

## NINTH GRADE ACADEMIES

# EASING THE TRANSITION TO HIGH SCHOOL

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## INTRODUCTION

The ninth grade is a pivotal year where suddenly students find themselves struggling to navigate large, impersonal, and competitive environments. This major transition year creates a “holding tank” otherwise known as the “ninth grade bulge” where some twenty five percent of students that fail the ninth grade are held for another year (Black). Several strategies to improve student performance and decrease retention rates have emerged over the last four decades. One strategy to decrease non-promotion and dropout rates is implementing Ninth Grade Academies. Freshman academies provide incoming ninth grade students with additional resources and personalized support to overcome transitional obstacles. A number of models (including Talent Development, Career Academy and High Schools That Work) have been created with the goal of improving academic success.

The purpose of this study is to catalog data on all existing Ninth Grade Academies in North Carolina and then analyze the comprehensive catalog to determine their impact on student retention, non-promotion, and student proficiency.

## BACKGROUND

Ninth graders are adolescents undergoing the difficult transition from middle school to high school. As they face the social, emotional, physical and intellectual challenges of this stage of development, it is easy for them to feel overwhelmed, confused and alone. Subsequently, over the last thirty years the national average for ninth grade non-promotion has more than tripled from approximately four percent to thirteen percent. This retention creates the “ninth grade bulge” and “tenth grade dip” as fewer students are promoted to the next grade. State-wide data indicates the non-promotion rate for North Carolina students in 2004–2005 was 14%, a significant leap from 8.4% thirty years ago.

The increasing number of non-promoted ninth grade students both nationally and locally has become a critical focus point among all educators. Additionally, statistics indicate the importance of creating Ninth Grade Academies, as schools with operational transition programs reflect a dropout rate of only 8% on average compared to schools without transition programs at an average of 24%—three times higher (NHSC).

With the number of non-promotions and dropouts on the rise, educators desperately seek alternative strategies to ease transition challenges that leave too many students behind. The most obvious of these challenges is the physical environment. During the past 40 years, the average size of high schools has increased drastically, creating more support for smaller school settings. Recent literature on the social organization of secondary schools and on high school restructuring provides insight into practices that may increase student engagement and achievement. By focusing on



the distinction between bureaucratic and communal school organization, researchers have identified practices that may help create a sense of community within a school, leading to less student alienation and lower dropout rates (Lee & Smith, 1995; Lee, Bryk, and Smith, 1993; Johnston, 1992; Bryk & Driscoll, 1988). One organizational reform, “small learning communities,” has been promoted as a fundamental change in the movement to create more personalized and responsive high school learning environments.

The 1970’s gave rise to a wave of smaller learning community (SLC) models developed to address the complexity of high school environments. Smaller learning community models have since become a staple for ninth grade transition. Newly formed Ninth Grade Academies have utilized these SLC environments to develop several different models for success. The next section highlights national SLC models, leading the field in the development of Ninth Grade Academies for the 21<sup>st</sup> century.

## CURRENT MODELS

Before examining these innovative models for success, it is important that we define Ninth Grade Academy. For the purpose of this study, a Ninth Grade Academy is defined as a year long, uniquely designed school program that provides ninth graders with the resources and support they need. A great deal of flexibility exists in creating models for supporting ninth grade students.

***High Schools That Work (HSTW), Career Academy, and Talent Development are three of the many SLC models utilized for Ninth Grade Academies.*** The HSTW model is developed from the Southern Regional Education Board initiative that is dedicated to obtaining 85% of career bound high school students to complete a rigorous course of study and to meet or exceed the High Schools that Work performance goals in mathematics, reading and science ([www.sreb.org](http://www.sreb.org)) While the model was developed for the entire high school population, several schools are using HSTW as a framework for implementing Ninth Grade Academies. **The High Schools that Work** model revolves around ten research-based practices that include: high expectations, challenging career technical studies, rigorous academic studies, challenging programs of study, work-based learning, teacher collaborations, actively engaged students, guidance, additional help and keeping score of progress (HSTW fact sheet, Ohio Education website).

**Career academies** are defined as schools within schools that connect students with peers, teachers and community partners in a controlled environment which fosters academic success and improved mental and emotional health. The career academy concept encompasses three key elements which include: small learning communities; a college preparatory curriculum with a career focus; and collaborations

with employers, community members and higher education facilities (Dedmond, 2006).

