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Perceptions of Underprivileged High Ability Students Who Bridged the Achievement Gap

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#### Abstract

This study was an investigation of the student experience at a High School Early College (HSEC) in Manhattan, NY. Students can graduate from this school in four years with both a high school diploma and a college Associates degree. The perspectives of students who attended a preparatory Early College Academy (ECA) prior to applying to the HSEC and those who were admitted to this HSEC who did not attend the ECA were examined. The HSEC model is effective in helping students succeed in this accelerated learning environment by incorporating support at all stages of the HSEC experience and at the middle school level.

## Perceptions of Underprivileged High Ability Students

#### Who Bridged the Achievement Gap

Our efforts to investigate the achievement gap have led to few concrete suggestions for addressing the issue. In fact, Ladson-Billings (2006) indicated that the issue is so difficult to solve because we do not really understand the problem. She explained that the educational disparities are not only related to economic differences, but they stem from moral, historical, and sociopolitical deficits. One path for narrowing the gap is by developing accessible pathways to higher education. This is not, however, easily accomplished.

For example, in a typical year more than 4,000 8th grade students apply for 135 places in the 9th grade at one of New York City's most rigorous high schools for bright, motivated students. Unfortunately, very few 8th graders from this school's nearby underprivileged neighborhood were admitted prior to 2007. Although there were students with high potential in local middle schools, they have had little or no access to this academically competitive high school, largely because of inadequate academic skills, low motivation, and a lack of understanding about how to access educational opportunities.

The purpose of this study was to examine the perceptions of students who had been participants in a program that provided academic support to middle school students who eventually applied to and were accepted at one competitive high school and to document their transition to this new environment. Dweck (1986) and Good and Dweck (2005) indicated that those who base their motivation on ways to improve their own learning not only sustain themselves through complex situations, but are more likely to achieve their goals.

#### **Review of the Literature**

Education in the United States has always been an important national issue. However, it has received particular emphasis in recent years as the American economy has declined and academic achievement, particularly in mathematics and science, has remained below the international average (Baldi et al., 2007; Lemke et al. 2004). Current Secretary of Education Arne Duncan and President Barak Obama have characterized the poor performance of students within the American education system as a problem with grave economic consequences. Both politicians have discussed the importance of education in leading to greater socioeconomic equality as well as strengthening the workforce and economy of the United States as a whole (U.S. Department of Education, 2009; Calmes, 2010). President Obama has highlighted in particular the fact that the unemployment rate in July 2010 for those without college degrees was almost twice that of those who had completed some form of higher education (Calmes, 2010). He has also voiced his concern that "countries that outeducate us today will outcompete us tomorrow" (Calmes, 2010). President Obama has even made it his goal to increase the number of American high school graduates by eight million students by 2020 (Stolberg, 2010).

A wide variety of approaches have been used to try to help students learn and perform well in the K-12 school system and continue on to acquire a college degree. In particular, the American government has focused recently on closing the achievement gap between low-scoring students and their counterparts who have reached the expected level of achievement and knowledge. Former President Bush's No Child Left Behind Act of 2001 made increasing each student's academic achievement a priority (U.S. Department of Education, 2002). President Obama's Race to the Top plan also focuses on increasing student achievement, as well as improving high school graduation rates and student readiness for both higher education and the

workforce (U.S. Department of Education, 2009). While these efforts are commendable, the needs of high-ability students have often been forgotten amidst attempts to help their lower-performing peers.

Working to meet the needs of any type of student, high-ability or not, is inevitably associated with "educational equity." Some people believe that this term means that every student should receive the same type of education at a particular age. This attitude neglects high-ability students who often master curriculum more quickly than others. Thus scholars in gifted education define this term as the right of each student to receive an education appropriate for his or her needs (Colangelo, Assouline, & Gross, 2004). Individuals learn differently; therefore, a variety of school programs must be available to students (Colangelo & Davis, 1997).

Additionally, flexibility must occur within all programs in order to support students in whatever areas of assistance they may need (Heacox, 2002; Tomlinson, 1999).

A prevalent issue for high-ability students is that they are not challenged enough in school (Colangelo & Davis, 1997). The effects of this problem can be detrimental to their present and future success. According to Democratic Representative Dale Kildee of Michigan, about 20% of all students who drop out of high school are gifted (U.S. Committee on Education and Labor, 2009). These students have enormous potential but are not intellectually stimulated by their academic curriculum and so leave the K-12 system. They neither better themselves nor their community when they do not complete high school requirements. As President Obama has made clear, their chances of becoming employed are also greatly reduced (Calmes, 2010). Thus scholars in gifted and talented education aim to understand how best to help these students become more engaged in learning (Colangelo & Davis, 1997). They hope that this focus will

deter high-ability, at-risk students from dropping out and persuade them to enroll in a form of higher education.

