## High School Graduation Project Requirement Should Remain a Local School District Decision



Final Report to the Joint Legislative Program Evaluation Oversight Committee

Report Number 2010-01

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Program Evaluation Division
North Carolina General Assembly
Legislative Office Building, Suite 100
300 North Salisbury Street
Raleigh, NC 27603-5925
919-301-1404
www.ncleg.net/PED

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### NORTH CAROLINA GENERAL ASSEMBLY

### Legislative Services Office

George R. Hall, Legislative Services Officer

Program Evaluation Division 300 N. Salisbury Street, Suite 100 Raleigh, NC 27603-5925 Tel. 919-301-1404 Fax 919-301-1406 John W. Turcotte
Director

April 28, 2010

Representative James W. Crawford, Jr., Co-Chair, Joint Legislative Program Evaluation Oversight Committee

Representative Nelson Cole, Co-Chair, Joint Legislative Program Evaluation Oversight Committee Senator Daniel G. Clodfelter, Co-Chair, Joint Legislative Program Evaluation Oversight Committee Senator Fletcher L. Hartsell, Jr., Co-Chair, Joint Legislative Program Evaluation Oversight Committee North Carolina General Assembly Legislative Building

16 West Jones Street Raleigh, NC 27601

Honorable Co-Chairs:

Session Law 2009-60 suspended a statewide high school graduation project requirement until July 1, 2011 and directed the Program Evaluation Division to evaluate the cost and effectiveness of a statewide requirement. This evaluation analyzed information about the history, costs, and current status of culminating projects in North Carolina high schools to inform the advisability of reinstating a statewide requirement.

I am pleased to report that the Department of Public Instruction, State Board of Education, and public high schools and school districts cooperated with us fully and were at all times courteous to our evaluators during the evaluation.

Sincerely,

John W. Turcotte

Director

April 2010 Report No. 2010-01

# High School Graduation Project Requirement Should Remain a Local School District Decision

### **Summary**

**Evaluation purpose.** On its own authority in 2005, the State Board of Education required all public high school students, starting with the class of 2010, to complete a senior project in order to graduate. Session Law 2009-60 suspended the statewide requirement until July 1, 2011 (starting with the class of 2015) and directed the Program Evaluation Division to evaluate the cost and effectiveness of a statewide high school graduation project requirement.

North Carolina Graduation Project model. The State Board of Education mandated that schools implement the requirement in accordance with the Department of Public Instruction's *Implementation Guide*. The *Implementation Guide* defines the Graduation Project as a performance-based assessment of students' ability to integrate knowledge, skills, and performance within a topic area of their choosing. Students complete a paper, product, presentation, and portfolio as part of the project. The Graduation Project was intended to be implemented school-wide, rather than in one content area, and over four years, rather than in the senior year.

Although 69% of schools require some version of a culminating project, very few follow the Graduation Project model. The Program Evaluation Division found the majority (69%) of North Carolina high schools required students in the class of 2010 to complete a culminating project, but very few schools followed the Graduation Project model as prescribed by the Implementation Guide. Each school spent an average of \$7,214 on its version of the requirement in the 2008-09 school year.

Due to insufficient empirical evidence of outcomes, statewide implementation would not be worth the \$6.6 million investment required. Although there is anecdotal support for culminating projects, there is no compelling empirical evidence that completing a project achieves intended student outcomes. At present, the investment and effort that would be required for statewide implementation of the Graduation Project cannot be justified. However, the Program Evaluation Division did not find evidence to support prohibiting individual schools and school districts from offering a graduation project experience. Proponents of culminating projects reported that they provided a unique learning opportunity for students and encourage community involvement in schools.

**Project requirement should remain a local school district decision.** The Program Evaluation Division recommends the North Carolina General Assembly direct the State Board of Education to delegate authority to school districts to decide whether to implement a high school graduation project requirement.

### Scope

In 2009, the North Carolina General Assembly suspended a statewide mandate requiring students in the class of 2010 to complete a high school graduation project. This legislation also directed the Program Evaluation Division to evaluate the cost and effectiveness of a statewide requirement. This evaluation analyzed information about the history, costs, and current status of culminating projects in North Carolina high schools to inform the advisability of reinstating a statewide requirement.

This evaluation addressed three central research questions:

- What is the proposed model for the statewide high school graduation project?
- What are the arguments for and against a statewide requirement?
- What would be the cost of a statewide requirement?

The Program Evaluation Division collected data from several sources, including a survey of all public high schools in North Carolina and site visits at a sample of schools and school districts that had a culminating project requirement in place before the statewide mandate. The Division collected additional data from

- the State Board of Education;
- the Department of Public Instruction;
- public high school and district administrators;
- teachers, students, and project mentors;
- organizations representing secondary education, post-secondary education, and business interests;
- the SERVE Center at the University of North Carolina at Greensboro and the Senior Project® Center;
- other states with statewide high school graduation project requirements; and
- studies on high school culminating projects.

### **Background**

Education organizations at the national level have urged high schools to incorporate a series of special skills, which they term "21st century skills," into curricula to prepare students for post-secondary education, the workforce, and society. Among these groups, the Partnership for 21st Century Skills has identified six key elements of 21st century skills:

- core subjects identified by the No Child Left Behind Act of 2001;
- 21st century content (e.g., global awareness; financial, economic, business, and entrepreneurial literacy; civic literacy; and health and wellness awareness);
- learning and thinking skills;
- information and communications technology literacy;
- life skills; and
- 21st century assessments, which include standardized testing along with classroom assessments.

<sup>&</sup>lt;sup>1</sup> 2009 NC Sess. Laws, 2009-60.

The Partnership for 21st Century Skills, of which North Carolina is a partner state, encourages high school reform efforts to incorporate the use of senior-year projects to teach and assess recommended skills.

The concept of requiring seniors to complete a culminating project was formalized by Far West EDGE in Medford, Oregon in 1986. This group trademarked the Senior Project® model, which features completion of a paper, project, presentation, and portfolio as part of the senior English course. The Senior Project® Center provides training, technical assistance, and resources to schools and school systems that implement the project.

A small number of states require all high school students to complete a culminating project that integrates knowledge, skills, and performance. Idaho, Ohio, Pennsylvania, and Washington have or are in the process of implementing statewide culminating project requirements. Two other states—Rhode Island and South Dakota—recognize a graduation project as one of several ways of fulfilling a capstone or proficiency-based graduation requirement. Other states recognize students who complete culminating projects: Hawaii plans to award a recognition diploma, Louisiana provides academic or career and technical diploma endorsements, and Texas recognizes distinguished achievement for students that complete culminating projects.

