Grade 12, 58.57% Attendance, 8.88% Academic, 2.51% Discipline (North Carolina Public Schools.org).

Academic and social apathy are rampant among our young people. Students demonstrate a clear lack of resiliency when faced with difficult choices and issues. Is it any wonder our high schools are graduating only three-fifths of the freshman class in four years, and they are inadequately prepared to face the realities of post-secondary life? Figure 1.1 shows the dismal reality of North Carolina's current outcomes.

For every one hundred 9th graders

60 graduate in 4 years

41 immediately enter college

29 are still enrolled their 2nd year

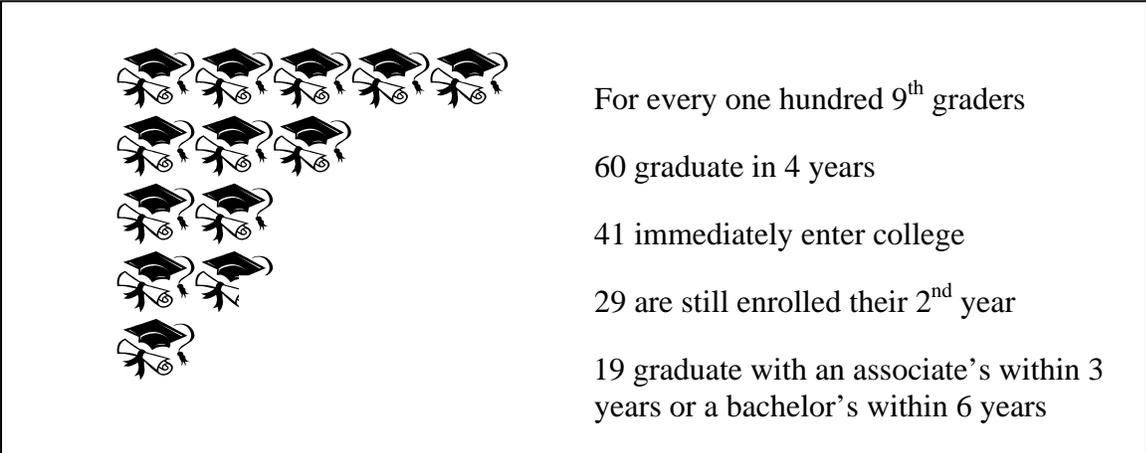19 graduate with an associate's within 3 years or a bachelor's within 6 years

Figure 1.1
North Carolina Educational Trend ("North Carolina Action").

The Solution

The solution is progressive reform within our schools. Multiple reform models are being adopted and implemented in North Carolina to address academic rigor, relevance within the course of study, and relationships within the school climate and with the school's community. New Schools Project, Senate Bill 656, Governor Easley's Education First Task Force, and Learn and Earn Initiative are just a few of these models ("North Carolina Action"). Several student programs have been initiated within schools including teacher and peer mentoring, student assistance teams, and dual enrollment. Curricular reform through student-centered programs, specifically a restructuring of the English curriculum to include grade-level projects, will produce students with voice who apply principles of constructivism, have instrinsic motivation and resiliency and are engaged in democratic governance. The reformed curriculum should emphasize choice, exploration and community while strengthening team building, problem solving and life-long learning.

The New Schools Project, in conjunction with both the Public School Forum of North Carolina and the Bill and Melinda Gates Foundation, has published an initiative entitled *r3: Rigor, Relevance and Relationships – A Vision for High Schools in North Carolina That Succeed For All Students*. This thesis will specifically examine the Senior Project as a potential component of this Education Cabinet initiative. An additional consideration is the need for major student projects to occur at each grade level to encourage motivation and meaningful connections between classroom education and the world outside. Students seek relevance in their classroom lessons. When it's lacking or nonexistent, educators find themselves battling student apathy. School reform programs tend to agree that the key to keeping students engaged to the

very last day of their senior year is getting them to connect their schoolwork to their life goals. The earlier this connection is forged, the more effective.

The Senior Project, as well as other grade-level projects, if implemented effectively, can become a significant tool in inter- and intrapersonal skill building. Freshmen are debating which track to pursue and must make well-informed decisions so that they may secure the necessary credits and course work to fulfill state graduation requirements. They would benefit greatly from a project giving them the opportunity to explore interests and hobbies to discover real-life applications. With sophomore English focusing on world literature, a sophomore project could take a more global approach helping students make relevant connections to the world community. As the students study the people and the economic and political systems of the world, their participation in a "sister city" project would encourage awareness of economics and politics in multiple communities around the world. Juniors still demonstrate a certain passion or intensity for school that tends to dissipate by the senior year. A junior project is timely for a student considering his or her post-secondary future giving the student a more focused direction when contemplating college, military, work or travel. Finally, the Senior Project would give each student the opportunity to combine each of the skills and the knowledge they've acquired throughout high school to research, implement and present a relevant topic of choice while learning about themselves and their relationships with people within and outside the school community.

Realigning the English curriculum to better suit the goals of the project years will also aid in the prevention of senioritis by encouraging student choice while offering academic and social relevance. English III will become a focus on social literature with a strong emphasis on research and writing. Students would choose between academic English IV and vocational English IV.

University bound students would enroll in the academic course to continue their studies of advanced literature, research and writing. Students bound for the work force, military, community or technical college would take the vocational course, which would continue to emphasize research, speaking and writing as it applies to the students' future goals. This course would also carry an internship component as a means to immerse the student within the work environment of their choosing to experience the realities of the career he or she plans to pursue.

Ultimately, by mandating the new exit standards, North Carolina hopes to confront the issues facing our graduating students who are entering society unprepared for higher education, social interaction, or the work force. Senior Project is a program emphasizing the three R's of education – rigor, relevance and relationships. Project-based curriculum will keep students in school and engaged in their education while populating our society with young adults who exercise responsible citizenry and resiliency when facing life's challenges.

Although Senior Project provides an avenue to explore the characteristics and skills lacking in our high school graduates, should it become a statewide mandated graduation requirement for all students? Not only will this thesis research the outcomes of senior project programs, but it will also investigate administrator, teacher, parent, and student reactions to the programs in an effort to measure the public response to the imminent exit standards. If the state legislature does not pass the project as a requirement, should schools independently consider adopting such a program for the benefits of their students? Are there aspects of grade-level project programs that could be infused within the current classroom, curriculum and instructional practices to encourage student retention, community awareness and skill obtainment?

CHAPTER 2. HISTORY OF SECONDARY EDUCATION

The ultimate problem to be addressed in this thesis is the fact that America's high schools are not graduating students who are being successful in their respective post-secondary arenas. In my experience teaching in a public high school, I saw hundreds of students biding time, too many dropping out, and plenty wanting to learn but frustrated with a system that did not teach them how to learn. I am not far removed from my own high school experience and clearly remember that my success in college can only be attributed to my own internal motivation and desire to achieve. My own teachers observed my valedictorian speech with pride; I wonder if they knew I was leaving for a state university inadequately prepared with mediocre writing and public speaking skills, nonexistent study skills and very little understanding of my own thinking capacity. The only difference between many of my students and me is the relevance I see in an education. My parents, my teachers, or my community may have instilled this. How do we help today's students understand the relevance in their education while helping them to build the critical relationships they will need as they pursue their life's goals?

Before I could begin to specifically define the problem within our high schools and to develop a hypothesis on how to address the problem, I had to first study the history of our secondary schools to understand the progression of our public schools' goals and society's impact on those goals. To measure the relationship between today's society and our unprepared graduates, I had to first understand how this relationship has been nurtured or ignored from the beginning.

The concept of secondary education began as early as 1635 with Latin grammar schools, which were developed to provide a college preparatory education for the sons of the colonial elite. However, it was Benjamin Franklin's proposal in 1749 that announced a new kind of

secondary school with a new goal for education – to produce "trained workers who could become effective participants in the new national economy" (George, McEwin, & Jenkins, 2000, p. 3). While social mobility may have been the central goal of the Latin grammar schools, social efficiency, for the first time, became an additional focus of secondary education. Franklin advocated for a school that "educated all worthy students regardless of social class, and for a school program that helped to move the economy of the new nation forward" (George et al., 2000, p. 3). Although we must remember that "all worthy students" in 1749 was still interpreted as white, male students, it was the first time America was actively promoting an education for all to benefit society.

After the American Revolution and before the outbreak of the Civil War, a third goal emerged to join social mobility and social efficiency as primary objectives of secondary education. Thomas Jefferson, tapping the increasing enthusiasm for democracy and social equality, submitted a plan for a free school system in Virginia in 1779. Jefferson's proposal illustrated his strong belief that "social democracy and universal education went hand in hand." His school system would provide three years of education for all "free" boys and girls (George et al., 2000, p. 4).

In 1821, the citizens of Boston voted to open a new school, the Boston English Classical School, which would become the first free and public high school in America. This new high school would be very different from Boston's Latin school established centuries earlier, which only prepared Harvard scholars who would later become national leaders. The new English High School would provide for the needs of the developing merchant class who needed "a generation of clerks and other workers with the skills required by the new economy" (George et al., 2000, p. 5). It was not until 30 years later in 1851 that the need for a comprehensive high school became

apparent. Again, a school committee in another region of Massachusetts recognized the need to offer two programs of study under one roof. One program would offer the classics for college-bound students while the other would offer the necessary skill training for those entering the world of commerce, business and industry (George et al., 2000). The question concerning the citizens of Lowell, Massachusetts was how exactly these two very different populations of students would fare together in one environment.

By the beginning of the 20th century, various educational advocates had clearly distinguished that the goals of secondary schools should address social mobility, efficiency and democracy. Though the majority of the schools still catered to the elite, and the colleges and universities continued to control high school standards and curriculum, the question was how exactly one should teach social democracy (Tucker, 1999). In 1918, the Commission on the Reorganization of Secondary Education published their report *Cardinal Principles of Secondary Education*, listing succinctly the seven necessary conditions of a quality secondary education: health, command of fundamental processes, worthy home membership, vocation, citizenship, worthy use of leisure time and ethical character. This report centralized students' needs and their required achievements at the heart of public schooling rather than a list of subjects or courses they must master. "The needs of all students (instead of curriculum) were primary for the first time" (George et al., 2000, p.13). Within two years, America's culture had noticeably shifted from an agrarian nature to one of industry, and the enforcement of the new compulsory education laws delivered millions of students to the schools' doorsteps forcing school officials to find ways to address the needs of the rising numbers of immigrant children (George et al., 2000). These students were coming from the most poorly educated countries; America's new industrialization required workers with at least 7th or 8th grade literacy (Tucker, 1999).

A decade later, the Commission on the Relation of School and College leveled a list of indictments at the high school of the 1930s. The charges made included:

- The high school seldom challenged students of first-rate ability to work up to their potential.
- The high school neither knew their students well nor guided them wisely.
- The high school failed to create conditions necessary for effective learning.
- The conventional high school curriculum was far removed from the real concerns of youth.
- The curriculum contained little evidence of unity or continuity.
- Complacency was characteristic of high school educators.
- Teachers were not well equipped for their responsibilities.
- The high school diploma meant only that the student had done whatever was necessary to accumulate the required number of units of credit (George et al., 2000, p.15).

By 1936, educators and school reformers responded to the charges with the following conclusions:

- The general life of the school and methods of teaching should conform to what is now known about the ways in which human beings learn and grow.
- The curriculum of the high school should deal with the "present concerns of young people as well as the knowledge, skills, understandings, and appreciations which constitute our cultural heritage."
- Educators must know each student well and guide each one wisely.
- Success in college doesn't absolutely depend upon the study of certain subjects for a certain length of time. Many avenues of study and experience exist that can lead to success in college (George et al., 2000, p. 16).