In order to provide high-ability students with a stimulating education, schools generally implement various forms of accelerative measures. "Acceleration" in terms of education is defined as "an educational intervention that moves students through an educational program at a faster than usual rate or younger than typical age" (Colangelo, Assouline, & Gross, 2004, p. 5). There are 18 types of academic acceleration as defined by Southern and Jones (2004) and, in general, they have been found to increase student achievement (Rogers, 2004). For instance, accelerated students are more likely to obtain higher degrees than are non-accelerated students (Kulik, 2004). While accelerated curriculums are highly effective in helping students progress academically, they also cultivate social and emotional development (Lubinski, 2004).

Early college curriculum programs are an example of educational acceleration. This particular method of giving high-ability students the means to excel intellectually is highly effective (Brody, Assouline, & Stanley as cited in Brody, Muratori, & Stanley, 2004). These programs offer students the combination of a challenging, stimulating curriculum with a significant amount of support for student needs.

There are many factors that effect student success in any college environment, including an early college setting. A college-ready student should have a good understanding of the following skills: written language, critical reading, mathematics, computer knowledge, and studying (Brody, Muratori, & Stanley, 2004). Previous exposure to a variety of content areas and academic rigor is also beneficial for students (Brody, Assouline, & Stanley as cited in Brody, Muratori, & Stanley, 2004). Additionally, several personality traits are important to a student's ability to excel in college: (a) focus, perseverance, and motivation (Muratori as cited in Brody,

Muratori, & Stanley, 2004); (b) a high level of maturity (Janos as cited in Brody, Muratori, & Stanley, 2004), and (c) positive self-esteem (Caplan, Henderson, Henderson, & Fleming, as cited in Brody, Muratori, & Stanley 2004).

Providing students with a support network is also important to student success and is a vital component of any early college program. School counseling and social support are especially important (Brody, Muratori, & Stanley, 2004; Cornell, Callahan, & Loyd as cited in Robinson, 2004). A study by Caplan, Henderson, Henderson, & Fleming (as cited in Brody, Muratori, & Stanley, 2004) shows that a positive family environment is also beneficial to early college students. Programs for high ability students should employ a counselor who not only advises students, but who also works with teachers and parents to create an atmosphere in which the students feel comfortable (Nevitt as cited in Landrum, Callahan, & Shaklee, 2001). When the needs of high ability students are met, especially social and emotional ones, they will more easily be able to concentrate on academics (Nevitt as cited in Landrum, Callahan, Shaklee, 2001). Whether students in an accelerated learning environment have academic or social concerns, they must be able to receive aid from their school in order to determine how best to cope with and overcome these setbacks.

#### Methodology

Strategies used in the teaching and learning processes in the classroom environment were studied through surveys, interviews, and classroom observation. Examined in particular were the specific forms of support made available to students in need of help. Also studied, in order to gain a better understanding of the HSEC model, were specific teaching methods; the content of curriculum; the use of the writing process, called habits of mind; types and variety of classroom activities and out-of-class assignments; and skills used in everyday life at the HSEC.

#### **Setting**

**High School Early College (HSEC)**. The following section of this report contains an account of the history of this specific HSEC program and a description of the program in its present day form.

HSEC Program history. This information was obtained largely from an interview with a HSEC administrator. Creating a public school that would intellectually stimulate high schoolaged students was the goal of Leon Botstein, President of Bard College in New York (Botstein, 1997). He did not support the traditional high school format and curriculum: he wanted to create a learning environment that enabled motivated students to reach their full intellectual and social potentials. From this discontent with the typical public high school, Botstein designed his high school early college model in the late 1990s.

Then-Chancellor of the New York City Board of Education, Harold Levy, supported Botstein's ideas and quickly put these plans into action before he was scheduled to leave public office. The HSEC was founded and organized over the course of a few months in the spring and summer of 2001. The Bill and Melissa Gates Foundation provided one million dollars in start-up funding. During this time period, a building to house the school was located, teachers were hired, a curriculum was created, and a group of students were accepted. Bard College agreed to award students with college credit for passing their classes in their last two years at the HSEC, Year 1 and Year 2 of their college curriculum. Faculty were trained at Bard College at Simon's Rock in Massachusetts, the nation's first early college institution (established in 1966 and incorporated into Bard College in 1979) (Simon's Rock, 2010). Simon's Rock and Bard College shared a focus on exploring and refining writing and thinking. Consequently, these concepts also became pillars of this HSEC experience. These principles were so important that the then-

Director of the Institute for Writing and Thinking (IWT) at Bard College was asked to be the first principal of this HSEC. Through experiential learning, the IWT fosters a better understanding of writing and thinking in teachers and helps them plan more engaging activities in writing and thinking for their own classrooms (Institute for Writing and Thinking, 2010). Through the influence of both Simon's Rock and Bard College, this HSEC's teachers became aware of how to develop their writing and thinking skills more deeply. It then became the faculty's goal to instill these ideas in their students.

In 2008, the High School Early College II opened in Queens, New York. This school has its own administration and faculty, but functions in the same manner as the original HSEC. Both schools share the goal of helping students fulfill their intellectual potential through the implementation of an accelerated curriculum.