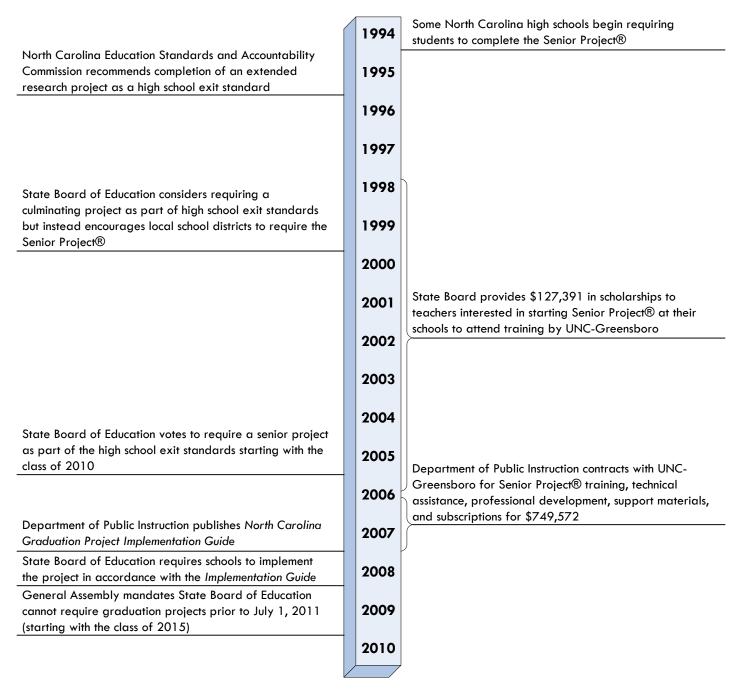
#### History of Culminating Projects in North Carolina

Exhibit 1 shows a timeline of major events related to culminating projects in North Carolina high schools. Some North Carolina high schools began requiring students to complete the Senior Project® as early as 1994. In 1995, the North Carolina Education Standards and Accountability Commission recommended the State Board of Education require students to demonstrate their ability to apply knowledge and skills through an extended research project. The State Board of Education passed new student accountability standards in 1999, including an exit exam for high school students. At that time, the State Board of Education considered but decided not to include a senior project as part of the high school exit standard due to concerns that success would be difficult to measure. Instead, the State Board of Education encouraged school districts to require senior projects at the local level by providing \$127,391 between 1998 and 2006 in training scholarships to teachers interested in starting the Senior Project® at their schools.

In 2005, the State Board of Education reexamined the idea of requiring students to complete a senior project. At that point, the State Board of Education modified the North Carolina High School Exit Standards, citing goals of adding rigor and relevance to the high school experience and preparing students for a globally competitive world. In addition to requiring proficiency on five end-of-course assessments, the new exit standards required all public high school students to complete a senior project in order to graduate. The State Board of Education endorsed statewide implementation because it wanted to make the experience available to all students, not just those attending schools already requiring a culminating project.

The State Board of Education made the culminating project a graduation requirement starting with the class of 2010, but Session Law 2009-60 mandated the State Board of Education not require any student to prepare a high school graduation project as a condition of graduation from high school prior to July 1, 2011 (starting with the class of 2015).<sup>2</sup>

Exhibit 1: Timeline of Major Events Related to Culminating Projects in North Carolina High Schools



Source: Program Evaluation Division based on State Board of Education minutes and interviews with Department of Public Instruction and Senior Project® Center staff.

<sup>&</sup>lt;sup>2</sup> Because preparation of the North Carolina Graduation Project begins in ninth grade, the Department of Public Instruction interpreted Session Law 2009-60 to delay the requirement until the class of 2015, which will be ninth graders in the 2011-12 school year.

Between January 2006 and October 2007, the Department of Public Instruction spent \$749,572 on Senior Project® training, technical assistance, and resources for schools through the state's eight regional education service alliances. However, in August 2007, the Department of Public Instruction published an *Implementation Guide* for school districts, which stated "The State Board of Education wanted to build upon the successes of the Senior Project® concept," but "the Board's shift in philosophy resulted in a more comprehensive design entitled the North Carolina Graduation Project."

The State Board of Education's rationale for moving away from the Senior Project® model was based on recommendations from the North Carolina Education Standards and Accountability Commission, the North Carolina Business Committee for Education, and schools and school districts that wanted flexibility in implementation. The State Board of Education issued a policy statement in 2008 requiring schools to implement the Graduation Project in accordance with the *Implementation Guide* because some high schools were implementing the Senior Project® model instead.

Like the Senior Project®, the Graduation Project is a performance-based assessment of students' ability to integrate knowledge, skills, and performance within a topic area of their choosing. Specifically, students engage in the following skills: computer knowledge, employability, information retrieval, reading, writing, research, teamwork, and thinking/problem solving. Students must complete four major components:

- a research paper demonstrating research and writing skills;
- a product created through the use of knowledge and skills;
- an oral presentation of project work to a review panel that grades their performance; and
- a portfolio in which they document tasks, record reflective thinking and insights, and demonstrate responsibility for learning as work progresses through the entire project.

Although the Graduation Project is modeled closely after the Senior Project®, it differs in two key features. First, unlike the Senior Project®, which requires students to complete the four components as part of their senior English course, the Graduation Project is a four- or five-year high school experience that culminates in the graduation year. Second, the Graduation Project is a school-wide responsibility; it is not meant to be housed within one classroom or content area.

### **Findings**

Finding 1. Although most North Carolina high schools and school districts have implemented a culminating project using existing resources, the initial cost of statewide implementation of the North Carolina Graduation Project is estimated at \$6.6 million.

The Program Evaluation Division surveyed all public high school principals<sup>3</sup> to determine how many schools required some version of a graduation project for the class of 2010 and which components they required. The survey yielded a response rate of 86% (518 out of 602). The majority of

<sup>&</sup>lt;sup>3</sup> Principals of high schools that did not have grades 9 through 12 or only served special populations were not included in the survey.

principals responding to the survey (69%) reported their schools required students in the class of 2010 to complete some version of a graduation project as part of their exit standard. Compared to high schools without a requirement, schools with a culminating project:

- had a lower average student enrollment (694 versus 887 students),
- were more likely to be located in rural counties (65% versus 44%),
   and
- had a higher percentage of students receiving free or reduced lunch (44% versus 39%).<sup>4</sup>

Based on the State Board of Education's policy statement requiring schools to implement the North Carolina Graduation Project in accordance with the *Implementation Guide*, the Program Evaluation Division anticipated that high schools requiring a culminating project for the class of 2010 would have the following features:

- students complete four components (paper, product, presentation, and portfolio);
- students start projects in ninth grade or before; and
- projects are a part of courses other than English.

Very few schools requiring a project incorporated the same elements as the Graduation Project model, as prescribed by the Implementation Guide. Exhibit 2 shows the percentage of schools surveyed that had implemented specific components of the Graduation Project model. Of the 360 schools with a requirement, 73% (n=264) implemented all four components, but only 6% (n=21) implemented the four components in courses other than English starting in the ninth grade or before.

#### Exhibit 2

High Schools' Culminating Project Requirements Differ from the North Carolina Graduation Project

Components of North Carolina Graduation Project	Percentage of Surveyed Schools
Community/faculty act as mentors on student projects	82%
A teacher or staff member serves as the graduation project coordinator	77%
Students complete four components	73%
Students start projects in ninth grade or before	22%
Projects are a part of courses other than English	19%
Students complete four components starting in ninth grade or before in courses other than English	6%

Source: Program Evaluation Division based on survey responses from public high school principals reporting a culminating project requirement (n=360).

High schools that require culminating projects have implemented them with existing resources. School administrators, teachers, and parents have expressed concerns that the Graduation Project is an unfunded mandate. Beyond the initial money spent on training teachers in the Senior Project® model, the State Board of Education has not provided additional funding to schools or school districts to implement the Graduation Project model.

<sup>&</sup>lt;sup>4</sup> The statistical significance for all three comparisons was p<.05.

The Program Evaluation Division surveyed principals in school districts that required some version of a graduation project before the statewide mandate in 2005 to determine implementation costs; the survey yielded a response rate of 56% (65 out of 116). As shown in Exhibit 3, survey responses indicated schools spent an average of \$7,214 on their requirement in the 2008-09 school year.