The references to young people's present concerns, knowing each student, understanding cultural heritage and experiences may be indirectly influenced by the high schools' shift toward custodial care during and after the Depression and into World War II. "High schools decreased their emphasis on preparing young people for future adult roles and responsibilities and instead increasingly directed their attention to immediate and clearly relevant problems of youth" (Angus and Mirel, 1999, p. 57). This statement directly coincides with Tucker's viewpoint that the schools of the 30s joined a "child-centered" movement, a term carrying a different connotation than it does today. The pre-WWII idea behind "child-centered" was to produce a

curriculum of little intellectual challenge but with much to offer in personal interest for the sole

purpose of keeping the children in school (Tucker, 1999).

Today, as I read this list of indictments and responses, I can't help but think that our high

schools are stuck in the 1930s, and though educators and reformers offered brilliant observations

in response to those charges almost 70 years ago, the schools never implemented the practices

that appeared so logical.

By 1961, 87% of America's 14-17 year olds were in school, no longer participants in the

labor force (Angus and Mirel, 1999). Still, the majority of available resources were being utilized

for college-bound programs (Tucker, 1999). Now that the comprehensive high school had been

formed and reformers were attempting to address the inherent issues of educating large, diverse

populations of students within the same environment, James Bryant Conant, former president of

Harvard, had a critical question concerning the comprehensive high school. In 1959, he asked,

> Can a school at one and the same time provide a good general education for
> all the pupils as future citizens of a democracy, provide elective programs for
> the majority to develop useful skills, and educate adequately those with a
> talent for handling advanced academic subjects? (George et al., 2000, p. 21)

Conant's own response at that time was a definite, "Yes." Since then, Americans have never

considered another alternative to educating young adults. Conant also issued a checklist to

measure the adequacy of efficient high schools. High schools providing a general education

would be effective if they provided the following elements:

1. Fours years of offerings in English literature and composition.
2. Social studies, including American history, government, and economics.
3. Ability grouping in required courses.
4. Vocational programs for boys and commercial programs for girls.
5. Opportunities for supervised work experiences.
6. Special provisions for very slow readers.
7. Special provisions for challenging the highly gifted students.
8. Special instruction in developing reading skills.
9. Summer session for the most able students.

10. Individualized, flexible programs for the academically gifted.
11. A school day organized into seven or more instructional periods.
12. Adequate guidance services.
13. Student morale.
14. Well-organized, heterogeneous homerooms.
15. Effective social interaction among students of widely varying academic abilities so that mutual understanding was promoted (George et al., 2000, p. 21).

In response, our guilty nation officially banned segregation during this decade and introduced federal aid as a means to supplement the disadvantaged. However, most of the aid was funneled to preschool care and elementary schools, not to the nation's high schools. Unfortunately, by the 1970s, America's high schools had become "warehouses" for adolescents. "The high school diploma, only a few decades ago a shining symbol of accomplishment, had now become merely a certificate of attendance" (Tucker, 1999, p. 21). Hopelessness and apathy had become the primary culture of the high school. Low-skill jobs were being outsourced to other countries, and low-income or government- assisted meant learning disabled. The 1980s began with a dramatic increase in gang activity – disadvantaged, lost young people looking for social support and a sense of self-worth (Tucker, 1999).

By 1983, the National Commission on Excellence in Education, in their now infamous *A Nation at Risk* report, charged the nation's schools with so inadequately preparing our students they compared it to a hostile act of war. "If an unfriendly power had attempted to impose on America the mediocre educational performance that exists today, we might well have viewed it as an act of war" (George et al., 2000, p. 29). It's true that by the time this report was published, many of the foreign nations who had once considered modeling the American education system were surpassing the United States in student achievement, attendance and standardized testing of basic skills, leaving Americans wondering if the comprehensive school was serving our nation's and our children's best interests (Angus and Mirel, 1999). Noticeably, the charges leveled

against our schools over a period of sixty years had become increasingly severe. However, corresponding evidence of decreased student achievement, increased drop out rates, stagnant college admissions, and decreased degree completion shows that schools were not actively responding to the charges until *A Nation at Risk* and other studies that occurred during the 1980s forced a response (Smith, 1995).

During the 1980s and 90s, Theodore Sizer emerged as a major influence on the perceived focus of the high school program. Sizer's opinion was that "American high school students were being required only to attend, not to learn." In response, he suggested the focus of the program should become the "development of students' minds and the refinement of cognitive skills, not on the memorization and regurgitation of meaningless curriculum" (George et al., 2000, p. 32). By 1984, the Coalition of Essential Schools, founded by Sizer, pledged to push for school reform based on the following principles:

1. The focus of the school should be helping students use their minds well.
2. Students should be guided toward mastery of less, rather than simple coverage of more.
3. The school's goals should apply to every student in the building.
4. Teaching and learning should be personalized to the greatest extent possible.
5. Schools should subscribe to the concept of "student as worker."
6. Intensive remedial work should be provided immediately for students who need it, and should continue until they no longer need it.
7. The high school diploma should be awarded for demonstration of mastery, not attendance.
8. High expectations, trust, and decency should characterize the school.
9. Educators should be generalists first, and specialists second, with a total school commitment. Common planning time for teachers should be instituted. Teachers' salaries should be raised, while costs in general for the school should decrease, meaning that some programs that are tangential to the school may be eliminated (George et al., 2000, p. 33).

By 1989, Sizer's philosophy that students should be trained to use their minds was absolutely endorsed by the national government. President George H.W. Bush and the nation's

governors met in September of that year to revitalize American public education by establishing

"clear national performance goals, goals that will make us internationally competitive." Goal 3

declared that

> American students will leave grades four, eight, and twelve having
> demonstrated competency in challenging subject matter including English, mathematics,
> science, history and geography; and every school in America
> will ensure that all students learn to use their minds well, so they may be
> prepared for responsible citizenship, further learning, and productive employment.
> (Angus et al., 1999, p. 1)

Another major player in the educational policy arena during this time period was Ernest

Boyer, who was an advocate for school reform and often shaped the debate on multiple

educational issues since the 1970s. Boyer's primary argument was that we know what works,

and we see it at work in the successful schools – small classes and flexibility. Effective schools

build a community around learning. "A comprehensive curriculum relates to children's lives, is

integrated thematically, promotes literacy, and teaches consensus values such as honesty,

responsibility, and self-discipline." Curriculum should be organized around three goals: content,

integration, and the relationship to students' lives (Merina, 1995, p. 7).

In 1996, the National Association of Secondary School Principals, in collaboration with the

Carnegie Foundation for the Advancement of Teaching, issued the report *Breaking Ranks:*

Changing an American Institution. The report offered a vision for the high school of the 21st

century and attempted to answer the question, "What goals ought today's high schools

embrace?" The authors' answers continue to encompass the primary goals of secondary

education emphasized initially by the schools of colonial America: democratic citizenship and

equality, social efficiency, and social mobility. The high school of the 21st century should have

nine purposes:

1. A community committed to demonstrable academic achievement.

2. An experience in transition to the next stage in life for every student, with the understanding that "ultimately each person needs to earn a living."
3. A gateway to multiple options.
4. A place to prepare lifelong learners.
5. A provision of the necessities for developing good citizens for "full participation in the life of a democracy."
6. A place where students are helped to develop as social as well as academic beings.
7. A place where students learn to be comfortable in a technological society.
8. A place where students become equipped for life in an internationally interdependent world.
9. A place that "unabashedly advocates in behalf of young people" (George et al., 2000, p. 33)

Several of the Coalition's principles along with the NASSC's purposes will resurface in the section titled FINDINGS as a rational foundation for the implementation of grade-level projects in our high schools.

In the introduction of his book, *The Failed Promise of the American High School 1890 – 1995*, David Angus states,

> At the heart of the prevailing American conception of what constitutes a good high school education are three fundamental beliefs: first, that the curriculum should be differentiated with respect to the backgrounds, plans, aspirations, and interests of students; second, that such differentiation is the key to universalizing high school attendance; and third, that, unlike in many European nations, these differentiated curricula should be offered by and within a single institutional setting. (1999, p. 2)

Since the inception of the comprehensive high school in 1851, the meaning of and the method of "achieving equal educational opportunity for all" have been debated. Our nation's state governors participated in an educational summit in February of this year to determine the needs of our high schools and how to address them.

Once we find a way to bring each and every student into the building, how do we teach him or her? What do we teach our young people to ensure they are successful once they leave the schoolhouse gate? More than ever, high school students today are going through the motions to

17

complete a curriculum that does not press for deeper understanding. Book learning is still the primary focus, not personal interests or the ability to do anything useful "with the knowledge they [have] gained. [The curriculum] fails to recognize the subtle interdependence between doing and understanding that Dewey had anticipated in 1899" (Tucker, 1999, p. 23). John Dewey was committed to the idea of a curriculum that was intellectually demanding but also developed the "capacity to function knowledgeably and responsibly in an increasingly complex society that demands much of [the students] as citizens, workers, and family members" (Tucker, 1999, p. 19). Dewey was endorsing Senior Project 100 years before SERVE, the Southeastern Regional Educational Library at UNC Greensboro, gave it a name.

CHAPTER 3. METHODOLOGY

The previous study of the history of secondary schooling and the social influences on the comprehensive high school led me to the present societal concerns and the current reform models being implemented to address those concerns. I've discovered that behind each of those models lie multiple concepts and philosophies. However, each model does hope to provide the strategies necessary to graduate the young adults for whom our society, military, workforce and universities are begging. Specifically, I was searching to find a single, tangible application of the concepts and philosophies behind modern day reform efforts. The concept of the Senior Project – the rationale, the format, the skills, the outcomes, and the public's reaction - emerged as a potential application for high school reform strategies. I first want to clarify that in no way am I suggesting with this thesis that a single strategy, model or activity can be the magic antidote for the turmoil our high schools are experiencing. I do believe the government, the school boards, the administrators, the teachers and the students must work together to identify the most effective concepts to formulate a comprehensive strategy for our schools. I also believe that one plan will not work for all schools just as one type of instruction is not effective for all students.

What is Senior Project?

To achieve meaningful reform that promotes an appropriate education for all students, we must challenge our entire concept of secondary education. Learning must occur for all pupils through "contextualized learning experiences, cohesive curricula, authentic assessments and instructional flexibility" (Stoll and Fink, 1996, p. 129). This is the very definition of Senior Project. The following description of the senior project has been adapted from SERVE, the Regional Education Laboratory for Alabama, Florida, Georgia, Mississippi, North Carolina and

South Carolina and their 2003 Preliminary Release of Three SERVE Studies. Dr. John R. Sanders serves as director for this educational organization with the mission to promote and support the continuous improvement of educational opportunities for all learners in the Southeast. Staff members work to develop tools and practices designed to assist educators with their work in raising the level of student achievement in the region.

Senior Project is a "culminating performance-based assessment" designed to measure what twelfth-graders know and what they can do as it applies to the world after high school. Seniors select an approved topic of choice based on interests, future plans, or hobbies. The students conduct research on their topic, write a research paper of a specified length, develop a product applicable to their topic, and finally deliver a presentation of their work to a panel of school and community members. The project is intended to be one of rigor, a learning stretch for the student, incorporating writing, thinking, research, speaking, planning and time management skills. Often a community mentor is associated with the project, and many students secure internships and work experience based on the topic and relationships they forge with the community. Senior Project is usually housed in the English department, becoming the responsibility of the senior English teachers; other times it's found in social studies, upper vocational classes or as an independently scheduled course.