The HSEC Program description. This HSEC is a public secondary school on the Lower East Side of Manhattan, NY that seeks to intellectually stimulate students. It is considered to be a competitive high school in New York City: it requires specific test scores, as well as other criteria, for acceptance. It is a small high school, with a total of about 575 students and a student-teacher ratio of 20 to 1. Students can graduate with a high school diploma and up to 2 years of college credits for the price of a typical NYC public school education. They take challenging 9<sup>th</sup> and 10<sup>th</sup> grade classes in order to prepare for an accelerated curriculum of college courses that, with qualifying grades, they can take in their last two years. This part of the HSEC's curriculum is a dual enrollment program: students take classes that allow them to complete high school course requirements while earning college credit. Although many students graduate with an Associates of Arts Degree (60 college credits), some students do not pass all of

their college courses and so graduate with fewer than the total credits required for the degree.

These students do not receive a college degree with their high school diploma.

Although the HSEC's college course credits are earned through Bard College in New York, all courses are taught by HSEC professors in HSEC classrooms. The professors at this secondary school teach at both the high school and college levels at the HSEC. This practice allows professors to better understand adolescent development and help their students through the high school-to-college transition. The HSEC's teachers are able to help cultivate in students the skills that they will need later in Years 1 and 2. Furthermore, the HSEC does not send students to a traditional college campus to attend college courses. Students can follow an accelerated curriculum within a familiar environment and with other bright, motivated students of their own age. There are great advantages to tackling college-level coursework early while being surrounded by students of the same age. Participants generally gain from having a peer support group and knowing that they are not alone in their experiences (Colangelo, 1997). The strong senses of community and continuity that these administrative choices foster make this HSEC a truly unique learning environment.

The concepts of writing and thinking are pillars in the HSEC curriculum. The HSEC uses a particular form of note-taking, called dialectic note taking, in order to cultivate critical thinking, reading, and writing. An administrator elaborated on this strategy, stating that this form of note-taking helps students through all stages of thinking and analyzing. Students use special notebooks where the left margin is wider than in a typical notebook, but less than half of the page. In this margin, students write a quote or concept from whatever they are reading or discussing in class or for homework. In the right margin, students write their own ideas, analyses, or critiques of what they had written to the left. This structured note-taking helps

students keep their ideas organized and updated every day. It also enables them to document all first impressions as well as new and revised opinions and ideas. Students create a written progression of their ideas and those discussed in-class: an invaluable resource for class work or paper writing.

The HSEC receives the same financial resources from the New York City Department of Education that any area public high school would receive. The school also receives other forms of aid from public and private grant funding. According to a HSEC administrator, among other school services, these additional resources pay for textbooks, the college credits from Bard College that students receive, employing a large number of faculty and staff (to keep the student-teacher ratio low), and maintaining and improving the HSEC's laboratory facilities.

**Early College Academy (ECA)**. The following section of this report contains an account of the founding of the ECA program and a description of the program in its present day form.

ECA Program founding. The Early College Academy, founded in 2005 at the HSEC, assists low-income 5<sup>th</sup>-8<sup>th</sup> grade students from diverse backgrounds in learning and honing a variety of skills. The initial source of the ECA's funding was a grant from the Jacob K. Javits Gifted and Talented Education Act as part of the act's effort to identify and further cultivate the talents of underserved students with high potential (U.S. Department of Education, 1988). High ability diverse students from across the country have historically been underserved (Ford, Moore, & Milner, 2005 as cited in U.S. Department of Education, 2008). Originally, this grant targeted a population of 603 middle school students from three area middle schools who traditionally had not been provided with the resources or opportunities to attend gifted education programs (U.S. Department of Education, 2005). According to this 2005 grant report, members of the diverse community are often economically disadvantaged and many are not proficient in English. The

demographic compositions of the three middle schools that were involved in the original grant for the ECA ranged from 74% to 87% Latino; 13% to 20% African American; and 97% to 99% free-lunch eligible, meaning that these students came from households that were at or below 130% of the federal poverty index (U.S. Department of Agriculture, 2010).

While admission to the HSEC is difficult for any student because over 4,000 8<sup>th</sup> graders apply yearly for about 150 places, access for area middle school students to competitive schools such as the HSEC was limited or did not exist before the ECA program was created. Prior to 2007, when the ECA graduated its first group of 8<sup>th</sup> grade students, few middle schoolers from this neighborhood had been admitted to this school. These students had had no means with which to strengthen their candidacy for acceptance into a competitive secondary school. Additionally, continuing their education beyond high school was not a prevalent goal among students (U.S. Department of Education, 2005). According to the original grant application, these students lacked the following: (a) encouragement to participate in programs for gifted and talented students; (b) aid to help them transition into a new environment; and (c) assistance for their families to undertake New York City's competitive high school applications process.

The original project was funded to address the following goals and objectives:

Goal 1: Prepare underserved, high-achieving middle school students to enter high school programs for gifted and talented learners.