#### Exhibit 3

Average Costs for Culminating Projects in the 2008-09 School Year Among Surveyed Schools

Cost Categories	Average Costs of Surveyed Schools	
Average total cost per school	\$	7,214
Coordinator salary/bonus	\$	5,684
Printing, postage, and supplies	\$	657
Parties, meals, and celebrations	\$	293
Substitutes for teachers and staff	\$	265
Training	\$	183
Mentor/community panel rewards	\$	67
Financial support to students	\$	40
Mentor background checks	\$	1 <i>7</i>
Travel and other costs	\$	8

Note: Out of 65 schools, only 3 provided cost data for mentor background checks, but another 16 reported that they performed them and did not have a cost associated with them.

Source: Program Evaluation Division based on a survey of public high school principals (n=65).

The largest single cost for schools to implement the requirement was coordinator salary or bonus. Schools with an unpaid graduation project coordinator spent less to implement the requirement than schools with a paid coordinator (average costs of \$1,361 versus \$35,960). Although almost all high schools (97%) responding to the survey had a designated graduation project coordinator, very few schools (n=11) compensated this individual specifically for this role.

Results from a Program Evaluation Division survey of administrators in school districts that required some version of a graduation project before the statewide mandate indicated additional costs for the culminating project were incurred at the school district level. The survey yielded a response rate of 58% (15 out of 26). School districts spent on average \$708 per school. Because of its size in comparison to the other school districts, Charlotte-Mecklenburg Schools was excluded from the average; it had significantly higher costs per school (\$6,052) because the district paid for mentor background checks, a district-level coordinator, and publication of an informational brochure for all parents.

The initial cost of statewide implementation of the Graduation Project is estimated at \$6.6 million. The estimated cost of implementing a statewide

<sup>&</sup>lt;sup>5</sup> This difference was statistically significance at p<.05.

high school graduation project requirement was based on several assumptions, which are described in detail in Appendix A. Coordinator compensation (\$5.1 million) and printing, postage, and supplies costs (\$395,514) were calculated on a per school basis. The cost of mentor background checks (\$224,736) was based on the number of students in the class of 2015. District costs (\$81,420) were calculated on a per district basis. A one-time cost for training and technical assistance was estimated at \$749,572. The Program Evaluation Division estimates the on-going annual cost of operating the Graduation Project statewide would be around \$5.8 million per school year. Based on these on-going costs, the average cost of the Graduation Project for the class of 2015 (N=112,368) would be \$52 per student.

## Finding 2. Studies examining student outcomes associated with completing culminating projects are limited and have produced mixed results.

Determining whether statewide implementation of a graduation project requirement is advisable requires an examination of the merits of the intervention itself. Even the most inexpensive initiative is not worth implementing if there are no clear benefits.<sup>6</sup> Because the concept of requiring students to complete culminating projects has been around since at least 1986, the Program Evaluation Division expected to find empirically rigorous studies that examined whether students who complete culminating projects achieve intended outcomes.

According to the North Carolina Graduation Project Implementation Guide, short-term outcomes for students completing the North Carolina Graduation Project include the following 21st century skills: computer knowledge, employability, information retrieval, reading, writing, research, teamwork, and thinking/problem solving. There have been no studies to determine if students who complete the Graduation Project achieve the short-term outcomes described in the Implementation Guide.

The design of studies that have examined similar short-term outcomes related to the Senior Project® are not rigorous enough to provide evidence of effectiveness.<sup>7</sup> According to the United States Department of Education, the quality and quantity of evidence regarding an intervention determines if it is backed by "strong" evidence that it will improve education outcomes.<sup>8</sup>

 The quality of evidence needed to establish strong evidence of effectiveness is randomized controlled trials that are well-designed and implemented. Randomized control trials are studies that

<sup>&</sup>lt;sup>6</sup> The Program Evaluation Division has issued several reports highlighting the need to link outcome measures to funding decisions: Improving Regional Economic Development through Structural Changes and Performance Measurement Incentives (May, 2008); North Carolina's Water and Wastewater Infrastructure Funding Lacks Strategic Focus and Coordination (January, 2009); and Accountability Gaps Limit State Oversight of \$69.4 Million in Grants to Non-Profit Organizations (November, 2009).

<sup>&</sup>lt;sup>7</sup> Whether or not Senior Project® outcomes should be extrapolated to Graduation Project outcomes is debatable, but Senior Project® data are the only empirical data available that shed light on what a culminating project could be expected to yield.

<sup>&</sup>lt;sup>8</sup> U.S. Department of Education, Institute of Education Sciences, National Center for Education Evaluation and Regional Assistance. (2003, December). *Identifying and Implementing Educational Practices Supported by Rigorous Evidence: A User Friendly Guide*. Retrieved from http://www2.ed.gov/rschstat/research/pubs/rigorousevid/rigorousevid.pdf.

- randomly assign individuals to an intervention group or to a comparison group; they evaluate whether the intervention itself, as opposed to other factors, caused observed outcomes.
- The quantity of evidence needed to establish strong evidence of effectiveness is randomized controlled trials at more than one site and at sites that represent typical school settings.

Only three studies have examined short-term outcomes related to the Senior Project®; none of them had randomized designs. One study<sup>9</sup> matched four North Carolina high schools that had required the Senior Project® for at least four years to four North Carolina high schools without a project requirement on academic performance, diversity, need, and location. This study was conducted by SERVE, a research center at the University of North Carolina at Greensboro, which acquired the rights to the Senior Project® in 2002.

SERVE contracted an evaluator to conduct two other studies—a pilot-year study<sup>10</sup> and year-two study<sup>11</sup> comparing two South Carolina high schools that were randomly assigned to start the Senior Project® to two schools without the project that were randomly selected from similar locations. Although this design sounds strong, a study that randomizes schools rather than students must use schools as the unit of analysis. However, because the pilot-year and year-two studies only had two schools in the intervention group and two schools in the comparison group, they used students as the unit of analysis.

Because none of the above studies were randomized control trials, the conclusions that can be drawn from these studies are limited. Differences in outcomes may reflect other underlying features about the schools and students participating in the studies more than the influence of the Senior Project®. Existing research on the effectiveness of the Senior Project® should be considered comparison-group studies. Educational research that has compared results from randomized controlled trials to comparison-group studies has found that comparison-group studies produce inaccurate estimates of an intervention's effect. Furthermore, none of the three studies were published in peer-review journals but rather by the institution that owned the rights to the intervention. Based on these shortcomings, the three studies do not provide evidence for the effectiveness of the Senior Project®.

In addition to design limitations, studies that have examined short-term outcomes related to the Senior Project® have produced mixed results. The three studies that examined the effectiveness of the Senior Project® used students' self reports to assess their attitudes about learning and project skills, confidence in project skills, perceived learning of project skills, and perceived emphasis on skills taught in the classroom. Across the studies, results were mixed. For example,

<sup>&</sup>lt;sup>9</sup> Bond, S., Egelson, P., Harman, P., & Harman, S. (2002). A Preliminary Study of Senior Project Programs in Selected North Carolina High Schools. Greensboro, NC: SERVE. Retrieved from <a href="http://srvlive.serve.org/SDImprov/products4.php">http://srvlive.serve.org/SDImprov/products4.php</a>.