The Senior Project program has been endorsed by SERVE since 1994 although other states and organizations have been implementing similar projects since the 1980s (Tomsho, 2005). SERVE provides training, financial assistance, video and textual publications, yearly institutes, networking meetings for site coordinators, and site visitations for data collection and consultation. Presently, over 750 American high schools have implemented a senior project program. At least five states have schools requiring a senior project for graduation: Hawaii,

North Carolina, Pennsylvania, Rhode Island and Washington (Hood and Egelson, 2005). As of 2002, 104 North Carolina schools were employing Senior Project with 48 seriously considering implementation (Egelson, Robertson, & Smith, 2003).

The Data

Finding data to support or negate the concept of a senior project program was difficult. Although SERVE has been networking since 1994, only recently has the project gained the attention of educators, the public and the researchers. Several school reform models mention adapting the curriculum to include authentic assessment of relevant skills and experiences, but they do not offer a name for such an assessment.

I was already familiar with SERVE through Dr. Sherry Broome, principal of Ashley High School in Wilmington, NC, and I was aware the New Hanover County School District required Senior Project as a graduation requirement for their five high schools. My research started with a general search for Senior Project through the web and the library's electronic database. I have only been able to locate a minimum number of articles, outside of SERVE publications, that mention Senior Project as a current instructional practice. I did choose to use the few I could find to develop the rationale for using Senior Project.

In addition, I have studied a number of texts and articles focused on school reform searching for philosophies similar to those of senior project networks – a need for a reality-based, student-centered project to assess the applicable knowledge and skills of our graduates as they prepare for post-secondary life. A representative sampling was selected based on references, contributing authors and relevant viewpoints.

The research, data analysis, and resulting implications will be qualitative in nature. My thesis will be a single document for individual viewpoints to merge in a comprehensive summary of the current findings on the rising trend. This issue is one of great import, and this thesis will provide a background and knowledge base from which imminent, future research can springboard.

CHAPTER 4. FINDINGS

Senior Project as a Component of R3

Rigor

How does Senior Project exemplify rigorous, relevant, student-centered instruction that builds and maintains critical relationships? Most recently *The Wall Street Journal* ran a front-page article discussing the parental backlash schools face when they attempt to toughen standards by implementing programs like Senior Project. Because U.S. teens are routinely outscored by their foreign counterparts, and statistics reveal a decline in post-secondary achievement, American schools are under intense pressure to "toughen up." "Employers and college professors overwhelmingly rated high school graduates as 'fair' or 'poor' in basic math and clear writing in a 2002 study by Public Agenda, a nonpartisan opinion research group" (Tomsho, 2005, p. A8). Extensive research and writing assignments are becoming a rarity in our English classrooms and appear to be nonexistent in other core courses. According to a 2003 national commission on student writing, "Seventy-five percent of all seniors say they get no writing assignments at all in history or social studies." A commission funded by the Department of Education concluded in its 2001 study that the senior year is decidedly a "lost opportunity" (Tomsho, 2005, p. A1).

Since 1980, various states have been creating, implementing and restructuring senior year projects. Cedarcrest High School in Duvall, Washington made the senior project a graduation requirement in 1993, and parents have been complaining ever since. School officials have been restructuring the requirements year after year until finally the minimum paper requirement became three pages, and topics of little consequence - the history of Barbie and the significance of the prom - became the norm. Currently, administrators are concerned the paper requirement is

too easy and are rethinking the length. Because the expectation has dropped, student performance has diminished. Only 9% of the 2003 senior class received Fs on their papers while 43% of 2004's graduates failed the writing component (Tomsho, 2005). Clearly, this supports the notion that students will perform with respect to the level of rigor and expectation.

In 2000, the Metropolitan Regional Career and Technical Center in Providence, Rhode Island could proudly boast about the incredible payoff for setting high standards. The MET is an alternative placement for at-risk students. Seventy percent of the school's population is Black or Hispanic, more than 60% live below the state's poverty level, and 40% are ESL students (Warner, 2005). Although the MET had only 200 students enrolled at the time, each and every one of them, not just seniors, was involved in a self-chosen research project. By the spring, 46 of the 48 seniors had been admitted to universities – "quite an accomplishment considering that it is likely that many of them would have dropped out of a traditional high school" (Wolk, 2000, p. 6). Currently, the MET boasts the lowest dropout rate in Rhode Island and has the highest college admission rate of all the state's high schools (Warner 2005). Students all over the nation have developed more focused career plans and have been offered scholarships and jobs as a result of senior project participation. "Unmotivated students have become high achievers during the process." A 1999 SERVE survey revealed that 75% of the responding students agreed and/or strongly agreed that their literacy skills: writing, researching, speaking, planning and time management had improved as a result of the project (Bond et al., 2003, p. 1.5).

Overwhelmingly, the message students receive from society is that intellectual endeavors are not important. When high school graduates apply for a job, they know employers will only ask whether they have a high school diploma but will not request a copy of a transcript to verify GPA, academic course loads or attendance. Straight "A" honors graduates receive the same

consideration as "C" average graduates, and students learn this quickly as they start applying for part-time work while they're still in school. Why should they challenge themselves with AP and honors courses? Passing general classes is good enough for part-time work, community college, technical college, military and non-selective universities. This social attitude must change. Top colleges are seeking the qualities that Senior Project participants develop - the ability to think and study, present themselves well and clearly articulate their ideas (Lorenz, 1999).

Relevance

Senior Project is not a new idea. Learning by doing, integrating ideas with action and linking classroom lessons to the real world are ideas educational researchers and reformers come back to time and again. Currently, classroom instruction is designed to teach only the answers. Senior Project is designed to guide students toward an understanding of the concepts behind the answers. Furthermore, learning is exponentially more effective within context. Victor Leviatin, co-founder of Wise Individualized Senior Experience, Inc.(WISE Services), a not-for-profit organization which helps schools establish senior project programs, comments that project-based instruction "teaches [students] the life lesson of building unanticipated consequences into learning" due to the nature of the "changing and dynamic curriculum" (Wade, 1999, p. 765). "[Howard] Gardner suggests that students who learn at a surface level rarely gain the real understanding which comes through contextualized learning" (Stoll and Fink, 1996, p. 119). A key factor is for students to develop the ability to use their knowledge for problem-solving in real situations.

> The real world demands collaboration, the collective solving of problems…
> Learning to get along, to function effectively in a group, is essential. Evidence
> and experience also strongly suggest that an individual's personal learning is
> enhanced by collaborative effort. The act of sharing ideas, of having to put

one's own views clearly to others, of finding defensible compromises and conclusions, is in itself educative. (Fullan, 1993. p. 45)

In 1992, The Conference Board of Canada released the employability skills for which all companies are searching. Though a Canadian report, each skill is obviously applicable to American society:

- People who can communicate, think and continue to learn throughout their lives.
- People who can demonstrate positive attitudes and behaviors, responsibility and adaptability.
- People who can work with others (Fullan, 1993, p. 45)

Part of Senior Project's aim is to help students develop these skills along with more concrete employability skills: written and spoken communication and technology.

Relationships

Finally, Senior Project can be an avenue toward establishing and strengthening relationships within the school community as well as with members of the school's surrounding community. One of the most critical relationships for successful project implementation is that between the student, the Senior Project coordinator and the student's mentor whether he or she is a school or community member. A sense of trust must be the foundation. This element can be most quickly and effectively established by encouraging student-centered decision-making through authentic student input during the planning stages as well as the implementation and restructuring stages when applicable. Ernest Boyer spoke of relationships in a 1995 interview, "Every student needs to be part of a smaller school 'family' where the student is always connected to a mentor/teacher." He went on to explain how these relationships disrupt the anonymity present in our schools and make learning more meaningful. He argued that quality education is impossible in a building in which a student feels anonymous (Merina, 1995, 7).

Boyer's *Basic School* philosophy is a series of critical connections – four principles for improving learning: connecting people in schools to create community, connecting curriculum so that it has coherence, connecting classrooms and resources to enrich the learning climate, connecting learning to life to build character (Bafumo, 1999).

Research conducted in Australia in the late 1990s illustrated a low correlation between students' responses and those of principals, teachers, and parents when asked what the goals of efficient schools should be. This observation "provides some indication that schools…may not be responding to the perceived desires of students but are perhaps being influenced by outside pressures of the economy or government policy" (Rudduck and Wallace, 1997, p. 76). Although these are findings from Down Under, American studies corroborate; school reformers are saying it's time to ask the students.

An analysis of student interviews conducted in three separate comprehensive high schools in England suggests schools can improve by

- Giving each year of secondary schooling a distinct identity.
- Creating time for dialogue about learning.
- Helping students explore standards for judging quality work in different subjects.
- Making time for teachers to talk individually with students.
- Starting futures counseling in small groups.
- Helping students understand what "working hard" or "working harder" means.
- Strengthening the procedures and practices related to homework.
- Responding to the problem of "catching up" for students who have missed work.
- Helping students manage the multiple demands of homework, course work and revision.
- Offering lunch hour or after school clinics (Rudduck and Wallace, 1997, p. 85).

Again, these suggestions were developed based on student responses during interactive focus group discussion. Clearly, students are recognizing the need for rigor, relevance and relationships within the school curriculum, instructional time and culture.

Interestingly, these same students identified the following traits as characteristics of teachers who are most likely to increase students' commitment to learning:

- Enjoy teaching the subject
- Enjoy teaching students
- Make the lessons interesting and link them to life outside school
- Will have a laugh but know how to keep order
- Are fair
- Are easy for students to talk to
- Don't shout
- Don't give up on students (Rudduck and Wallace, 1997, p. 86).

Each of these qualities encourages the formation of a trusting, productive relationship. Students want to see their teachers as real people who demonstrate a love for learning with whom they can talk easily and openly about life and academics. Students perform better not only in respect to higher expectations but within schools that encourage meaningful relationships with a caring adult. The key role of personalized school settings is cited in the *Breaking Ranks* report of the National Association of Secondary School Principals: "These supportive relationships personalize the educational experience and help identify early warning signs of student trouble – both academic and personal" ("North Carolina Action"). The ideal is for high schools to create a culture where every student is known, valued and given the opportunity to contribute. Student support teams, peer counseling groups, teacher mentor programs, looping, advisory groups, and freshman academies are some of the ways schools are "shrinking" their environment. Adopting grade-level projects requiring community and/or teacher mentors is one more step toward a more intimate culture.

Senior Project Answers Society's Call

How can Senior Project be used by schools to prepare independent, skilled, democratic thinkers who become meaningful contributors to our society? Our society has moved into an

information age where the means of production "is no longer capital, nor natural resources, nor labour. It is and will be knowledge…Value is now created by productivity and innovation, both applications of knowledge to work" (Stoll and Fink, 1996, p. 3). R. Reich in *Work of Nations* contends that "each nation's prime assets will be its citizens' skills and insights" not its products, technologies, corporations or industries. The real challenge for America's schools "is to increase the potential value of what [our] citizens can add to the global economy, by enhancing their skills and capacities and by improving their means of linking those skills and capacities to the world markets" (Stoll and Fink, 1996, p. 3).