- A. Identify underserved students, with gifted potential, for a year-round program (3-year duration, summers/Saturdays) that will prepare them for admission to top high schools
- B. Strengthen capacity of students for self-regulation

- C. Create a culture, and habits of mind, among students that will prepare them to succeed at competitive high schools and early colleges
- D. Prepare students to emerge from 8<sup>th</sup> grade with confidence about how they learn
- E. Improve students' academic achievement as measured by standardized test scores
- F. Increase the number of underserved students applying to and accepted by the top public high schools
- Goal 2: Develop teacher expertise to identify underserved students and to strengthen curriculum and instruction to improve the achievement of all students.
- A. Develop procedures to assess student self-regulation, habits of mind, confidence and achievement in mathematics, science and writing
- B. Train teachers to raise academic standards in middle schools with large numbers of underserved students
- C. Provide strong professional development programs for administrators and faculty, including research opportunities to improve quality of teaching and disciplinary study
- D. Provide graduate courses for participating teachers
- E. Raise expectations to develop gifted behavior in all classrooms
- Goal 3: Provide opportunities for parents to identify/develop their children's abilities.
- A. Provide opportunities for parents to understand how to support their children's talents and interests
- Goal 4: Develop and disseminate replicable program curriculum and instruction that will be widely disseminated

- A. Disseminate program materials
- B. Develop course materials for classroom teachers to develop habits of critical thinking in their students. (U.S. Department of Education, 2005, p. 6-7)

ECA Program description. The ECA aims to help improve underserved, high ability students' achievement in mathematics, science, and writing as well as strengthen their self-regulation and confidence so that these students can apply to, be accepted at, and perform well in competitive high schools in New York City (U.S. Department of Education, 2008). The development of critical reading and writing skills is especially focused on because mastery of these skills is critical at the HSEC.

During the school year, middle school students attend class on Saturday mornings in subjects such as Science, Mathematics, Humanities, and Enrichment (high school application preparation). During the summer segment of the ECA, students also take a dance class. The HSEC educators teach the students using a curriculum that is meant to challenge them and help them grow intellectually. Students are exposed to the difficult coursework and increased workload demands that they would receive at the HSEC. Student mentors from the HSEC also work at the program and help students with class work and assignments. Once per month during the school year, parents are invited to meet with the program's teachers to discuss the expectations of the ECA and of competitive high schools such as the HSEC. They are also encouraged to motivate their children to be the best students that they can be. In reaching out to these students, now from five different schools, the ECA program has made a positive difference in the HSEC's relationship with the surrounding community (Peterson, 2010).

#### **Design**

This project used a qualitative case study design. The students' progress and their perceptions of the ECA and HSEC programs were the focus of the study. In order to understand student views, data were collected through surveys and interviews. In addition, student records have been reported to show equivalence of student achievement between those who attended the ECA and those who did not. Program administrator and teacher perspectives were used to verify student responses. Classroom observations were used to gather information about program context.

#### **Subjects**

Early College Academy Alums (ECA Alums). Three students who attended the ECA and were admitted into the HSEC agreed to participate in the study. To notify students about the study, a recruitment poster was disseminated in the school (bulletin boards, announcements, school newsletter, etc.). The decision for student participation was based on responses to this recruitment information, consent to participate, and the students' schedules. The identity of these participants is kept confidential through the use of code names (B1-B3).

Non-Early College Academy Alums (Non-ECA Alums). Four students who did not attend the ECA and were admitted into the HSEC agreed to participate in the study. To notify students about the study, a recruitment poster was disseminated in the school (bulletin boards, announcements, school newsletter, etc.). Selection of students was based on responses to this recruitment information, consent to participate, students who have similar backgrounds compared to the ECA students (i.e., grade level), and students' schedules. All four non-ECA alums were also mentors within the ECA program. Based on their knowledge of the ECA, they were able to offer well-informed perceptions of the ECA as well as of the HSEC. The identity of these participants is kept confidential through the use of code names (NB4-NB7).

Table 1 provides information about student demographics and achievement. These data are presented to show the similarities between ECA/HSEC and Non-ECA/HSEC students. This researcher realizes that the following data must be interpreted with caution because of the small sample sizes of each group studied.

Insert Table 1 About Here.

In relation to first semester cumulative averages from the ECA/HSEC and Non-ECA/HSEC students, there were no significant differences between mean scores (t = -2.119, p = .088) at a significance level of  $p \le .05$ . Likewise, there were no differences for the most recent cumulative averages for both groups (t = -1.282, p = .256) at a significance level of  $p \le .05$ . While there are differences between student semester and cumulative averages, there is a lack of statistical differences between group mean scores. This fact indicates that upon entry to the HSEC, the ECA alums had similar academic profiles compared to the non-ECA students. Furthermore, in general, the ECA alums interviewed increased their cumulative grade point averages over time and narrowed the gap between their grades and the grades of the non-ECA the HSEC participants.