<sup>&</sup>lt;sup>10</sup> Lopez, L. (2004). Senior Project: Effectiveness Study in South Carolina. Pilot Year Report (2003-2004). Chapel Hill, NC: SERVE. Retrieved from http://srvlive.serve.org/SDImprov/products4.php.

<sup>&</sup>lt;sup>11</sup> Lopez, L. (2005). Senior Project: Effectiveness Study in South Carolina. Year Two (2004-2005) Final Report. Chapel Hill, NC: SERVE. Provided by author.

- One study found students at Senior Project® schools had more positive attitudes about school learning, but another found no differences on the same measure.
- Although two studies found students completing the Senior Project®
  had greater confidence in giving a speech and writing for various
  audiences, these same studies found no difference in students'
  confidence in several other project skills (e.g., organizing time,
  finding and using new information, studying a new topic or doing a
  project).
- Although students at Senior Project® schools reported teachers emphasized writing skills more than at comparison schools, students reported no differences in the emphasis on other 21st century skills (i.e., computer knowledge, employability, information retrieval, reading, teamwork, and thinking/problem solving).

Appendix B provides a more detailed description of the measures on which differences and no differences were found across the three studies for students and teachers.

Self-reported outcomes should be corroborated by objective measures to provide strong evidence of effectiveness. One of the three studies assessed students' scores on the Writing Process Test and found no difference between scores at Senior Project® versus comparison schools. The other two studies assessed students' performance on a reference skills assessment: one study found no difference in scores, and the other found students at Senior Project® schools had lower scores than students at comparison schools.

In sum, any benefits associated with completing the Senior Project® cannot be discerned from inconclusive results across only three studies lacking empirical rigor. The results of these studies suggest students at comparison schools learn 21st century skills from other sources besides the Senior Project® and/or students at Senior Project® schools learn these skills at the same rate as students at comparison schools.

There have been no studies to determine if students who complete the Graduation Project achieve the long-term outcomes described in the Implementation Guide. Long-term outcomes for students completing the Graduation Project are functioning in a globally competitive world, leading to success in workplaces, higher education, communities, and life. These outcomes are difficult to define and measure because they are broad and vague. To date, no studies have compared students at Senior Project® schools to students at schools without the project on these outcomes. The only data that come close to assessing these outcomes were students' responses to questions about their future plans in two of the three studies discussed above. Neither study found differences in students' immediate plans after high school, educational aspirations, nor type of work desired.

## Finding 3. Support for culminating projects is based on anecdotes and self reports that the projects provide a unique learning opportunity.

The Program Evaluation Division heard numerous anecdotes about successful culminating projects. Both students and teachers relayed stories of students finding jobs based on the contacts they made during their projects. Teachers described circumstances where students struggling with behavioral or developmental issues surpassed everyone's expectations and inspired others. Because anecdotal evidence is not necessarily representative of a "typical" experience (i.e., only the most salient examples are conveyed), the Program Evaluation Division used quantitative and qualitative data collection methods to discern arguments for a statewide requirement. The following themes emerged from several forms of data collection: a survey of all public high school principals in North Carolina; site visits at a sample of schools and school districts that had a culminating project requirement in place before the statewide mandate and a survey of recent graduates and project mentors from those schools; and queries to organizations that represent secondary education, postsecondary education, and business interests.

"Culminating projects offer high school students a learning experience that may not be captured by the traditional curriculum." Public high school principals surveyed by the Program Evaluation Division were asked what they thought were the strongest reasons for having a statewide graduation project requirement. As shown in Exhibit 4, the most popular reasons for a statewide graduation requirement were the learning opportunities it would provide to students (e.g., allows students to demonstrate integration of knowledge, performance, and skills; gives students a chance to apply knowledge outside of the classroom, provides students with a project-based experience). According to North Carolina Independent Colleges and Universities, graduation projects have the potential to provide an opportunity for students to show they can process facts and ideas to create a project, which are skills they will need in college.

### Exhibit 4

Principals' Agreement with Reasons for Having a Statewide Graduation Project Requirement

Reasons for Statewide Requirement	Percentage Agreement
Allows students to demonstrate integration of knowledge, performance, and skills	57%
Provides students with a relevant learning opportunity	43%
Gives students a chance to apply knowledge outside of class	37%
Provides students with a project-based experience	37%
Moves students to a higher level of engagement in learning	30%

Source: Program Evaluation Division based on a survey of public high school principals (n=518).

According to proponents of culminating projects, graduation projects provide a unique opportunity for students to explore a topic of their choosing, which may increase their interest in school. Some principals agreed a graduation project provides students with a relevant learning opportunity (43%) and moves students to a higher level of engagement in

learning (30%). During site visits at high schools requiring a culminating project, teachers in focus groups explained the projects are "the one time when they are not going to tell students what to do" and "the first time students feel they own what they produce."

Supporters of culminating projects reported that if students choose a topic that is of professional interest to them, they may determine whether a career path or course of study continues to appeal or no longer appeals to them. On a Program Evaluation Division survey of recent graduates, several alumni reported their graduation project prepared them for the "real world" and for college. Both students and teachers reported that one of the biggest lessons learned from completion of a graduation project was time management. At all six site visits, the Program Evaluation Division heard of the "tremendous" sense of accomplishment students felt after completing a large-scale project. Teachers at one school explained, "It's the happiest you will see students besides graduation day."

"Graduation projects encourage businesses and communities to get involved in schools." According to the North Carolina Business Committee for Education, a "graduation project represents the 'first best chance' for high school students to demonstrate competency in skills and knowledge that are in demand across the nation and around the world." This committee strongly supports a culminating project requirement and has asked its members to get involved through job shadowing, mentoring, advising, and judging presentations in their communities. According to the committee, graduation projects provide opportunities for business leaders to support education in North Carolina by investing their time, experience, and knowledge.

School personnel reported that graduation projects encourage students to reach out to the community and for the community to get involved in schools. At many schools, a key component of a culminating project is spending time with a mentor with expertise in the student's topic area. Students identify and connect with a faculty, community, or virtual mentor. According to teachers and administrators, a graduation project may be the first time students interact with community members beyond their family and friends. As a result, students learn social skills, such as appropriate phone etiquette and how to write thank-you notes and address envelopes.

If students choose a topic of professional interest, they may shadow someone in the field, meet potential employers, and determine their level of interest in a career path. For example, one mentor who had two students complete graduate-level degrees in athletic training and had two others in college in this field commented, "They went into it with their eyes open as to the amount of work involved, the importance of this career, and the responsibility this career entails." The experience can be rewarding to mentors also. A wildlife officer who served as a mentor stated, "The highlight for me was when the student began to realize the impact poaching has on our community and the wildlife."

Community members get involved in graduation projects through their roles not only as mentors but also as judges. Students present their work to a panel of judges composed of community members, which is often a unique experience for them. Teachers explained that students are often very

nervous before their presentations, but they experience a great sense of accomplishment once they finish, especially when they receive compliments from adults in the community. According to school administrators and teachers, graduation projects offer the best opportunity for schools to show off to their communities. "Presentation night" is often a big event at schools: seniors dress up, younger students escort judges around the building, and there may be food and entertainment.

## Finding 4. The North Carolina Graduation Project lacked necessary elements for effective statewide implementation.

The idea of requiring students to complete a graduation project started at the local level in North Carolina, with individual schools and districts requiring a culminating project as early as 1994. The State Board of Education followed this local effort for a decade before voting to mandate the requirement at the state level in 2005. The decision to make a culminating project a statewide graduation requirement was consistent with the State Board of Education's goal of ensuring an equitable education for all students. Whereas the State Board of Education determines graduation policies, the Department of Public Instruction is the agency charged with implementing those policies.