As noted in the previous section on the history of secondary education, our high schools are still operating as though we are preparing students for the society of the 1950s. North Carolina's schools, specifically, were designed to supply farming and manufacturing communities. The economy of yesteryear that thrived on an unskilled labor force has turned to foreign resources. Within the last ten years, North Carolina has lost more than 25% of its manufacturing jobs to overseas plants, and they will not be returning. In 1950, 60% of the workforce depended upon unskilled workers while 20% demanded skilled labor. By 1997, the demand for unskilled laborers had dropped to 15% while skilled workers rose to 65% ("North Carolina Action"). Some schools, especially in rural areas of the state, continue to prepare students for jobs that no longer exist nor will provide enough income to support a family. The reality is that we must prepare our students for a knowledge-based society as well as give them the post-secondary training they need to compete and succeed.

During the 1999-2000 school year, SERVE conducted a field study of four Senior Project schools and four matched control schools. They hoped to determine whether Senior Project graduates were better prepared for the work force and/or higher education than traditional

graduates. Data was collected from teachers, administrators, current 12th grade students and 1997

graduates. Table 4.1 presents teacher and student perceptions of instructional and assessment

methods. Each of the percentages reflects the majority of responses for each question. The data

conclude the following:

- Lecture remains a primary instructional strategy in both Senior Project and control schools.
- Slightly over half the teachers and students in Senior Project schools recognize the consistent use of project-based instruction.
- In Senior Project schools the majority of teachers and students said student discussion seminars are never used while control school responses indicate a monthly use of seminars.
- In Senior Project schools teachers claim to use student self-assessment on a weekly basis while a resounding student majority claim self-assessment is never used.
- Teachers in both school settings demonstrate a significantly more optimistic use of individual progress conferences than students.
- Oral presentations are not being used as frequently in the control schools as in their Senior Project counterparts.
- A higher percentage of control students indicate a consistent use of extended projects than Senior Project students.

Table 4.1
Instructional Methods and Assessments – Teachers' and Students' Perceptions
T = teacher, S = student (Bond et al., 2003).

Instructional Method	Senior Project Schools				Control Schools			
	%	Daily/Weekly	Monthly/Semesters	Never	%	Daily/Weekly	Monthly/Semesters	Never
Cooperative Learning - T	**68.3**	*			**70.2**	*		
Cooperative Learning - S	62.6	*			72.8	*		
Discovery-based Learning - T	**48.7**		*		**59.5**		*	
Lectures - S	78.8	*			69.3	*		
Project-based Instruction - T	**59.8**		*		**68.6**		*	
Project-based Instruction - S	54.1		*		75.2		*	
Student Discussion Seminars - T	**39.6**			*	**52.3**		*	
Student Discussion Seminars - S	49.5			*	44.2		*	
Student Self-Assessment - T	**49.8**	*			**44.6**		*	
Student Self-Assessment - S	71.2			*	51.4			*
Student Assembles Collection of Work - T	**42.2**	*			**46.9**		*	
Student Assembles Collection of Work - S	60.8		*		46.7			*
Individual Progress Conferences - T	**67.3**		*		**67.1**		*	
Individual Progress Conferences - S	42.3			*	52.9			*
Oral Presentations - T	**72.3**		*		**62.4**		*	
Oral Presentations -S	69.4		*		45.6		*	
Extended Projects - T	**68.6**		*		**61.5**		*	
Extended Projects - S	71.7		*		82.5		*	

Secondly, teachers and students were questioned about the instructional focus on specific skills within eight categories: communication, computer knowledge, employability, information retrieval, language – reading, language – writing, teamwork, and thinking/ problem-solving. Tables 4.2 and 4.3 record the results of the survey. Table 4.3 specifically addresses thinking and problem-solving skills as a significant, life-long, marketable skill our students are lacking.

One of the skills not depicted in Table 4.2 or 4.3 is technology. The SERVE study concluded that students in both school settings reported a significant use of technology in their classes. However, across the board, students' perceptions vary significantly from skill to skill from those of the teachers. Of course, this may be a result of just that – perception. Here's a look at how the perceptions vary:

- Senior Project students report a greater emphasis on interviewing skills than their teachers.
- Teachers report a significantly higher emphasis on assuming responsibility and persistence in both settings.
- Conversely, the students report a significantly greater emphasis on developing career interests and goals.
- Students in both settings report a higher emphasis on using community members for information retrieval and locating and choosing reference material.
- Overall, students in both settings report much higher emphasis on writing skills than their teachers, sometimes by 36% or more.
- Students in control schools report a much lower emphasis on taking initiative.
- Students in both settings report a higher emphasis on teamwork.

Table 4.2
Classroom Emphasis on Specific Skills – Teachers' and Students' Perceptions
T = teachers, S = students (Bond et al., 2003).

Skill	Senior Project Schools			Control Schools		
Emphasis	High	Mod. - Low	None	High	Mod. - Low	None
Communication						
Conveying thoughts or opinions effectively - T	**53.7**	**42.4**	**3.9**	**47.9**	**47**	**5.1**
Conveying thoughts or opinions effectively - S	52.6	45.2	2.2	42.9	51.4	5.7
Explaining a concept to others - T	**44.2**	**53.8**	**2**	**40.4**	**58.6**	**1**
Explaining a concept to others - S	31.5	62.4	6.1	37.5	55.8	6.7
Interviewing - T	**16.6**	**57.8**	**25.6**	**14.6**	**51.9**	**33.5**
Interviewing - S	22.6	66.6	10.8	15.4	58.7	26
Employability						
Assuming responsibility for own learning - T	**78.4**	**21.1**	**0.5**	**82**	**18**	**0**
Assuming responsibility for own learning - S	61.5	35.7	2.9	56.7	40.4	2.9
Persistance - T	**76.4**	**22.6**	**1**	**75.2**	**24.8**	**0**
Persistance - S	58.4	40	1.6	49	47.1	3.8
Working Independently - T	**68.5**	**30.5**	**1**	**70.8**	**29.3**	**0**
Working Independently - S	54.8	43.3	1.9	50	48.1	1.9
Responding to criticism - T	**42.2**	**53.8**	**4**	**53.1**	**46.4**	**0.5**
Responding to criticism - S	45.5	51.9	2.5	45.2	47.1	7.7
Taking initiative - T	**59.3**	**39.2**	**1.5**	**61.6**	**36.9**	**1.4**
Taking initiative - S	51.4	46	2.5	43.7	52.4	3.9
Information Retrieval						
Using community members - T	**13.1**	**62.9**	**24.1**	**10.7**	**61.2**	**28.2**
Using community members - S	20.4	65.6	14	25	44.2	30.8
Locating/Choosing appropriate reference materials - T	**37.3**	**53.7**	**9**	**26**	**67**	**7**
Locating/Choosing appropriate reference materials - S	41.5	56.9	1.6	31.4	67.6	1
Language - Writing						
Organizing/relating ideas - T	**38.8**	**50.7**	**10.4**	**34.7**	**52.1**	**13.1**
Organizing/relating ideas - S	59.5	39.2	1.3	44.8	52.4	2.9
Proofing/Editing - T	**34.3**	**50**	**15.7**	**32.6**	**47.5**	**20**
Proofing/Editing - S	60.5	37.3	2.2	41	57.1	1.9
Synthesizing information - T	**33**	**53.2**	**13.8**	**27.6**	**60.3**	**12.1**
Synthesizing information - S	41.7	56.1	2.2	26.7	67.6	5.7
Persuasive/Justification - T	**20.2**	**55.1**	**24.6**	**13.6**	**58.3**	**28.2**
Persuasive/Justification - S	37.3	58.9	3.8	27.9	62.5	9.6

Table 4.3
Classroom Emphasis on Thinking/Problem-Solving Skills
T = teachers, S = students (Bond et al., 2003).

Skill	Senior Project Schools			Control Schools		
Emphasis	High	Mod. - Low	None	High	Mod. - Low	None
Thinking/Problem-Solving						
Identifying key problems or questions - T	**53.8**	**44.7**	**1.5**	**55.3**	**43.8**	**1**
Identifying key problems or questions -S	39.5	58.6	1.9	43.8	50.5	5.7
Evaluating results - T	**49.2**	**48.2**	**2.5**	**50.5**	**47.6**	**1.9**
Evaluating results - S	37.7	57.5	4.8	36.5	59.6	3.8
Developing strategies to address problems - T	**47.5**	**49.5**	**3**	**50.5**	**48.6**	**1**
Developing strategies to address problems - S	37.9	57.6	4.4	38.1	56.2	5.7
Developing an action plan or timeline - T	**35**	**55**	**10**	**34.3**	**57.4**	**8.2**
Developing an action plan or timeline - S	29.4	64.5	6.1	25.7	66.7	7.6

According to SERVE's numbers in this study, Senior Project does not seem to significantly affect the classroom focus on reading, writing or employability skills. This may be a result of all schools' recent implementation of a variety of academic and career-related initiatives including Senior Project, business studies, apprenticeship programs, career centers and counseling, job shadowing and expanded vocational offerings. Additionally, schools are offering an increased number of advanced courses (Advanced Placement, Honors, Dual-Enrollment) and technology focused programs. This trend corresponds with the students' desire for a more intensive curriculum with Senior Project components. Focus groups of Senior Project and control students both indicated a desire for more exposure to communication and analytical skills, presentations, research, and career exploration (Bond et al., 2003).

On the other hand, the most disturbing discrepancy in the study's results emerges in the thinking/problem-solving category. Teachers in both settings believe they are emphasizing thinking skills on a much higher scale than the students report, sometimes by as much as 14%. Identifying problems, developing strategies to address them, evaluating results and developing action plans and timelines are significant life-long thinking skills, and it appears our young people are graduating from our North Carolina high schools without them.

Teachers and current students were not the only subjects surveyed in this particular SERVE study. In the spring of 2000, a sample of 1997 graduates was also surveyed to assess how well they thought their high school experience prepared them for their future. They were asked to indicate the skills taught and/or reinforced in high school and which skills they have utilized since graduation. When questioned about the following skills: conducting research, locating reference materials, time management, and carrying out a plan, Senior Project graduates reported a higher rate of instruction and reinforcement of the skills than their control school counterparts.

The difference fell anywhere between 2% and 15%. Most significantly, Senior Project graduates reported instruction in preparing and presenting a speech at 31% higher than control graduates; reinforcement of those skills was 17% higher. Not surprisingly, regardless of the level of instruction or reinforcement of these skills each of the graduates received, both report a similar need and use of these skills since high school. The real world, regardless of a graduate's high school experience, demands the same knowledge of these skills (Bond et al., 2003). Table 4.4 shows the skills the graduates have been asked to use since high school.

Unfortunately, a third of the Senior Project graduates reported that the project had little or no influence on their future. However, 75% did report gaining specific skills through the experience including communication, research, public speaking, writing, presentation and interviewing. A small number even reported that the experience led to a job or a career choice (Bond et al., 2003).

Generally, the SERVE study indicated significant similarities in the types of instruction used between Senior Project and control schools. The assessment within the classrooms does vary, and the student perception of instruction and assessment in both settings fluctuates. However, Senior Project students do report a greater emphasis on specific, life-long skills:

- Conveying thoughts or opinions effectively
- Interviewing
- Persistence
- Searching for and synthesizing information
- Using language accurately
- Organizing and relating ideas

Table 4.4

Skills *Used* Since High School (Bond et al., 2003).

Skill	% "yes" Senior Project graduates	% "yes" control graduates
Writing a research paper	81	86
Conducting research	80	90
Locating reference materials	84	89
Interviewing	65	72
Summarizing information	84	91
Proofing and editing	82	86
Preparing and presenting a speech	76	87
Time management	77	88
Carrying out a plan	87	91

Ultimately, it would seem reasonable to conclude that Senior Project does emphasize the thinking and communication skills expected within our society. A high school's participation in the project would be a way to ensure that *all* students have access to learning and the constant reinforcement of these skills. Thus providing equal opportunity in education for every student, not just the "best and the brightest," getting us back to the original vision of comprehensive secondary schools. If schools opt to not implement Senior Project, hopefully the instructional staff would look for ways to create a curricular program that emphasizes the skills inherent in the Project.