**The Talent Development** model is designed to transform school facilitation and structure by providing a revised plan for management, organization, curriculum and to provide professional development for faculty. The model is a solution for schools that have problems with student attendance, discipline, achievement scores and dropout rates (Balfanz, R. Legters, N., & Jordan, W. 2004).

## SUCCESSFUL BY DESIGN— COMMON STRATEGIES

The literature on implementing Ninth Grade Academies indicates great flexibility for success. However, four themes emerge as critical ingredients for sustaining SLC’s that foster Ninth Grade Academy success—***Authentic Learning Communities, Personalization, Rigorous and Relevant Instruction, and Professional Learning and Collaboration.***

**Authentic learning experiences** can be defined as those experiences that connect students to the world outside of the school environment. For example, internships, community outreach, college and business partnerships and research projects that require students to be knowledgeable of and investigate societal challenges.

**Personalization** may be one of the most difficult challenges encountered by classroom teachers. With the large number of distractions both inside and outside the classroom setting, it becomes increasingly important for schools and teachers to utilize the personalization strategy. Implementing this strategy includes but is not limited to more classroom based staff, smaller class sizes and more accountability (i.e. student attendance and teacher-parent communication).

**Rigorous and relevant instruction** is a strategy that enables students to overcome the barriers often associated with race, poverty, language or initially low academic skill. Academies that wish to prepare all ninth grade students with the tools needed to successfully transition to high school will need to develop curriculum and instruction that is demanding and relevant. Authentic learning experiences, personalization and relevant instruction work interdependently with one another, promoting a greater chance to engage students academically.

The last strategy focuses more on the development of teachers. **Professional learning and collaboration** provides teachers with greater opportunities for collaboration, curriculum and instruction design, and to gain insights from their peers. This development not only increases the morale of teachers, but also transcends the learning environment, which ultimately benefits the students.

## DATA

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We used qualitative survey response data from Zoomerang (a web survey software tool) for our analysis. We found that North Carolina has 134 Ninth Grade Academies in 63 counties throughout the state. Of these academies, 82 qualified for our study based upon their years of operation. We used non-promotion data, student proficiency data and dropout data for students in North Carolina. In our comparison we used school summary data from similar high schools in North Carolina and examined proficiency growth data for grades 8<sup>th</sup> and 9<sup>th</sup>. In order to examine the change in performance for ninth grade students we used End of Course scores for eighth grade Reading and End of Course scores for ninth grade English. We analyzed data from 2001 to 2007 to determine whether or not there was a significant performance relationship. Because we are unable to report 2007–2008 school data, academies that began implementation in that year are not included in this study. Further, alternative schools and charter schools were not included in our data analysis because these schools often use alternative programming that cannot be controlled in our statistical model.

To access a report that outlines all of North Carolina’s Ninth Grade Academies, please see the North Carolina’s Ninth Grade Academies link at the following web address:  
<http://www.ncpublicschools.org/intern-research/reports>

## METHODOLOGY

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After performing an extensive literature review on Ninth Grade Academies, we began to narrow the scope of our research by identifying specific research questions and quantifiable measures. The questions we sought to answer entailed:

- Are Ninth Grade Academies affecting student performance or non-promotion?
- Are some Ninth Grade Academies having more affect than others?
- Are some models/programs better than others?
- What are some other possible impacts?

**Possible Impacts:** Team teaching, individualized plan, award/incentives for students, focus on math skills, focus on reading skills, curriculum integration, class size variance, and parent partnerships and home visits.

The measures we chose for this study included:

- A comparison between 8<sup>th</sup> grade reading scores and 9<sup>th</sup> grade English scores
- A comparison between Ninth Grade Academies to overall state proficiency data
- A comparison measuring the change in dropout and non-promotion rates for schools with a Ninth Grade Academy.

Additionally, we developed a comprehensive Ninth Grade Academy catalogue for the state of North Carolina.

In order to compile all of the necessary information for Ninth Grade Academy catalog, we developed a survey to determine the model type, strategies, length of operation, challenges, successes, and other details that survey respondents included. The survey was sent out via email to all superintendents and a Ninth Grade Academy contact person was established for each county. Districts with a Ninth Grade Academy were asked to fill out a fifteen minute online survey for each school containing an academy.