Statewide implementation of the North Carolina Graduation Project hit stumbling blocks that led to a legislative mandate suspending it. The mandate suspending statewide implementation was based on objections from some stakeholders, but shortcomings that gave rise to those objections led the Program Evaluation Division to question whether the implementation plan had been adequate.

To address this question, the Program Evaluation Division reviewed literature and interview data on successful program implementation of education initiatives in general and, in some cases, the Graduation Project in particular. This review identified the following key elements for program implementation:

- program model,
- needs assessment,
- pilot sites,
- stakeholder engagement,
- centralized support, and
- evaluation.

The Department of Public Instruction failed or has yet to complete each of these elements.

To provide an equitable education opportunity, implementation of a statewide initiative must include basic elements, such as a clear idea of the program model. A clear model for a program determines which outcomes best reflect success and guides the selection of appropriate outcome measures for evaluation. An essential model component is a program's overarching goal that guides program activities and the selection of appropriate outcomes.

When the Program Evaluation Division requested a goal statement for the Graduation Project, the Department of Public Instruction referred the Division to the North Carolina Graduation Project Implementation Guide. However, the Implementation Guide yielded no consistent goal statement. Still seeking to understand the fundamentals of the model, the Program Evaluation Division requested that the Department of Public Instruction provide a logic model that reflected the program's goal, inputs, activities, outputs, and intended outcomes. The department responded that it had not developed a model but it would work with the Program Evaluation Division on one. When the department provided a goal statement for the model, it described a process (i.e., the project would provide a learning opportunity) rather than intended outcomes for program participants. Ultimately, the Program Evaluation Division suggested an outcome-related goal statement and created the logic model that appears in Exhibit 5; the department subsequently approved it.

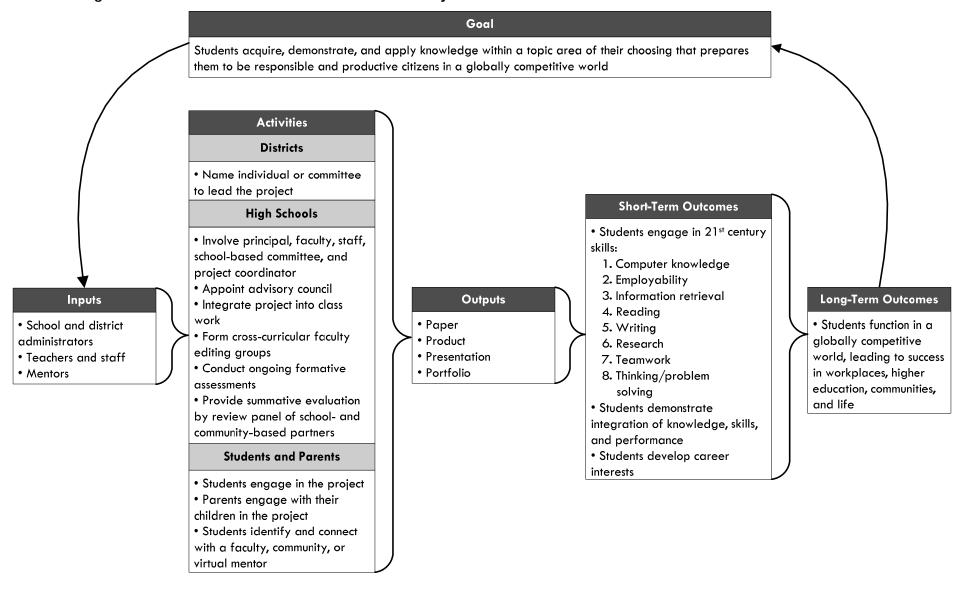
The lack of a concise goal statement or identification of measurable, long-term student outcomes to assess success (beyond completing the project) jeopardized program implementation, especially for a program slated to go statewide and intended to complement the state's Accountability and Curriculum Reform Effort. The resulting lack of clarity also may have contributed to resistance to the model as expressed by school administrators, teachers, and parents in a survey conducted by the Department of Public Instruction in 2009. In an interview with the Program Evaluation Division, an administrator compared implementation of the Graduation Project to "building a plane and flying it at the same time."

Needs assessments facilitate implementation in schools and districts by determining the gap between "what is" and "what should be." Late adopters (i.e., schools or districts that did not yet have a graduation project requirement) may have required support to train teachers, communicate clearly with stakeholders, get the project up and running, and create an infrastructure to sustain the project. A needs assessment would have documented their perceived needs. In addition, needs assessment information from schools that had already implemented a culminating project would have helped determine what they needed to transition to the state's model. Data from the Program Evaluation Division survey of high school principals suggest that 96% of schools—including those that either did not have a project or had one that differed from the Graduation Project model—may have required support to implement the Graduation Project model.

http://www.eric.ed.gov/ERICWebPortal/contentdelivery/servlet/ERICServlet?accno=ED089405.

<sup>12</sup> State of New Jersey Department of Education (1974). Needs Assessment in Education: A Planning Handbook for Districts. Trenton, NJ: State of New Jersey Department of Education. Retrieved from

**Exhibit 5: Logic Model for the North Carolina Graduation Project** 



Note: In addition to activities in high schools, middle schools build skills needed for a successful project.

Source: Program Evaluation Division based on the North Carolina Graduation Project Implementation Guide and interviews with Department of Public Instruction staff.

The Department of Public Instruction failed to conduct a needs assessment before the State Board of Education directed all schools to adopt the Graduation Project model. Particular aspects of the model may have caused more concern than others. For example, in site visits conducted for this report, school administrators voiced concern about having enough mentors in their own school, let alone in schools that had not yet introduced a project. Concerns about finding a sufficient number of appropriate mentors and paying for mentor background checks were mentioned numerous times in the Department of Public Instruction survey. This issue and others that required troubleshooting could have been identified in a needs assessment.

Pilot tests of existing models yield data on model effectiveness and the success of specific approaches adopted at pilot sites. Careful implementation of wide-scale initiatives nearly always requires beginning with pilot sites. In 2008, the North Carolina General Assembly's Fiscal Research Division described the value of pilot programs to yield important program data before scaling up programs.<sup>13</sup>

In fact, programs that could have been treated as pilots were already up and running in North Carolina: over 360 North Carolina high schools already required some version of a culminating project, and some had implemented a project over 15 years ago. Although a number of high schools' requirements differed from the state's model, data collected by the Program Evaluation Division suggest at least 21 schools had a project that closely aligned with the Graduation Project. These schools comprise a missed opportunity for the Department of Public Instruction to have evaluated program process and outcomes and to have used staff from these schools to conduct training and technical assistance. The department failed to treat these programs as the natural pilots they were and did not reap the benefits of the experience they could have shared.

Stakeholder engagement is essential for implementation and sustainability. As described in 2007 by Achieve, Inc., a network that works with states on high school benchmarks, changes to school policy require buy-in from constituencies including school administrators, staff, students, parents, supporters from the community at large, and policy makers. Without effective communication about model goals, attributes, and benefits, even the strongest model can fail implementation when a broad group of key stakeholders is not sufficiently engaged.