Senior Project as a Graduation Requirement

North Carolina is currently considering Senior Project as a component of the exit standards. How is Senior Project an effective measure of a graduate's knowledge and skill base? It would seem an appropriate companion piece to the EOC requirement; while the standardized tests are attempting to assess academic knowledge, the Senior Project would be assessing skill attainment. As noted earlier, society is adamantly begging for knowledgeable, skilled, globally focused citizens. Although the SERVE study cited earlier in this section indicates a positive correlation between Senior Project and desired skill attainment, Senior Project meets with widespread objection from teachers, parents and students alike. English teachers especially complain about increased workload; however, their students, those in non-Senior Project classrooms are reporting more similarities to Senior Project instruction than differences. This fact alone refutes the teachers' argument that Senior Project interferes with instructional practices. If the project is implemented as it's designed to be, teachers really should not be

bogged down with additional work. Schools must call upon the community for mentors, resources and evaluators.

Parents object to the months of after-school work and what appears to be sometimes arbitrary grading. One should note, Senior Project requires, at most, 15 hours of additional "class time" (Bond et al., 2003). One parent's viewpoint is that the project is a way for teachers and administrators to maintain their sense of power to set and enforce standards, rather than focus on student achievement (Tomsho, 2005).

Interestingly, the least vocal in their objections are the students themselves, and of these objections, the source tends to be the highest achieving students. They claim the extra time spent on the project is taking away valuable time needed to apply for colleges (Tomsho, 2005). Ironically, colleges are beginning to become more aware of the Senior Project, and admissions officers are indicating a vested interest. (This will be discussed further in the conclusion). The remaining student population, as stated earlier, is asking for increased exposure to the skills inherent in the Senior Project process. They seem to be inviting added rigor rather than shrinking from it.

Perhaps the reasoning behind each of these objections is the stigma of the name itself. When the words Senior Project are uttered around any member of the school community, one can almost see a visible shudder of fear and loathing. The easiest solution – develop the curriculum within the school but allow the school's stakeholders to give the project a title with more positive connotations. For instance, *Project Coffee* in Oxford, MA, carries the components of Senior Project: vocational instruction, integration of academics and occupational training, counseling, job training and work experience, and industry partnerships but carries a less austere title (Woods).

Finally, the question remains – should North Carolina mandate the Senior Project as a graduation requirement. The NW Regional Educational Library published an article entitled "Reducing the Dropout Rate" as part of the *School Improvement Research Series*. The article discusses ways to address the dropout problem in the U.S. but also highlights ineffective practices. Although research continually finds effective, proven strategies, some of these less desirable strategies can still be observed in our schools. One of these being state mandated promotion policies.

> If standards and requirements are raised without support for school
> improvement and without personal attention to the varied populations of
> high-risk students and their specific learning requirements, the effect will
> be to push more young people out of school. (Woods)

Simply requiring schools to implement Senior Project without ensuring the proper instruction, supports, and strategies are in place will only perpetuate the current problem facing our schools and society. Mandating the program is not problematic. But first, we must be sure our teachers are properly trained to address differentiated, individualized instruction. An adequate system of support and monitoring must be in place to constantly assess teacher and student needs and respond immediately and effectively.

CHAPTER 5. CONCLUSION

The global society of the 21st century demands skilled thinkers who have the motivation and resiliency to participate, compete and succeed in our democratic, ever-changing society. Unskilled labor is no longer the majority of America's present workforce nor will it be our future. With fewer labor positions, our society has become much less stratified in its workforce demands; our schools must provide equity in our students' preparation for that society. High schools must find ways to infuse the present curriculum and school culture with instruction and modeling focused on thinking, communication, teamwork, and collaboration. Most importantly, every student, not just those enrolled in advanced classes, must have the opportunity to be exposed to such instruction. Recent high school and college graduates are finding that regardless of their career choice or post-secondary schooling experience, the world is demanding the same use of skills, flexibility, and knowledge.

A logical response to America's demand is the implementation of grade-level projects in our schools. Project-based programs like Senior Project not only expose every student to imperative thinking and communication skills, but they also demand the application of those skills. Additionally, Senior Project instills a sense of responsibility, personal incentive, persistence, and initiative. Grade-level projects afford students the opportunity to realistically research and/or experience careers, personal interests, life choices, and global issues, giving each student a leg up on informed, post-secondary decision making.

According to a recent SERVE poll of college admissions officers, Senior Project may also give students an advantage when applying for university and college. Forty-one phone interviews were conducted with admissions officers from colleges and universities throughout the six states in the SERVE region (Alabama, Florida, Georgia, Mississippi, North Carolina and

South Carolina). The officers were asked whether they were aware or knew anything about Senior Project and whether they consider those types of programs in the admissions process (Taaffe, 2003). Overall, several of the officers were highly interested in the program and wanted to know more about it. As the public becomes more educated, college admissions departments will become more aware and will know to look for it on the applications. The greatest concern, however, is the level of inconsistency and variation between programs from school to school. Commonly agreed upon standards and program descriptions among Senior Project schools would be desirable. Also, officers were concerned about the level of subjectivity in the grading of the projects and the need for admissions staff to separately evaluate each project if it were included with a student's application materials (Taaffe, 2003). Table 5.1 breaks down admissions officers' responses concerning a project's influence on a student's acceptance.

Overall, the more selective universities and colleges were the most likely institutions to incorporate Senior Project as part of the admissions process. These schools have a greater tendency to seek outstanding student achievements, initiative, talents, and experience. Student competition to be accepted is just as high as the universities' competition to secure the students. The less selective colleges are more likely to consider the Senior Project in interviews and/or special case considerations. So far, all of these institutions are holding the students responsible for bringing the project to the admissions boards' attention through either the application or an interview process when applicable (Taaffe, 2003).

Table 5.1
Admissions Officers' Response to Senior Project as an Influence on the Application Process
(Taaffe, 2003).

	School Admission Considered:			
	Highly Selective (11 interviews)	Very Selective (8 interviews)	Selective (18 interviews)	Non-Selective (4 interviews)
# of Officers – Senior Project an overall advantage	8	4	6	0
% of Officers – Senior Project an overall advantage	73%	50%	33%	0%
# of Officers – Senior Project an asset in special consideration cases	0	3	5	2
% of Officers – Senior Project an asset in special consideration cases	0%	38%	28%	50%

The problem here is that many college applicants may not recognize the Senior Project as something exceptional to include. Most students perceive it to be a requirement – everyone had to do it. Additionally, students might have the perception that all high schools have a project requirement, therefore, assigning little significance to their own project. School staff in Senior Project schools must help students understand that grade-level projects are indeed outstanding resume builders.

Implementing Project-Based Instruction

In 2002, the North Carolina State Board of Education and Department of Public Instruction requested that SERVE investigate closer to home. SERVE surveyed 407 schools to determine who was currently implementing Senior Project or planned to in the future. Of the 330 schools which replied, thirty-two percent were implementing, 14% were considering, and 54% identified themselves as non-Senior Project schools. Sixty-six percent of the Senior Project schools had declared it as a graduation requirement (Egelson et al., 2003). Because 88% of the respondents implementing the program reported Senior Project was imbedded in the English department, one could easily conclude the high percentage is a result of the fact that English IV is a graduation requirement as well. Interestingly, of the schools surveyed, the greatest number of responses for, against or not decided about implementation came from schools with a senior population of 101-250 students (Egelson et al., 2003). This seems to indicate that the size of the school does not have a direct influence on the school's decision to implement a Senior Project program.

North Carolina schools are offering reasons for implementing Senior Project from the opportunity to teach and reinforce thinking skills to curing senioritis. Some reasons for not implementing were a lack of support, time and resources, and previous implementation issues

(Egelson et al., 2003). Frequently, school reform or new program implementation is a struggle at the secondary level. Though not impossible, it is difficult, as Ernest Boyer pointed out in a 1995 interview, because "children are less active, parents are less engaged, the schedule tends to be inflexible, and the curriculum more rigidly defined" (Merina, 1995, p. 7).

The following flowchart, Figure 5.1, illustrates a proposed implementation process for introducing project-based instruction into a high school community.

The key to Senior Project implementation is getting all stakeholders within the school community on board. The two most critical stakeholders are the parents and the students. The parents are the foundation for program support. When they recognize the benefits of a program and their children's achievement and success, parents are an awesome ally; however, if they are excluded or disenfranchised, the foundation will crumble. Research cited in this thesis indicates students are recognizing the need for rigorous, applicable instruction, and they must be included in curricular decision-making. Lower incidents of drop-out are noted in settings in which students are actively involved in the design of the program. Their involvement "appears to increase their commitment and the perceived relevance of the program in their eyes." Additionally, successful dropout prevention programs have a tendency to provide flexibility and adaptive strategies; both are inherent in Senior Project (Woods, p. 5).
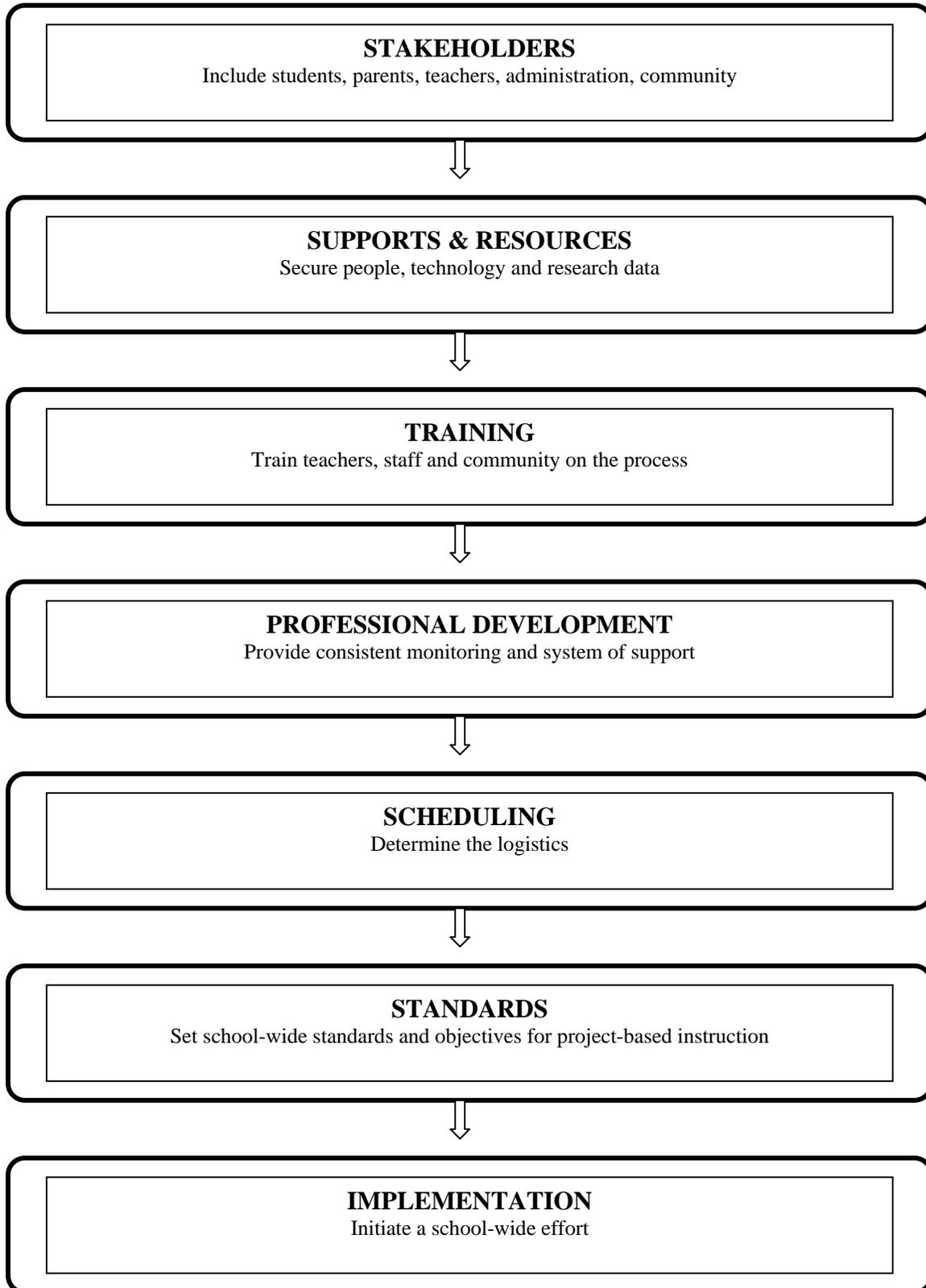
STAKEHOLDERS
Include students, parents, teachers, administration, community