Once surveys were complete, we entered all data into a comprehensive catalogue and used the database to analyze and assess success of Ninth Grade Academies based on student retention (lower non-promotion rates) and student proficiency levels between 8<sup>th</sup> and 9<sup>th</sup> grades for reading and English. During our analysis we studied the selected measures to determine whether or not a significant relationship existed among the chosen variables.

- Attendance at a Type A school had a small negative effect on growth in reading and math
- Non-completion of high school by a student’s parent(s) had a small negative effect on growth in reading and math
- The percentage of teachers with 0–3 years of experience had a small negative effect on growth in reading and math
- School leadership had a small positive effect on growth in reading and math
- The percentage of students in poverty had a small negative effect on growth in reading and math

## FINDINGS

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From 2001–2007, non-promotion rates decreased for schools with Ninth Grade Academies. Ninth Grade Academies have a non-promotion rate of fifteen percent in comparison to the twenty-two percent state average. Dropout rates also indicated a significant change. The dropout rate in Ninth Grade Academies was 6.6% compared to a state average of 12.5%, almost double that number.

While the dropout and non-promotion numbers indicate a positive change for Ninth Grade Academies, we found a statistically insignificant relationship between the proficiency growth from 8<sup>th</sup> grade Reading and 9<sup>th</sup> grade English scores. The percent change from 0.0062 for academy students and 0.0031 for all other students indicates no significant difference between Ninth Grade Academies and the state average. Therefore, End of Course scores displayed no positive or negative proficiency growth between Ninth Grade Academies and schools without Ninth Grade Academies. Additionally, we looked at the following



groups to determine a casual relationship to proficiency change. The following groups were assessed:

- All 9<sup>th</sup> graders (selected population)
- HSTW model
- Team Teaching
- Parent partnership and home visits
- Individual personalized academic plans
- Award/incentive programs
- Math skills program
- Reading skills program
- Curriculum integration
- Class size standard

However, our study did not find any specific group had any significant impact than others. In future studies, current year data will assist in finding a correlation between specific programs and implementation strategies and success indicators.

## CONCLUSION

For each high school dropout, it costs a state approximately \$3,000 to \$5,000 per year. The costs to the individuals who drop out are likewise disadvantageous. Dropouts lose \$10,000 dollars each year in income after age twenty five (Bottoms). Still, the consequences of high school dropouts span far

beyond the state cost and individual income deficiencies. Other costs associated with high school dropouts include incarceration, unemployment, reduction in wages and engaging in high risk behavior (betterhighschools.org). Taking a proactive approach to high school transition challenges is more critical now, than ever, to reverse current trends. While Ninth Grade Academies are relatively new to our State, their success could generate long-term improvements for the students and citizens of North Carolina.

Our research indicates, Ninth Grade Academies are successful in reducing non-promotion rates and dropout rates for students in North Carolina. The findings suggest that academy support strategies are helpful for both students and teachers. In general, best practice methods for Ninth Grade Academies include collaboration of administrators, teachers, students, parents and guardians. Also, academies must have a welcoming culture that is flexible to change. Finally, administrators must use standardized expectations, an established routine, persistence and consistency.

## FUTURE RESEARCH

Some additional comparisons identified in our literature review that should be considered for future study included: race, gender, wealth, school size, location of school, geographic location (region of state), number of NBPTS teachers and/or Masters degree teachers, and extended instructional time. Future study of these variables would help determine which, if any, of these variables has a statistically significant relationship with student success in the 9<sup>th</sup> grade. Another area of interest for Ninth Grade Academies is the funding streams used to develop programs. Having a clear understanding of where external and internal funding sources derive will help new academies start with a strong financial foundation. The more variables we are able to identify as having a significant correlation with 9<sup>th</sup> grade student success, the better we can understand and implement new solutions that will work.



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The Financial and Business Services Area established the Research Intern Program in FY 2006–2007. The Program is designed to help build a quality research program within DPI to supplement and supply data for discussions related to procedural, process, and policy changes. The inaugural program includes five graduate students from four area universities. The intern program is managed by Jackson Miller (919) 807-3600 | [intern\\_research@dpi.state.nc.us](mailto:intern_research@dpi.state.nc.us)

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