#### Administrators for the High School Early College (HSEC) and/or ECA.

Administrators who participated in the ECA program were asked to participate in this project: the HSEC building Principal, ECA Director, original Javits grant Director, and a school Principal from one of the local middle schools that participated in the original ECA program. Three of these administrators were available for the study: the Principal of the HSEC, the ECA Director, and a middle school Principal. Profiles of administrators are included in Table 2.

**HSEC Teachers**. Three teachers who worked at the HSEC agreed to participate in the study. While it was desirable to have teacher participants who also taught at ECA, only one of the teachers interviewed met this criterion. Profiles of teachers are included in Table 2.

**Support Staff for the HSEC and ECA**. One guidance counselor who works at the HSEC and teaches in the ECA program agreed to participate in the study. Refer to Table 2 for a description of educators who participated in the study.

The identity of the adult participants is kept confidential through the use of code names (E8-E14). These code names are not related to the sequence of educators listed below.

Insert Table 2 About Here.

### Goals, Objectives, and Instrumentation

Goal 1. To examine the perceptions of students admitted to the HSEC who also attended a middle school program called the ECA, which was conducted at the HSEC, and compare these perceptions to those of the HSEC students who did not attend the ECA. The focus was on understanding how the HSEC helped students succeed in its accelerated curriculum environment. Specific objectives for this goal are listed in Table 3.

Insert Table 3 About Here.

Goal 2. To examine administrators' goals for the HSEC and ECA students and to understand their methods of helping students succeed at the HSEC. Specific information about the objectives and instrumentation related to Goal 2 can be found in Table 4.

Insert Table 4 About Here.

Goal 3. To examine teachers' and support staff's goals for students who attended the HSEC (and the ECA, if the educators have taught in the program) and their methods of helping students succeed at the HSEC. Refer to Table 5 for specific objectives related to this goal.

Insert Table 5 About Here.

#### **Procedures**

IRB approval was received from The College of William and Mary Protection of Human Subjects Committee, 2009-10-30 and approved by the NYC Department of Education on April 9, 2010. A recruitment flyer was posted explaining the purpose of the study. This was distributed on school bulletin boards and given to students serving as mentors in the ECA program. The researcher also visited a Saturday ECA session and explained the study to potential volunteers. After receiving consent forms (necessary for those under the age of 18) and assent forms, a hard copy survey was given to the HSEC student volunteers. Teachers, support staff, and administrators were contacted directly and asked to participate in the study. These volunteers were sent a separate survey. Both versions of the survey asked for general information about the HSEC as well as demographic data on the respondents. The survey took about 20 minutes to

complete. The surveys for students and for the adults are in Appendices A and B, respectively.

Names remain confidential and are not mentioned in the final analysis of the data collected. All respondents received a code name to protect their privacy.

All interview questions were open-ended. All but one of the initial interviews was conducted at the HSEC during non-academic periods when students, teachers, and administrators were available. Interview questions are located in Appendices C and D. The only interview that did not take place at the HSEC was conducted with an administrator at the middle school where she worked. Each interview was conducted in a 40-60 minute time period.

Follow-up interviews were also conducted with each participant. Respondents were asked questions via email or during a second meeting in their free time during school hours. Follow-up email questions took approximately 20 minutes to complete, outside of class time.

Detailed notes were typed from all 14 interviews. Quotes were also recorded using a computer. Afterwards, the data from the student participants were coded in great detail using a spreadsheet. Data from the student surveys were complied and coded in similar detail on a separate spreadsheet. All relevant coded information from these spreadsheets was then organized into tables by participant.

In addition to sending out surveys and conducting interviews, classes were observed during the school day. Eight classroom observations were conducted to obtain the context of the school program. Classes visited were the following: "The Americas" (History class, mix of 9<sup>th</sup> and 10<sup>th</sup> grade students), World Literature, 10<sup>th</sup> grade World Literature, "America in Crisis" (English class, mix of Year 1 and Year 2 students), Year 2 Seminar (English class), 9<sup>th</sup> grade Physics, Geometry and Algebra, and 9<sup>th</sup> grade Art.

On the HSEC's Symposium Day, the researcher also observed 10 student presentations on 6 topics: "Considering College Education," "Corporate Power in the 1940s-1950s," "Men Behaving Badly," "Fashion: Sexuality and Gender since WWII," "Moby Dick," and "Thinking and about Thinking." On this special class day, which occurs annually, students from all grade levels can present individual or group research projects that they have been working on for their courses. Following each presentation, a panel discussion occurs where anyone can ask the researcher questions. Professors, administrators, and students choose freely from a list of presentations and attend one after another for a full day of learning. Notes were taken during these observations in order to document the overall atmosphere and to better understand different teaching and learning techniques used at the school.

#### Results

Perceptions of Educators: Skills Necessary to Excel in a High School Early College Environment

Administrators, teachers, and guidance counselors were asked what skills students needed in order to excel in a high school early college environment. Five out of seven interviewed educators stated that critical thinking, reading, and writing skills were imperative in creating student success. The importance of students' confidence, articulation, work ethic, time management, desire to learn, and open mindedness were also repeatedly cited ideas.