⇩

SUPPORTS & RESOURCES
Secure people, technology and research data

⇩

TRAINING
Train teachers, staff and community on the process

⇩

PROFESSIONAL DEVELOPMENT
Provide consistent monitoring and system of support

⇩

SCHEDULING
Determine the logistics

⇩

STANDARDS
Set school-wide standards and objectives for project-based instruction

⇩

IMPLEMENTATION
Initiate a school-wide effort

Figure 5.1 Senior Project Implementation Flowchart

Intensive support and resources must be secured to protect the integrity and success of the project. These should include human, technological and textual resources such as SERVE network personnel, school and community mentors, evaluators, experts, staff from Senior Project schools, adequate technology and training, research data, testimonials, project-based curricula, etc. Again, support must be available to all stakeholders.

Training must be implemented for teachers, staff and community mentors and evaluators. Each key member of the Senior Project process must be adequately instructed about the practices of project-based instruction. Even more crucial is the training of teachers and students in individualized, learner-centered instruction. Transitioning from traditional lecture-based classrooms, even if occasional differentiation occurs, to a project-based program will be a paradigm shift for everyone in the school community, especially the students. Professional development for the staff must be carefully planned with consistent monitoring and a system of support, which includes reward and recognition. Coaching must be available for the students and parents in the form of individual conferencing and/or focus groups. One teacher who has implemented Senior Project in her classroom stated about the students, "Dealing with their fears and complaints was the most challenging part of implementing the project" (Lorenz, 1999, p. 80). Transition naturally breeds fear, and teachers must be equipped with the strategies to ease the fears of the students as well as their colleagues.

Adapting a project-based curriculum to fit the school's existing schedule and set of programs is a logistical challenge. Although the administrative staff has the ultimate decision in scheduling, all stakeholders should be included in this step of the process as well. Parents' and students' perspectives regarding the intricacies of scheduling and complying with state standards can be quite limited. Being involved in the planning will only intensify the community support

once they feel they have a clear picture of the options and have a true voice in the decision-making. Some, but not all, of the decisions to be made at this stage: Senior Project as a required elective class standing alone, Senior Project embedded in English IV or in the vocational department, English teachers as the guardians of the project, Senior Project committee membership, an appeals process, a reassessment process, time-management, and community mentor screening. This is the appropriate time to look to SERVE and other Senior Project schools for guidance and feedback. Multiple ideas abound. For instance, Cedarcrest High School in Washington pays substitute teachers to attend to classes while the staff take time off to grade project papers. Also, students who do not graduate by initially failing the paper component have the opportunity to bring their work up to the school's standard through independent study or summer school. Doing this results in a diploma, but the "F" remains on the transcript (Tomsho, 2005). A teacher in Michigan encouraged her students to look to the whole school's staff and the community for proofreaders. Even the principal and the superintendent found themselves editing senior projects (Lorenz, 1999). The key is finding the right strategies that will work most effectively for the school, community and climate.

One point concerning scheduling and student graduation credits is evident at Topsail High School in Hampstead, North Carolina. The principal of the school, Hugh F. McManus III, tries to work with students and their schedules in an attempt to maintain a positive culture within the school. Across the state, successful students who pass their required courses and electives are bogged down by their senior year with classes they don't need, often forcing them to select electives that are not interesting or applicable to their future plans. This often creates discipline issues within those classrooms. During the 2004-05 school year, McManus granted approximately 125 seniors from a class of 146 at least one free period for the year. At least 40

students were granted two free periods, meaning these students, with parental consent, had permission to leave campus during those periods. Some left for the beach; some went to lunch; others went to work; still others attended a community college course. If 86% of the senior class has at least one free period by twelfth grade, Senior Project as a stand-alone course becomes a very realistic option. North Carolina graduation requirements specify 28 credits to graduate – 14 state required courses and 14 school electives. On a block schedule, the average student has four chances to fail a course and still graduate with a diploma – the very same diploma with which the class valedictorian walks. This is not the definition of rigor. This does leave room, however, for a justified discussion concerning the implementation of a Senior Project program. Students and teachers alike are asking for increased elective opportunities, bringing the real world into the schools. Senior Project opens the world to the student, offering him/her the opportunity to elect a path.

The final step before school-wide implementation can be initiated is to explicitly define the standards and objectives of the project. At this point, the state has not mandated any state-wide standards. The school's stakeholders must determine the components, the descriptions, the hour and length requirements, the grading procedure, topic guidelines, re-evaluation guidelines, presentation and audience limitations, multi-media requirements, and ultimately, whether the Senior Project will be a requirement for graduation or not. Most critical is setting, communicating and upholding high standards.

Future Research Needs

Closing the achievement gap between genders and races has been a growing concern in the public school forum for a number of years. A recent report by the North Carolina Department

of Public Instruction published the testing achievements of 2003-04 graduates by ethnicity. The data reported the percentage of graduates in North Carolina who passed all five EOC tests currently being considered as graduation requirements. White students are surpassing their Black and Hispanic counterparts by 30.5% and 25.3% respectively. The data also shows a tremendous gap between students with disabilities and their peers, regardless of ethnicity. Only 15.4% of White students with disabilities, 3.2% Black, and 6.5% Hispanic are passing the exams. Tables 5.2 and 5.3 summarize the NCDPI findings (Fabrizio, 2004).

Grade-level projects could address the need for student-centered instruction while increasing all students' interest in developing the critical thinking skills essential for testing and achievement. Future research to determine any correlation between grade-level projects and a decreased achievement gap would include data on racial and gender achievement in Senior Project schools, project pass/fail rates, college application and admissions numbers, and continued longitudinal studies of post-secondary achievement of students exiting project-based secondary programs. This data collection could possibly determine if grade-level projects, implemented appropriately with equity and high expectations, would have the capability of leveling the playing field for every student.

Table 5.2

Percentage of 2003-04 Graduates Passing All 5 EOC Exams (English I, Biology, Algebra I, US History, ELP) (Fabrizio, 2004).

Race	Graduates	Passed %	Passed n	1 SEM* %	1 SEM n	2 SEM %	2 SEM n
All	71,703	39.3	28,189	66.8	47,928	75.8	54,365
American Indian	878	28.8	253	60.8	534	76.4	671
Asian	1,596	43.0	688	64.0	1,022	71.4	1,140
Black	18,815	18.1	3,415	52.0	9,790	69.1	13,007
Hispanic	2,285	23.3	532	45.2	1,032	53.1	1,213
Multiracial	731	36.3	265	62.9	460	69.1	505
White	47,398	48.6	23,036	74.0	35,090	79.8	37,829

*SEM (Standard Error of Measurement)

Table 5.3

Percentage of 2003-04 Graduates With Disabilities Passing All 5 EOC Exams (Fabrizio, 2004).

Race	Graduates	Passed %	Passed n	1 SEM %	1 SEM n	2 SEM %	2 SEM n
All	5,253	11.2	587	33.6	1,767	51.3	2,693
American Indian	72	4.2	3	22.2	16	37.5	27
Asian	34	14.7	5	35.3	12	52.9	18
Black	1,679	3.2	53	17.8	299	38.6	648
Hispanic	93	6.5	6	31.2	29	40.9	38
Multiracial	38	15.8	6	50.0	19	65.8	25
White	3,337	15.4	514	41.7	1,392	58	1,937

While conducting their study on Senior Project in Southeastern schools, SERVE staff noted several students mentioning their guidance departments and extra-curricular clubs as significant influences on their post-secondary planning. Counselors and sponsors, being integral members of the school community, are stakeholders who would be involved in the planning and implementation process. Future research could determine the level of meaningful involvement guidance departments, student organizations and clubs might have in student personal growth and career exploration.

Finally, the question remains in Senior Project schools does the project come first or does a thinking, writing intensive curriculum? What is not known or determined by current research is whether project-based instruction affects a stronger emphasis of critical thinking and employability skills or if schools that already emphasize these skills are drawn to implementing Senior Project as reinforcement. Either way, data does conclude the need for high school reform in all aspects from culture to curriculum. The implementation of Senior Project is one way schools can bring rigor to classroom instruction and increase the relevance of instruction to the students' lives while forging and strengthening essential relationships within the entire school community. A renewed focus on the 3 Rs provides students the opportunity to gain and reinforce the skills necessary to adapt to and participate and compete in tomorrow's technological, global democracy.

BIBLIOGRAPHY

Angus, D. & Mirel, J. (1999). *The Failed Promise of the American High School 1890 – 1995.* New York: Teachers College Press.

Bafumo, M.E. (1999). Curriculum in Ernest Boyer's Basic School. *Education Digest, 64* (7), 4-7.

Bond, S., Egelson, P., Harman, P., & Harman, S. (2003). A Preliminary Study of Senior Project Programs in Selected North Carolina High Schools – March 2002. In *Three SERVE Studies: Examining the Implementation and the Impact of Senior Project.* (pp. 1.1-1.27). University of North Carolina at Greensboro.

Dunn, K. (2001). The Fourth-Year Itch. *Teacher Magazine, 12* (7), 12-14.

Egelson, P., Robertson, C., & Smith, S. (2003). North Carolina Senior Project Survey Results – 2002. In *Three SERVE Studies: Examining the Implementation and the Impact of Senior Project.* (pp. 3.1-3.26). University of North Carolina at Greensboro.

Fabrizio, L. (2004). *High School Exit Standards.* An Executive Summary presented at the October State Board of Education Meeting.

Fullan, M. (1993). *Change Forces: Probing the Depths of Educational Reform.* New York: The Falmer Press.

George, P., McEwin, C.K., & Jenkins, J. (2000). *The Exemplary High School.* New York: Harcourt College Publishers.

High School Exit Standards Survey. (2004). Retrieved December 13, 2004, from http://www.zoomerang.com/recipient/survey-intro.zgi?p=WEB223Z4QK9EC4.

Hood, A. & Egelson, P. (2005). *A Formative Evaluation of a High School Assessment Process.* A paper to be presented April 13, 2005 at the Annual Meeting of the American Educational Research Association in Montreal, Canada. Retrieved March 31, 2005, from http://www.seniorproject.net/research.php.