The Vice Chair of the State Board of Education's Globally Competitive Students Committee attributed resistance to statewide implementation to a lack of adequate stakeholder engagement and public relations by the State Board of Education. At the local level, engaging district and school administrators is key to providing a comparable experience to all students in North Carolina. Local control, a strong force in education, must be balanced with state uniformity, some level of which is essential in a truly

<sup>&</sup>lt;sup>13</sup> Nordstrom, K. (2008). Ten Questions to Better Pilot Programs. Raleigh, NC: General Assembly Fiscal Research Division. Retrieved from http://www.ncga.state.nc.us/fiscalresearch/frd\_reports/frd\_reports\_pdfs/Fiscal\_Briefs/Getting\_More\_From\_Pilot\_Programs\_Fiscal\_Brief\_FINALweb.pdf.

<sup>&</sup>lt;sup>14</sup> Achieve, Inc. (2007). Policy Brief: Aligning High School Graduation Requirements with the Real World: A Road Map for States. Retrieved from http://www.achieve.org/AligningHighSchoolGradRequirements.

statewide initiative. Whereas Graduation Project supporters continue to back statewide implementation, the task of creating widespread stakeholder engagement remains incomplete.

Centralized support—including training, leadership, and communication—is critical to changes in graduation policy. In the past, training for North Carolina teachers and administrators was available to schools that adopted the Senior Project® model. The benefits of this support were documented in the only peer-reviewed publication on implementation of a project in North Carolina, written by a Cabarrus County school administrator. The training provided a critical first step toward smooth implementation in schools and districts. Ongoing support from motivated coordinators who were compensated with extra planning time or a stipend, district-level support (from the local board, superintendent, and district administrators), and wide-spread faculty support were important to successful projects.

Oversight of statewide implementation ensures consistent communication and provides localities with training and leadership. These elements are important because, as noted by Lowder, "the logistics of making all that is involved successful is quite an undertaking." In the Program Evaluation Division survey of high school principals, 57% of respondents believed it would be difficult to implement the Graduation Project consistently across the state. Inconsistencies would be exacerbated without active central guidance. Faculty from North Carolina State University's Friday Institute echoed the importance of central leadership and support based on their experience implementing other statewide initiatives.

Although the Senior Project® model provided centralized support, this infrastructure was lost when the State Board of Education moved away from the model¹6 and did not provide subsequent financial or substantive technical assistance. The Department of Public Instruction provided Graduation Project training sessions in 2007 and 2008, but school and district administrators interviewed for this report indicated implementation relied on the Implementation Guide with minimal additional central support. They added the Implementation Guide was not specific enough to direct start-up. Although some administrators expressed satisfaction with their experience, others reported local Graduation Project implementation was hindered by miscommunication, a lack of support and training, and inconsistencies at the state level. Currently, the Department of Public Instruction has one full-time employee that dedicates approximately 20% of her time to the Graduation Project.

**Evaluation is essential to establish whether a program is successful in fulfilling its goal.** The critical role of evaluation has been well-established in, for example, the W. K. Kellogg Foundation's Evaluation Handbook<sup>17</sup>

<sup>&</sup>lt;sup>15</sup> Lowder, C. (2008). Top 10 ways for a smooth Graduation Project implementation. High School Journal, 92, 41-45.

<sup>&</sup>lt;sup>16</sup> In 2002, rights to the Senior Project® model were purchased by the University of North Carolina at Greensboro. In addition to being a nationally recognized model with an established support infrastructure, the support was local and most of the data on the Senior Project® had been collected in North and South Carolina. The University of North Carolina at Greensboro sold the rights to the Senior Project® back to the Senior Project® Center in 2009.

 $<sup>^{17}</sup>$  W. K. Kellogg Foundation. (1998). Evaluation Handbook. Battle Creek, MI: W.K. Kellogg Foundation. Retrieved from http://www.wkkf.org/ $\sim$ /media/10BF675E6D0C4340AE8B038F5080CBFC.ashx.

and United States Department of Education guidelines. <sup>18</sup> Evaluation provides program information about how well a project is implemented, what it takes to operate a program, and whether participants achieve intended outcomes. Evaluation should be considered an integral part of implementation: without adequate evaluation, return on investment cannot be known. Evaluation components are included in other statewide education initiatives in North Carolina such as the One-to-One Learning Initiative, where initial evaluation findings were generated from pilot sites. <sup>19</sup>

Providing evidence for return on investment is arguably the most important role for evaluation, but positive findings also can help to increase buy-in among stakeholders. One North Carolina school principal who reported having a positive experience with a graduation project requirement nonetheless believed the Department of Public Instruction should not have recommended statewide implementation before providing research to back it up.

The Department of Public Instruction has planned a small-scale outcome study to compare graduates from two schools (one with a Graduation Project requirement, one without) on post-secondary experiences. Preliminary results are expected in the summer of 2010. Nonetheless, any evaluation should include measures derived from program goals, activities, and intended outcomes described in the program model which, in this case, did not exist until now.

In sum, the Program Evaluation Division did not find evidence that a culminating project is effective at improving student outcomes, even though constituents report it provides the type of project-based learning experience that Graduation Project proponents seek. Furthermore, statewide implementation would require introducing the program in schools and school districts that have not yet opted to do so and getting schools that already have a requirement to adopt the state's model. Statewide implementation would require evidence of effectiveness and considerable planning, effort, and investment of state resources.

### Recommendation

The North Carolina General Assembly should direct the State Board of Education to delegate authority to school districts to decide whether to implement a high school graduation project requirement.

In 2005, the State Board of Education required all public high school students to complete a senior project in order to graduate. Session Law 2009-60 directed the State Board of Education to not require any student to prepare a high school graduation project as a condition of graduation from high school prior to July 1, 2011. This evaluation's recommendation would permanently suspend the 2005 statewide mandate.

<sup>&</sup>lt;sup>18</sup> U.S. Department of Education (2002, April). New Directions for Program Evaluation at the U.S. Department of Education. Retrieved from http://www2.ed.gov/news/pressreleases/2002/04/evaluation.html.

<sup>&</sup>lt;sup>19</sup> Corn, J., Halstead E., Oliver, K., Tingen, J., & Patel, R. (2009). Results from North Carolina's 1:1 Learning Initiative Pilot. Washington, DC: International Society for Technology in Education. Retrieved from <a href="http://www.iste.org/Content/NavigationMenu/Research/NECC\_Research\_Paper\_Archives/NECC2009/Tingen\_NECC09.pdf">http://www.iste.org/Content/NavigationMenu/Research/NECC\_Research\_Paper\_Archives/NECC2009/Tingen\_NECC09.pdf</a>.

Schools and school districts should continue to have the option of requiring students to complete a high school graduation project, and they should have the flexibility to implement the project to accomplish their goals for the requirement. The 69% of high schools that currently require students to complete some version of a high school graduation project could continue to offer a project if they or their districts elect to, and schools without a project would have the option of requiring one.

Evidence gathered for this evaluation did not support prohibiting schools and school districts from offering a graduation project experience. Support for culminating projects is strong among some constituents, and some other states have adopted different versions of culminating projects. However, the Program Evaluation Division's analysis did not reveal compelling empirical evidence that completing a project yields intended student outcomes.

Furthermore, optional implementation of a graduation requirement is recommended because statewide implementation of a standardized graduation project would require considerable effort and resources. Thorough, thoughtful implementation of the North Carolina Graduation Project would be required given the State Board of Education's intention to require all high schools to adopt their model and to include the project in the state's accountability framework. The Program Evaluation Division estimates it would cost around \$6.6 million to implement the Graduation Project statewide, with additional operating costs of around \$5.8 million per school year. At present, the investment and effort that would be required for statewide implementation cannot be justified.