Comparisons can be made between this information and the student responses on the topic of how to excel as a student at the HSEC. In general, the teachers' skill expectations and goals for the students parallel the skills that students believed were vital to their success at the HSEC.

**Students' Perceptions Regarding their Middle Schools** 

Students were asked to compare their middle school learning experiences with those that they had had at the ECA and/or at the HSEC. They cited differences in curriculum content, rigor of assignments, freedom of choice, independence, teaching style, support, classroom size, and sense of community.

Level of Difficulty in Relation to Students' Middle School Experiences. One ECA alum and all four non-ECA alums stated that they had not been challenged enough in middle school. These students also all specifically mentioned that they were able to finish assignments very quickly and without thinking deeply. They admitted that, in general, they expended minimal effort with respect to the completion of their middle school activities. They had been given no reason to work harder and fulfill their learning potentials. One ECA alum implied how detrimental the lack of intellectual challenges can be: "the work wasn't challenging so you sort of [got] lazy... when you get lazy you just stop caring."

Level of Freedom in Relation to Students' Middle School Experiences. Two ECA alums noted how little control they had over their education in middle school. One of the alums stated that her teachers did not believe that MS students could handle the responsibility of making their own decisions: they believed that enforcing structure in the classroom and in assignments was a necessity. Having to strictly follow a particular curriculum and set of assignments did not allow the students much creativity or independence of thought. The other alum commented on this issue and said that "you don't have your own identity" in middle school as a result of the rigidity of the curriculum.

**Teaching Methods in Relation to Students' Middle School Experiences**. All three alums highlighted in particular that the teaching methods used by their middle school teachers were very different from those used at the ECA. One student described that he was often placed

in a group of students who did not understand the course material as well as he did. He was expected, although his teachers did not directly ask him to do this, to teach those who were struggling if the teacher could not personally aid every student.

Teacher Support in Relation to Students' Middle School Experiences. On the topic of receiving support from their MS teachers, several students (one alum, two non-alums) stated that they had not received as much one-on-one aid as they had from ECA and the HSEC educators. Two alums and two non-ECA alums cited the larger class sizes at their middle schools as the cause of a lack of personal attention from teachers to students.

Climate of ECA in Comparison to Students' Middle School Experiences. The difference in the learning atmosphere between middle school and the ECA and the HSEC was another focal point of several students' comments (two ECA alums, one non-ECA alum). They stated that because local students of age were *obligated* to attend middle school, the student body represented a broad mix of attitudes towards education. Some students enjoyed school and tried hard to excel, while others had no interest in paying attention in class or studying. This range of attitudes towards learning created an atmosphere that was far from the feeling of community at the ECA and the HSEC, where the majority of students were eager to learn and ready to work hard.

# **Student Perceptions of the Early College Academy (ECA)**

Students were asked to discuss a variety of aspects of the ECA program: student involvement in the ECA; program climate; curriculum; program effectiveness; adjustment and support issues; and suggested areas for improvement.

**Involvement in the ECA**. Two alums, from different participating middle schools, were contacted by their guidance counselors and asked if they would like to join the ECA. Another

alum from a local middle school stated that she had been contacted in 6<sup>th</sup> grade about the program through a letter. The students attended a blend of the summer and Saturday ECA programs beginning in 5<sup>th</sup> or 6<sup>th</sup> grade. They each attended the program as their schedules allowed them to.

The HSEC student participants who were not ECA alums became program mentors through different circumstances. Some students were contacted by the HSEC administrators about becoming mentors, while others reached out to the program on their own. Some participants especially needed a job and all were interested in tutoring and mentoring. In general, these students had been working with the ECA program for one or two years.

**ECA Climate**. Student responses on the learning environment at the ECA described it as being a positive one. The feeling of community, the new responsibility that the students were given, and the relationships between the students and ECA authority figures created this positive atmosphere.

One ECA alum stated that the environment was a friendly one because the students generally attended of their own free will. Some were forced by their parents to attend, but the majority of students was eager to learn and came to the ECA prepared to do so. This student stated that even he had been reluctant to attend these extra classes at first, but then began to enjoy the program once he realized that it was engaging and entertaining.

The feeling of community was fostered among the students as they came to know each other better. Two ECA alums stated that they became more confident in themselves during the program as a result of this development. One of these alums stated that she began to speak more during the ECA courses as a result of her increased comfort level. The small class sizes helped to foster this sense of familiarity.

The ECA students were also expected to rise to more challenging course content and assignments. A wider range of content material was taught at the ECA than at students' middle schools, which appealed to a larger variety of student interests. The ECA students were given more engaging activities and were able to make more choices as to how to complete projects. One alum said that he was treated more as an adult at the ECA: he had to work hard to meet the higher expectations but could make more choices. A student mentor noted that this manner of treating students was very effective. She had learned from a guest high school mentor that getting children to behave in the classroom that was "simple – you just treat them as adults. You just talk to them as if, you know, you're on the same level. And you don't talk down to them...and they don't want to misbehave after that."