Lorenz, S., (1999). The Senior Project: The Best Idea I Ever Stole. *NASSP Bulletin, 83* (609), 77-85.

Merina, A. (1995). Back to Basics. *NEA Today, 14* (5), 7.

National Center for Education Statistics. *Dropout Rates in the United States: 2000.* Retrieved January 23, 2005, from http://www.nces.ed.gov/pubs2000/ droppub_2001.
North Carolina Action Plan for High School Innovation. Project R3: Rigor, Relevance

and Relationships. (n.d.). A Vision for High Schools in North Carolina that Succeed for All Students. An initiative of the North Carolina Education Cabinet and the Public School Forum of NC with the support of the Bill and Melinda Gates Foundation.

North Carolina Public Schools.org. (2005). *Efforts Underway to Encourage Students to Stay in School; 2003-04 Dropout Rates Released Today.* Retrieved March 30, 2005, from http://www.dpi.state.nc.us/news/04-05/020205.1.html.

Rudduck, J., Day, J., & Wallace, G. (1997). Students' Perspectives on School Improvement. In A. Hargreaves (Ed.), *Rethinking Educational Change with Heart and Mind* (pp. 73-91). Alexandria, VA: Association for Supervision and Curriculum Development.

Smith, T. (1995). High School Students Ten Years After "A Nation At Risk". Adapted from (T. Smith) *Condition of Education, 1994.* U.S. Department of Education.

Stoll, L. & Fink, D. (1996). *Changing Our Schools.* Philadelphia: Open University Press.

Taaffe, W. (2003). Senior Project College Admissions Survey – November 2001. In *Three SERVE Studies: Examining the Implementation and the Impact of Senior Project.* (pp. 2.1-2.18). University of North Carolina at Greensboro.

Tomsho, R. (2005, February 8). Senior Blues: When High Schools Try Getting Tough, Parents Fight Back. *The Wall Street Journal,* p. A1.

Tucker, M. (1999). How Did We Get Here, and Where Should We Be Going? In D. Marsh & J. Codding (Eds.), *The New American High School* (pp. 18-34). Thousand Oaks, CA: Corwin Press, Inc.

Wade, T. (1999). Fighting High School Senior Slump. *Phi Delta Kappan, 80*, 763-765.

Warner, M. (Facilitator). (2005). *National Education Summit on High Schools* [Television Broadcast]. Wilmington: C-Span.

Wolk, R. (2000). Real-World Lessons. *Teacher Magazine, 11* (8), 6.

Woods, E.G. (n.d.). Reducing the Dropout Rate. In *School Improvement Research Series.* Retrieved January 12, 2005, from http://www.nwrel.org/scpd/sirs/9/c017.html.

Appendix A. WISE Services General and Contact Information

Wise Individualized Senior Experience, Inc. (WISE Services) is a not-for-profit organization with administrative and mentoring expertise earned in two decades of work. The staff of practitioners, mentors, administrators, parents and graduates, assists schools in developing, maintaining and renewing high school senior experience programs tailored to the needs of individual districts.

The WISE program began at Woodlands High School (NY) in 1973 and celebrated its 25th Anniversary in 1998. WISE Services was founded in 1991 by the original WISE coordinators, who hoped to make the program available to other high school seniors.

Individualized senior experience programs offer a unique opportunity for partnerships between schools, community agencies and businesses to create a comprehensive learning experience.

Program Elements

High school students, under the mentorship of teachers and administrators, design projects that include internships with local community agency members or business people, intensive research, or cultural, artistic, performance-based projects.

During the school day, evenings and weekends, students devote significant time to work in their internships, research their topics, maintain written daily journals, discuss their topics with one another and meet with their mentors to explore and reflect upon project issues. Upon completion of the project, students submit their daily journals for evaluation and give oral presentations before a panel of students, teachers and community members.

The topics that can be explored in school-based experiential learning programs are innumerable because of the individualized nature of the projects. However, because of the focus on individual development of students and their project topics, design of a school's experiential program becomes critical. Opportunities must be built-in for shared reflection, mutual support, and community-building. Through group interaction, students discover skills, strengths and talents in each other not seen before.

WISE Services, a 501(c)(3) not-for-profit organization staffed by retired teacher-practitioners, assists schools in developing a comprehensive academic program tailored to local needs.

The WISE Organization

348 N. Midland Avenue Upper Nyack, NY 10960
(845) 353-2854
(845) 353-2838 fax
wiselindag@optonline.net email

Contact Us

348 N. Midland Avenue Upper Nyack, NY 10960
(845) 353-2854
(845) 353-2838 fax
http://www.wiseservices.org/index.html

President	**Executive Director**	**Program Coordinator**
Vic Leviatin	Linda Greene	Toni Abramson-Matthews
(914) 428-1968	(845) 353-2854	805-649-8149
vicwise@aol.com	wiselindag@optonline.net	twisewest@aol.com

WISE Schools to Date
As of March, 2005

The individual projects pages on this site are designed to encourage contact and exchange among coordinators, students, and mentors during their WISE journeys. The coordinators or faculty designated by each school will be the gatekeepers who will facilitate conversations about senior projects, student to student, and mentor to mentor. Sharing ideas, discussing obstacles, and trading resources will enrich the project experience for all the members of the WISE family. This site is a work in progress, and we welcome your suggestions for improvement.

First Year (programs are ongoing)

1972/73   Woodlands High School (NY)

1992/93   Croton-Harmon High School (NY)
Mamaroneck High School (NY)
Scarsdale High School (NY)

1993/94   Bellefonte High School (PA)
New Rochelle High School (NY)
NY School for the Deaf (at Woodlands)

1994/95   Berkeley High School (CA)
Concord-Carlisle High School (MA)
East Lyme High School (CT)
Tuckahoe High School (NY)
Wheeler High School (CT)

1995/96   Hendrick Hudson High School (NY)
Hollywood Hills High School (FL)
Nyack High School (NY)
Peekskill High School (NY)
Village School (NY)
Walter Panas High School (NY)

1996/97   Ithaca High School (NY)
NY School for the Deaf (NY/Fanwood)
RHAM High School (CT)
Staples High School (CT)

1997/98   Abraham Lincoln High School (Denver, CO)
Copaigue High School (NY)
East High School (Denver, CO)
Mahopac High School (NY)
J.P. Taravella High School (FL)

1998/99   Coginchaug High School (CT)
Evanston Township High School (IL)
Lyme-Old Lyme High School (CT)
Monument Mountain Regional High School (MA)
Nathan Hale-Ray High School (CT)

Rondout Valley High School (NY)
Stonington High School (CT)
Summit High School (NJ)
Westlake High School (NY)

1999/2000 Bronxville High School (NY)
Canton High School (CT)
Milken Comm. High School (LA, CA)
North Branford High School (CT)
Old Saybrook High School (CT)

2000/2001 Highland Park H.S. (NJ)
Locust Valley H.S. (NY)
New Canaan High School (CT)
Newton South H.S. (MA)
University Heights Secondary School (NY)

2001/2002 Christopher Columbus H.S. (NY)
Marjory Stoneman Douglas H.S. (FL)
Textron Chamber Academy (RI)
Tiospaye Topa School (Cheyenne River Res., SD)

2002-2003 Eastchester HS (NY)
Miramonte HS (CA)
Ossining HS (NY)
Saugerties HS (NY)
Stevens HS (SD)

2003-2004 Carmel HS (NY)
Cypress Bay HS (FL)
DeWitt Clinton HS (NY)
Hunter-Tannersville HS (NY)
Huntington HS (NY)
Park City HS (UT)
Putnam Valley HS (NY)

Appendix B. Senior Project and Partnership for Dynamic Learning General and Contact Information

Welcome to the only comprehensive, nationally recognized Senior Project® Center

Training, Services, and Staff Development

With 18 years of Senior Project experience and national perspective, the Partnership for Dynamic Learning Senior Project consultants provide clients with hands on program reality and expertise framed by research. Sessions are engaging and packed with Senior Project knowledge, policies, procedures, implementation strategies and performance-based teaching techniques.

Senior Project Phase I Training:

This intense full day seminar trains high school staffs for Senior Project implementation. By the end of the session the school's selected steering committee will be familiar with aspects of the policies, procedures, processes, problems, and solutions involved in a successful Senior Project program. Participants will leave this energetic, thoughtful seminar with both the "nuts and bolts" of how to implement the program as well as a synthesizing vision of how the Senior Project fits as the pivotal curriculum piece in the school's restructuring plans.

Senior Project Phase II Training:

This training session is designed exclusively for those veteran Senior Project schools that are working at upgrading the Senior Project program and its learning impact. Good Senior Project programs are in continuous evolution and design; because of the power and impact such a program can have, development and refinement are never done. The day will include not only sharing, but ideas which have been used across the nation to further develop, strengthen and improve the program. (Please note, only register for Phase II training if the participants have run a Senior Project program for at least two years.)

Related Senior Project Workshops:

Available Senior Project workshops encompass not only comprehensive Phase I and Phase II Senior Project training but also Senior Project related sessions including but not limited to

- Benchmarking to the Senior Project
- School to career
- Portfolios - digital and traditional
- Senior Project action plans
- Mentoring
- The senior set

- Student research and presentation skills
- Increasing staff involvement

For further specifics and fee estimates about individual Senior Project workshops or specifically designed Senior Project workshops for individual schools, do not hesitate to contact us:

Partnership for Dynamic Learning
Senior Project Center
4259 Innsbruck Ridge
Medford, OR. 97504   Phone or FAX: (541) 770-9483

Long Distance Coaching Service:

Re-inventing wheels can be frustrating! An onsite consultant visit, though not feasible, may seem like the only reasonable solution! Enter the long distance Senior Project coaching/mentoring service that provides a cost effective, focused solution. Access the knowledge of a Senior Project expert and address those issues that would be more easily resolved with the help of a knowledgeable coach. The topic(s), defined by the school prior to the call, allow the coach to preplan and be able to collaboratively address selected area(s) of interest, concern or exploration. Currently conducted via conference calls (coming soon online services), are arranged at the convenience of the client and may involve only the Senior Project Coordinator(s), Senior Project teacher(s) or include Steering Committees, Advisory Boards, administrators or selected staff.

Terms of Long Distance Coaching Agreement:

1) Initial agreement must represent a minimum of 5 or more hours of non-refundable Long Distance Coaching unless otherwise mutually agreed upon by the school and the Senior Project Center.

2) Coaching fee is $100 per hour, for a minimum of 5 hours with a minimum fee of $25 per call.

3) Initial agreement will include a one time 15% discount coupon that can be used towards purchasing support materials, OR Senior Project institute attendance for a team of 3 persons or more. In order for discount to be valid, coupon must accompany order or registration.

4) Long Distance Coaching agreement is valid for 1 year.

5) Procedure for Coaching Conferences: Scheduling of the coaching conferences is mutually arranged in advance by the client:

a. Client facilitates contact
b. Duration of call mutually determined prior to the call
c. Areas of probable focus defined

6) If unable to meet the scheduled coaching conference, client must call 2 hours prior to conference call to reschedule. If there is no notification, the scheduled number of hours will be deducted from the number of hours of the client's agreement.

7) Terms of renewal: The number of hours specified for this agreement must be used within the year. If these hours are used within the year and renewal of the agreement for more "Long Distance Coaching" is desired, the fee drops to $90.00 per hour thereafter. Renewals require a minimum of 5 hours unless otherwise mutually agreed upon by the school and the Senior Project Center.