### **Appendices**

Appendix A: Initial Cost of Implementing the North Carolina Graduation Project Statewide is Estimated at \$6.6 million

Appendix B: Studies Found Mixed Results on Short-Term Outcomes at Senior Project® Versus Comparison Schools

## **Agency Response**

A draft of this report was submitted to the Department of Public Instruction and the State Board of Education to review and respond. Their responses are provided following the appendices.

Program
Evaluation Division
Contact and
Acknowledgments

For more information on this report, please contact the lead evaluator, E. Kiernan McGorty, at <a href="mailto:kiernan.mcgorty@ncleg.net">kiernan.mcgorty@ncleg.net</a>.

Staff members who made key contributions to this report include Michelle Beck, Carol H. Ripple, and Pamela L. Taylor. Intern Korinne Chiu also contributed. John W. Turcotte is the director of the Program Evaluation Division.

## Appendix A: Initial Cost of Implementing the North Carolina Graduation Project Statewide is Estimated at \$6.6 Million

Cost Categories	Assumptions for Cost Estimations  The Graduation Project model includes a project coordinator at the school level. The Division assumed each public high school (n=602) would compensate a coordinator with at least one planning period, which was valued at \$8,483 (or 20% of the average teacher's salary of \$42,416 in the 2009-10 school year). This amount will increase as teacher salaries increase.		\$ 5,106,886	
Coordinator compensation				
Printing, postage, and supplies	The Division assumed each public high school (n=602) would spend \$657 (average from the Division's survey) on printing, postage, and supplies.		395,514	
Mentor background checks	The Graduation Project includes mentors for each student. The Division assumed background checks for each student's mentor (N=112,368 for the current class of 2015) at an approximate cost of \$2 per background check.		224,736	
Training and technical assistance	The Division assumed a one-time startup cost of training and technical assistance would be similar to the amount the Department of Public Instruction spent on statewide training, technical assistance, and resources related to the Senior Project®. There may be additional costs for ongoing training and technical assistance.	(0	749,572 ne-time cost)	
Parties, meals, and celebrations	The Division assumed schools would be responsible for		0	
Substitutes for teachers and staff	covering the costs of parties, meals, and celebrations; substitutes for teachers and staff; mentor/community			
Mentor/community panel rewards	panel rewards; financial support to students; and travel and other costs.			
Financial support to students				
Travel and other costs				
District costs	The Division assumed each school district (N=115) would spend \$708 (average from the Division's survey). There may be higher costs for larger districts.		81,420	
Total first-year costs		\$	6,558,128	
On maining annual costs	The Division resumed the on reiner surred costs for	•	E 000 EE4	
On-going annual costs	The Division assumed the on-going annual costs for operating the Graduation Project would include all of the above cost categories except the one-time startup cost of training and technical assistance. On-going annual costs will vary as the number of students and schools fluctuates each year.	\$	5,808,556	

Source: Program Evaluation Division based on surveys of public high school principals (n=65) and school district administrators (n=15) and a 2006-07 contract between the Department of Public Instruction and the University of North Carolina at Greensboro.

## Appendix B: Studies Found Mixed Results on Short-Term Outcomes at Senior Project® Versus Comparison Schools

The tables below present the findings of three studies on the effectiveness of the Senior Project®. The first table shows results reported by students, and the second table shows results reported by teachers. Within each table, results appear in two columns to show where the studies found differences and where they found no differences. The source of each result is denoted by a footnote.

Differences Reported by Students at	No Differences Reported by Students at
Senior Project® versus Comparison Schools	Senior Project® versus Comparison Schools
Attitudes	Attitudes
<ul> <li>More positive attitudes about school learning<sup>2</sup></li> </ul>	No difference in attitudes about school learning <sup>3</sup>
<ul> <li>Greater perceived importance of the following project skills: making a speech and writing for various audiences<sup>2</sup></li> </ul>	<ul> <li>No difference in perceived importance of the following skills: making a speech and writing for various audiences<sup>3</sup></li> </ul>
	<ul> <li>No difference in perceived importance of the following other project skills: organizing time, prioritizing tasks, finding and using new information, studying a new topic or doing a project, and getting things done as planned<sup>2,3</sup></li> </ul>
Confidence	Confidence
Greater confidence in the following project skills: giving a speech and writing for various audiences <sup>2,3</sup>	<ul> <li>No difference in confidence in the following project skills: organizing time, prioritizing tasks, finding and using new information, studying a new topic or doing a project, and getting things done as planned<sup>2,3</sup></li> </ul>
Skills	Skills
Greater perceived learning of the following project skills: writing a research paper, interviewing, preparing and presenting a speech, and carrying out a plan <sup>2</sup>	<ul> <li>No difference in perceived learning of the following project skills: conducting research, locating appropriate reference materials, summarizing information, proofing and editing, and time management<sup>2</sup></li> <li>No difference in scores<sup>2</sup> and lower scores<sup>3</sup> on a reference skills assessment</li> <li>No difference in scores on the Writing Process Test<sup>1</sup></li> </ul>
Emphasis on Skills Taught in the Classroom	Emphasis on Skills Taught in the Classroom
<ul> <li>Teachers emphasize the following writing skills more: using language accurately, proofing and editing, organizing and relating ideas in writing, documenting sources, synthesizing</li> </ul>	<ul> <li>No difference in teachers' emphasis on the following writing skills: developing an outline and creating memos, letters, and other forms of correspondence<sup>1</sup></li> </ul>
<ul> <li>information from several sources, and writing to persuade or justify a position<sup>1</sup></li> <li>Teachers emphasize the following communication skills more: conveying thoughts or opinions effectively and</li> </ul>	<ul> <li>No difference in teachers' emphasis on the following communication skills: distinguishing between important and unimportant information and explaining a concept to others<sup>1</sup></li> </ul>
<ul> <li>interviewing others or being interviewed<sup>1</sup></li> <li>Teachers emphasize the following other skills more: using word-processing and database programs, persisting until the job is completed, and searching for information using</li> </ul>	<ul> <li>No difference in teachers' emphasis on the following other skills: computer knowledge, employability, information retrieval, reading, teamwork, and thinking/problem solving<sup>1</sup></li> </ul>
<ul> <li>community members<sup>1</sup></li> <li>Greater perceived reinforcement of the following skills: conducting research, locating appropriate references, and preparing and presenting a speech<sup>2</sup></li> </ul>	<ul> <li>No difference in perceived reinforcement of the following skills: writing a research paper, interviewing, summarizing information, proofing and editing, time management, and carrying out a plan<sup>2</sup></li> </ul>
Teaching Methods	Teaching Methods
<ul> <li>English teachers use the following teaching methods more: lecture, assign projects, and use computers in their instruction<sup>1</sup></li> </ul>	No difference in how often English teachers use the following teaching methods: independent student learning, individual instruction, small-group instruction, and students
English teachers use the following teaching methods less:     cooperative learning strategies and seminars in class <sup>1</sup>	teaching each other <sup>1</sup>
Assessment Methods	Assessment Methods
<ul> <li>English teachers grade using the following assessment methods more: written responses, rubrics, projects, portfolios, and speeches<sup>1</sup></li> </ul>	<ul> <li>No difference in how often English teachers grade using the following assessment methods: performance assessment and individual student progress interviews<sup>1</sup></li> </ul>
<ul> <li>English teachers grade using the following assessment methods less: forced-response tests and students grade their own work<sup>1</sup></li> </ul>	