The relationship between the students and the administrators, teachers, and mentors was also positive. Staff members were very friendly and never raised their voices at the students stated one alum. This positive attitude of the teachers and mentors helped this respondent better enjoy the program.

**ECA Curriculum**. The content of the ECA curriculum and the manner in which it was taught helped the students grow both intellectually and socially, allowing them to have more confidence in themselves and their abilities. ECA educators taught academic, creative, and organizational skills through a variety of appealing activities and assignments that were intellectually challenging.

Student Perceptions of Academic Goals of the ECA. Both alums and non-alums were asked what skills the ECA taught its students. They discussed skills taught through the program and goals of the ECA for its students. There responses were the following: the ECA focused on reviewing familiar academic topics and teaching advanced curriculum; exploring different ways

to think and write; fostering creativity; and improving confidence, articulation, typing skills, time management, note-taking, and general organization.

Were many different types of activities and assignments used at the ECA in order to keep the students engaged while learning the aforementioned skills. One ECA alum stated, for instance, that students expressed themselves through talking about their own experiences, writing focused free writes, and reading their work aloud to their peers. Another alum stated that instead of simply sitting in a classroom and writing, he was taken on fieldtrips and asked to write about his impressions of the excursion. While students were given a large amount of independence, they were also asked to work in groups. One ECA alum and one mentor stated that this experience was very beneficial for students. The alum added that he learned best at the ECA through these exercises because "you learn from... other students." This statement shows that cooperation and community were very important at the ECA.

In addition to completing these class activities, one mentor added that ECA students were required to create and either pr, esent or perform final projects in front of their peers and family members. This presentation component surely helped the students practice public speaking, confidence, and receiving critiques about their own work. All of these skills are important at the HSEC, where projects often require students to present in a panel form of discussion to both faculty members and their peers.

According to two ECA alums and one non-alum, these activities were appealing because the students were given the responsibility to choose their own topic for assignments. This teaching choice allowed the students to explore ideas that interested them and become more engaged in their learning. One of these alums said, "If you write about something that you want

to write about, it's not as boring." The non-alum emphasized that this flexibility made the ECA learning environment very effective. He stated that students who are not interested in their assignments begin to detach themselves mentally from schoolwork. They feel required to do their work but they do not complete it with their best effort: they "coast."

Effectiveness of the ECA. This section discusses students' perceptions of the effectiveness of the ECA in terms of the necessity of such a program, the areas of greatest student improvement within the program, and the ECA's forms and means of preparation for students for competitive high school admission.

Necessity of participation in a preparatory program prior to entering the HSEC. When asked if ECA students would have been able to apply to and be accepted into the HSEC without the ECA's preparation, all seven participants stated that the ECA prepared students much better for the HSEC's application process and for the coursework and pace of the HSEC than had these students not attended any preparatory program.

The ECA alums were asked if they thought that they would be performing as well academically at the HSEC had they not attended the ECA. They each responded that they would not be doing as well in their classes without the information and skills that they had learned at the ECA. One alum thought that the program provided a good introduction for her to the type of work that she would be expected to complete at the HSEC. She explained, "I think even if I was accepted it'd be a much harder transition if I didn't learn what I learned during the program... because of the summer program and the Saturday program you were sort of already adjusted in a way to the curriculum and what was expected." Another alum agreed, saying that the program "better prepared [him]." The third ECA alum interviewed stated that she was especially grateful for the aid she had received from the ECA in improving her writing skills.

Two non-alums added that while extra academic practice will benefit any student, not all middle school students needed to attend a preparatory program in order to attend the HSEC.

NB5 stated that this need depended on the student and whether or not he or she has had adequate academic preparation prior to applying to the HSEC. This student added, however, that she wishes she had attended a preparatory program such as the ECA before attending the HSEC.

She admitted

I never went to the academy program and I wasn't actually prepared for the challenge . . .

And I guess I can compare myself to my friend...because he did go to the program and he was really prepared. I think it's always nice to have prior knowledge of how hard the school is and the challenges that are coming – what you need to do in order to prepare yourself.

Participation in a preparatory program would be beneficial to anyone, no matter his or her academic background.

Areas of greatest student improvement through ECA. Participants named several areas in which, according to their own perceptions, the students had made the greatest improvements during their studies at the ECA. Two ECA alums and two non-alums stated that students' knowledge in the humanities and writing skills improved significantly. Four out of seven respondents stated that the ECA students' math skills also grew greatly. Other participants highlighted the following: knowledge of the application process to competitive high schools, risk-taking, focus, effort, participation, articulation, increased vocabulary, asking for help, and time management.

Forms and means of preparation for completing the HSEC application and the HSEC coursework.