For further information call (541) 770-9483 or contact us by email

Senior Project Manager™ Web-Based System:

Capstone projects, like the award winning Senior Project, have been mandated by several states, as a graduation requirement as well as being incorporated by hundreds of high schools and teachers seeking to actively engage the exit students in a culminating rigorous, relevant learning experience.

In response to some of the difficulties inherent in project-based learning, Partnership for Dynamic Learning has created a student-focused, web-based **Senior Project Manager™** specifically designed for Senior Project high schools. The web-based management tool effectively...

- Tracks each student's Senior Project work, improving accountability and time management responsiveness
- Provides appropriate stakeholders (parents, staff, and mentors) with visibility of each senior's work, progress and related communication
- Allows seniors, teachers, parents, mentors to interact, review work, comment and/or approve progress as appropriate
- Facilitates prompt feedback to students
- Increases ease of tracking of communication among staff, students, parents, mentors
- Fosters seniors' project management skills
- Simplifies processes by providing key information that is often time critical to Coordinators, teachers, administrators, parents and seniors
- Allows a showcase for student work

The **Senior Project Manager™** is included as part of Platinum level membership to the Senior Project Network™. Addtitional information is available by calling (541) 770-9483 or contact us by email

Appendix C. Senior Project Certification Process and Application Form

Senior Project Certification

Carefully designed, rigorous and relevant Senior Project programs impact more than just the senior year and the seniors. Built upon a strong framework of high expectations blending traditional skills with performance-based application, sophisticated programs raise not only graduation standards but influence student expectations, guide and refine district curricula strategies, and offer continued opportunity for significant community involvement. This level of program sophistication requires not only fidelity of implementation but policies and procedures that create long-term program quality and sustainability. Designed to reinforce and refine established programs, Senior Project Certification not only evaluates and validates veteran programs but also facilitates continued, rigorous development.

Backed by 18 years of Senior Project expertise, certification assesses the program's current status and provides focused, specific suggestions and strategies for strengthening weaknesses, stabilizing procedures and taking next steps. The Senior Project moves beyond compliance to commitment and shifts from "program" status to a sustainable and relevant high school reform initiative.

The Senior Project Certification process is most valuable for veteran programs of 3 years or more. However, using the certification guidelines or attending "certification training" creates a strong framework and guiding vision for programs being implemented.

The Senior Project Certification involves a thorough program examination incorporating the following processes:

- Initial application
- Required documentation prior to the visit
- Onsite visitation from a Senior Project Certifier
- Program review guided by a series of "Yes or Not Yet " criteria- (school must receive all "yeses" to initially be considered for certification eligibility.)
- Guided interviews supported with school documentation when possible (Groups to be interviewed: Administrators, Senior Project Coordinator, Senior Project Steering Committee/Advisory Board, Community members, students)
- Quality and content review of randomly chosen student portfolios
- Assessment of 10%-15% of randomly chosen Senior Project student research papers

The outcome of this process involves a thorough report citing specific documentation as well as supporting suggestions for improvement and growth. When all phases of the review process are completed, the report will be sent not only to the school but for review by the Certification Board. If the review supports certification, the superintendent, the principal and the State Department of Education will be notified. If certification is not awarded, the school will be notified with specific details pinpointing "not yet" status and offering detailed strategies for improvement. The school will have one year to improve the area(s) highlighted as "Not Yet."

Once certification is achieved, a school may successfully retain the seal of certification for 4 years by validating continued quality during an annual off site renewal process.

When completing the application process, please read and carefully complete the following processes. If you have any questions, do not hesitate to contact us:

www.seniorproject.net

seniorproject@charterinternet.com

Phone/Fax: 541-770-9483

4259 Innsbruck Ridge

Medford OR 97504

Appendix D. New Hanover County Schools Senior Project Research Paper Rubric

Research Paper Scoring Guide				
Mechanics and Usage				
Skill application demonstrates:	**1**	**2**	**3**	**4**
Correct usage and grammar				
Correct punctuation				
Correct spelling				
Complete sentences				
Agreement (clear use of reference, subject/verb)				
Content				
Skill application demonstrates:	**1**	**2**	**3**	**4**
Clear, focused, and challenging thesis				
Thoroughly developed topic				
Specific examples to support a thesis				
Evidence of a clear purpose that controls the paper				
Agreement (clear use of reference, subject/verb)				
Content that exhibits application of information				
Content that exhibits integration of prior knowledge and information acquired through research				
Form/Style				
Skill application demonstrates:	**1**	**2**	**3**	**4**
Highly engaging introduction and thoughtful, clear conclusion				
Clearly organized ideas				
Consistently strong and varied sentence structure and thorough paragraph development				
Sophisticated and vivid language appropriate to topic				
Information Literacy				
Skill application demonstrates:	**1**	**2**	**3**	**4**
Evidence of thorough search (sources represent variety and types)				
Documentation that exhibits correct MLA form				
Research information going beyond surface information				
Evidence of sorting and selecting				

1 - Highly Competent; 2 – Competent; 3 – Developing; 4 – Not Evident

Appendix E. New Hanover County Schools Product Requirements

The following must be included or apparent in the product that you choose to develop as a part of your senior project.

Application of Knowledge
- Application of knowledge gained from research
- Depth of knowledge

Product Development
- Product based on research paper
- Effective time management
- Variety of sources
- Verification items present and well organized
- Creativity

Risk Factor
- Risk/stretch/challenge is evident.

Appendix F. New Hanover County Schools Product Rubric

Senior Project Product Scoring Guide			
Criteria	**EE**	**ME**	**DNME**
Application of Knowledge			
Application of knowledge gained from research			
Depth of knowledge			
Product Development			
Product based on research paper			
Effective time management			
Variety of sources			
Verification items present and well organized			
Creativity			
Risk Factor			
Risk/stretch/challenge is evident.			
EE - Exceeds Expectations			
ME - Meets Expectations			
DNME - Does Not Meet Expectations			

Senior Boards:

You have reached the summit of your project. This final presentation represents the ultimate step in the Senior Project journey.

Component 1:

A speech which focuses on the research, the product, and self-evaluation. You will need to present to the judges information about your topic, your physical product, and the stages of your senior project journey.
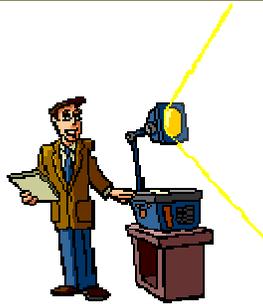
Component 2:

An interactive question/answer session with the panel of judges.

Professional Appearance

It is important to project the appropriate image to the judges. This will be, in most cases, the first time they have met you and you want to create a good first impression.

You do want:	You do not want:
to be neat.	to be casual.
to be clean.	to be sloppy.
to be tidy.	to be flamboyant.

Suggested Dress:

Males:	Females:
Suit & Tie	Dress
or	or
Slacks & Dress Jacket (Sports Coat)	Suit (slacks or skirt with coordinated top, vest,

Suits and Jackets should be tasteful in style.	and/or jacket)
Button down shirt with collar and tie. (Or a dress shirt appropriate to your suit.)	Dresses and skirts should be of tasteful and modest length and style.
Dress shoes (in other words, something other than tennis shoes.)	Blouses should coordinate with the suit, should be long enough to cover your midriff, and should be both tasteful and modest.
Minimal and tasteful jewelry/accessories.	Dress shoes.
	Minimal and tasteful jewelry/accessories.

Remember that you should dress as if you are going to a business meeting or job interview, not for a night on the town or a day at the beach.

What should your speech cover?

Click here for a checklist of options. You are not restricted to these elements alone, but this list should serve as a guideline or at least a place to start.

Reminders

Remember that your oral presentation should include an introduction, body, and conclusion.

Keep back-up copies of every piece of your Senior Project. This includes a back-up copy of your video.

Think about it seriously. No one can help you out if you lose the only copy of the video or anything else that you plan to use.

Please remember to make back-up copies of your diskettes also. Protect your Senior Project items.

Remember your tri-fold board. It should be visible from ten or fifteen feet away. It should be neat and visually pleasing.

Use colored paper behind each picture to help them stand out. Also, use colored paper behind all typed material. All written material must be typed.

Scoring Guide

Used by the judges during the presentations. Have someone watch you practice your presentation and act as a judge, scoring you on your content, delivery, and impromptu skills.

Appendix H. New Hanover County Schools Presentation Rubric

New Hanover County Schools

Senior Project Presentation Scoring Guide

Presenter _____

Explanation of Scores:

5 – Outstanding   2 – Below Standard

4 – Above Standard   1 – Not Evident

3 – At standard

					Content
5	4	3	2	1	Effective attention grabber – introduction
5	4	3	2	1	Clearly stated purpose
5	4	3	2	1	Speech controlled by purpose
5	4	3	2	1	Main ideas supported by accurate/appropriate details
5	4	3	2	1	Explanation of research paper and product link
5	4	3	2	1	Logical organization
5	4	3	2	1	Content balance between research/product/self-evaluation
5	4	3	2	1	Evidence of self-evaluation/self-reflection
5	4	3	2	1	Clear summary of research
5	4	3	2	1	Effective conclusion – closes entire speech
					Dress/Appearance
5	4	3	2	1	Professional appearance
					Delivery
5	4	3	2	1	Eye contact with audience members
5	4	3	2	1	Appropriate voice, volume, and rate
5	4	3	2	1	Evidence of speech practice; delivery beyond reading of note cards
5	4	3	2	1	Effective word choice
5	4	3	2	1	Effective gestures
5	4	3	2	1	Energy, enthusiasm, and personalization
5	4	3	2	1	Composure and sophistication
					Impromptu Skills
5	4	3	2	1	Direct and clear answers
5	4	3	2	1	Complete thoughts
5	4	3	2	1	Elaborated Answers
5	4	3	2	1	Appropriate language (avoids slang/clichés)
				Total Score: _____	

Appendix I. New Hanover County Schools Peer Review Guide

Peer Review Ratings

Speaker:_____

Peer:_____

3=Practically perfect
2=Not quite there, but will be there immediately
1=Yikes! Trouble looms on the horizon, but will be corrected immediately
NA=Not applicable at this time

_____ 1. **Attention grabber**

_____ uses a quotation

_____ uses facts

_____ uses an incident or story

_____ uses a question

_____ other

_____2. **Introduction**

_____ mentions topic for paper

_____ mentions topic for the physical project

_____ tells why you chose this topic

_____3. **No more than 2 minutes (3 to 5 major topics) from the research paper**

_____4. **How the research is related to the physical project**

_____5. **How this project has been a learning stretch for you**

_____ 6. **What you learned about yourself as**

_____ an independent learner

_____ a manager of time

_____ an organizer

_____ a calm problem solver

_____ a good communicator with others, especially those who are older, younger, etc.

_____ a presenter

_____7. **Problem(s) you may have encountered during the physical product**.

_____ 8. **Visuals:**

_____ Neat

_____ Readable

_____ Typed copy (if applicable)

_____ Visually pleasing (Suggestion: Use background colors for photos and labels so the pictures and information catch the judges' attention.)

_____9. **Makes eye contact**

_____10. **Projects voice appropriately**

_____11. **Speaks at the proper rate**

_____12. **Varies pitch of voice as needed**

_____13. **Uses transitions (to connect parts of speech smoothly)**

_____14. **Appropriate length** (8-12 minutes)

_____15. **Rarely looks at note cards**

_____16. **Evidence of practice outside of class**

***The best thing about your speech is

_____

***You need to work on