Differences Reported by Teachers at	No Differences Reported by Teachers at		
Senior Project® versus Comparison Schools	Senior Project® versus Comparison Schools		
Emphasis on Skills Taught in the Classroom	Emphasis on Skills Taught in the Classroom		
More emphasis on locating and choosing appropriate reference materials <sup>1</sup>	No difference in emphasis on the following skills:     communication, computer knowledge, employability,     information and in a discontinuous discont		
Less emphasis on responding to criticism <sup>1</sup>	information retrieval, reading, writing, teamwork, and thinking/problem solving <sup>1</sup>		
Teaching Methods	Teaching Methods		
	No difference in use of the following teaching methods: direct instruction with entire class, individual instruction, independent student learning, cooperative learning, small-group instruction, students teaching each other, discovery-based learning, project-based learning, computer-based instruction, and seminars facilitating student discussion <sup>1</sup>		
Assessment Methods	Assessment Methods		
Grade using the following assessment methods more:     rubrics and evaluating extended-project work <sup>1</sup>	<ul> <li>No difference in use of the following assessment methods: student demonstrates a skill, forced-response tests, written responses, student self-assessment, student assembles collection of work, individual student progress interview, and individual or group oral presentation<sup>1</sup></li> </ul>		

Source: Program Evaluation Division based on three studies:

<sup>&</sup>lt;sup>1</sup> Bond, S., Egelson, P., Harman, P., & Harman, S. (2002). A preliminary study of Senior Project programs in selected North Carolina high schools. Greensboro, NC: SERVE;

<sup>&</sup>lt;sup>2</sup> Lopez, L. (2004). Senior Project: Effectiveness study in South Carolina. Pilot year report (2003-2004). Chapel Hill, NC: SERVE; and

<sup>&</sup>lt;sup>3</sup> Lopez, L. (2005). Senior Project: Effectiveness study in South Carolina. Year two (2004-2005) final report. Chapel Hill, NC: SERVE.



### PUBLIC SCHOOLS OF NORTH CAROLINA

DEPARTMENT OF PUBLIC INSTRUCTION | June St. Clair Atkinson, Ed.D., State Superintendent

WWW.NCPUBLICSCHOOLS.ORG

April 8, 2010

Mr. John W. Turcotte, Director North Carolina General Assembly Program Evaluation Division 300 N. Salisbury Street, Suite 100 Raleigh, NC 27603-5925

Dear Mr. Turcotte:

The North Carolina Department of Public Instruction appreciates the opportunity to comment on Report No. 2010-01, a result of Session Law 2009-60, that directed the Program Evaluation Division to evaluate the cost and effectiveness of a statewide high school graduation project requirement. We thank you for the time and effort that you took to understand the North Carolina Graduation Project (NCGP) in the context of the state's graduation requirements. Our responses relative to each finding are as follows:

Finding 1. Although most North Carolina high schools and school districts have implemented a culminating project using existing resources, the initial cost of statewide implementation of the North Carolina Graduation Project is estimated at \$6.6 million.

Most of the estimated costs projected in the study were based on the assumption that a coordinator for the NCGP was needed at every high school and on a prorated amount of an average teacher's salary at 20% of their time (eg. the equivalent of one high school period). Most LEAs do not have a local coordinator for the project. The study cites that the average cost per student, based on the projected senior class of 2015 would be a little more than \$52. per student, representing a minimum investment per child. School districts have considerable flexibility with discretionary monies and the ways in which monies are earmarked. Finding 1 also acknowledged that 69% of high school principals responding to the survey required students in the class of 2010 to complete some version of the graduation project as part of their exit standard, regardless of encumbering costs.

Finding 2. Studies examining student outcomes associated with completing culminating projects are limited and have produced mixed results.

Three studies conducted by SERVE have been conducted on the NCGP, but the Agency agrees that there has been a paucity of empirically rigorous studies on short-term or long-term outcome measures. Currently, there is a pilot study underway employing quantitative measures that will compare students completing a NCGP to students without the project. It should be noted, however, that employing quantitative measures only on an authentic performance-based measure that occurs over time may not be the best methodological fit to determine effectiveness. Rigorous qualitative measures may be better suited to assess a long-term performance task.

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Finding 3. Support for culminating projects is based on anecdotes and self reports that they provide a unique learning opportunity.

This section of the report confirms responses the Agency has heard over the years about the benefits of a culminating project. The comment cited on page 11, "Culminating projects offer high school students a learning experience that may not be captured by the traditional curriculum," is typical of such responses. Additionally, the report acknowledges that the North Carolina business community supports a culminating project requirement as indicative of competencies which would be required in the work context. Lastly, this section shares comments from community members about the importance of mentors in the graduation project process.

Finding 4. The North Carolina Graduation Project lacked necessary elements for effective statewide implementation.

According to the report, successful statewide implementation of a state requirement requires key elements such as a program model, needs assessment, pilot sites, stakeholder engagement, centralized support and evaluation. The Agency disagrees that the State Board of Education did not employ key elements in a coherent or systematic way. The State Board was very thorough and methodical in their adoption of the project. The State Board began discussions around a project as early as 1999. Instead of requiring a project at that time, the Board supported interest and engagement at the local level by funding local high schools to attend Senior Project training. These sites were used as pilots across the state. A conceptual program model was not needed since the Graduation Project was built on the premises of the Senior Project which already had the research and modeling in place. By the time the Board voted to adopt and formalize the implementation of the Graduation Project, well over half of the high schools in the state already had a similar project, negating the need to start at square one in the implementation stage. While the process of implementation of the Graduation Project differs slightly from the Senior Project, the outcomes and conceptual frameworks are the same. Staff at the Agency proceeded with the implementation of the Graduation Project at the professional development stage. Eight regional meetings were held to provide technical assistance as soon as the Board voted. School systems across the state were already very familiar with such a project. While engagement at the local level could have been much stronger, to state that all of these elements were absent is not accurate or a fair assessment.

Report Recommendation. The North Carolina General Assembly should direct the State Board of Education to delegate authority to school districts to decide whether to implement a high school graduation project requirement.

The evaluation's recommendation would permanently suspend the 2005 statewide mandate. While the Agency agrees the school districts should have flexibility with regard to implementation models of the NCGP, we disagree that it should not be a statewide mandate, given the fact that 69% of high schools currently require it, value it, and are implementing it at a relatively low cost. Furthermore, an optional implementation requirement we believe will lead to not only a lack of fidelity but a decrease in rigor, relevance, and relationships and ultimately, not supporting the State Board's mission that "every public school student will graduate from high school, globally competitive for work and postsecondary education and prepared for life in the  $21^{st}$  century."

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If such a project is not a requirement, only some students will benefit from the valuable lessons learned from such an experience. If school decisions regarding a graduation project follow the typical pattern, students attending progressive or more innovative schools with an eye to skills and knowledge needed for a global environment will have a greater advantage than those students attending economically or educationally depressed schools. The role of the State Board of Education is to ensure an equitable education for all of the students in the state, a fact supported by the Leandro decisions.

Thank you for the opportunity to comment on this report. The Agency has no technical disagreements with the findings; we only disagree in principle. Given the limited time for review and comment, we offer these comments only as opinions by Agency staff, and not as a formal submittal by the State Board of Education.

Sincerely,

June St. Clair Atkinson

June St. Clair atkinson

JSA:RG:eb