Three mentors commented that the ECA exposed students to the expectations that teachers and administrators would have of them at the HSEC. One of these non-alums added that the program helped students understand that they could complete more complicated coursework and that they had the potential to do even more advanced work at the HSEC. Being exposed to the HSEC's curriculum expectations and several of its educators also gave the students much more confidence in applying to the HSEC and in their everyday activities once they were accepted to the school. One ECA alum confirmed that the application process to the HSEC was far less intimidating because she had met and become familiar with key HSEC administrators through the ECA. B3 stated that although he would have applied to the HSEC even if he hadn't attended the ECA, this preparatory program had helped him become more confident in his abilities. He said, "The fact that I went to the program boosted my confidence in getting into the school." The same ECA alum also stated that all of the skills he learned from the ECA could be applied directly to his classes and assignments at the HSEC. Furthermore, the group work he did at the ECA prepared him for the "HSEC experience" where student cooperation is a pillar of the school program.

Adjusting to the ECA and Forms of Program Support. This section describes students' perceptions of adjusting to the ECA through examining the level of difficulty of coursework and the forms of program support with which students were provided.

Level of difficulty of coursework and effect on ECA students. In order to better understand how ECA courses effected students, both alums and non-alums were asked if they thought that there was anything particularly challenging or easy about these courses. One ECA alum stated that although ECA classes were harder than those at her MS, concepts "seemed easier at times because of the way [teachers] taught [them]." The ECA teachers explained

concepts clearly and in a variety of ways so that subject matter appeared more straightforward. She added that she appreciated being challenged academically. The third alum stated that he never felt over-worked or over-challenged because he was always able to receive help on class work or assignments when he needed it.

A non-ECA alum offered another perspective and noted that many students had struggled with clear articulation in essay writing. She stated that many students were not used to writing essays in their middle school classrooms; therefore, they experienced difficulty in honing this skill.

Forms of support available to ECA students. Whatever challenges the ECA students faced, they were able to look to the program's teachers, mentors, and other students for aid. Two ECA alums stated that the ECA teachers readily gave students individual attention. One of these alums noted that the HSEC mentors also offered the ECA students help whenever it was needed. Lastly, the ECA students developed cooperative relationships with each other. B3 stated that in the close-knit ECA community, students were always willing to help each other better understand a topic. NB5 noted that this positive atmosphere allowed students to learn from each other. When asked if he found anything particularly challenging about the ECA program, B3 answered, "not really because you have the teachers and the staff there and they'll help you if you ask." The abundance of available aid at the ECA helped students participate in the program and learn without feeling incredibly overwhelmed.

**Suggested Areas for ECA Improvement.** Students described changes that they would have liked to make to the ECA program.

Concepts about which ECA alums would have liked to learn more through the ECA.

ECA alums were asked if there was anything additional that they wished they had learned

through the ECA program before attending the HSEC. B1 wanted to have learned more math skills, while B3 would have liked to have had more practice with writing and study skills before entering 9<sup>th</sup> grade. B2 wishes she had been given current list of the HSEC courses in order to become even more familiar with the HSEC environment.

Aspects of the ECA that ECA alums and non-ECA alums would like to change. All participants were asked if there was anything that they wish could be changed about the ECA. The students' suggestions were the following: clarifying the purpose of the ECA, focusing more on the mechanics of writing, paying more attention to the different ability levels of students within the HSEC, including more middle schools in the ECA program, enabling even more interaction between ECA students and the HSEC students and faculty, creating afterschool sessions, and lengthening the ECA sessions. The expansion of different parts of the ECA program was a repeated theme in students' answers.

One non-ECA alum elaborated on the occasional issue of there being a great difference in the ability and understanding of students on a particular topic. She thought those who grasped an idea more quickly could be put into groups together. She recognized, however, that this separation from those who needed more time might create a negative learning environment. Some students might end up feeling intellectually inferior, while others might feel superior for no reason. She believed that hiring more mentors to aid those falling behind and engage the more advanced students might be helpful: "more mentors would be good," she said.

Two students wanted to expand the program in different ways. B3 explained his desire to include more the HSEC faculty members in the ECA. Developing a relationship with a professor from each department through the ECA would have made him more comfortable asking for help at the HSEC. He explained that students would benefit from "knowing someone in each

apartment so when they come in 9<sup>th</sup> grade, if they need help they can just go ask that teacher." More specifically, the ECA ask a HSEC History professor to participate. This student as well as a non-ECA alum also emphasized the importance of expanding the program's general outreach to more middle schools so that more students could take advantage of the ECA's benefits. NB6 said, "I know probably that [at] the middle school where I came from there might be some students that would greatly appreciate a program like the ECA. [There are] schools from other places in New York [that] would greatly appreciate programs like the ECA."

#### **Student Perceptions of the High School Early College (HSEC)**

Students were asked to discuss a variety of aspects of the HSEC program: student involvement and reasons for initial interest in the HSEC; school climate; curriculum; perceptions of standardized testing; program effectiveness; adjustment and support issues; suggested areas for improvement; and popularity of the HSEC concept.

**Admission into the HSEC.** Students discussed how they learned about the HSEC program and why they made the decision to apply to and eventually enroll in the school.

How students learned about the HSEC. Students stated that they learned of the HSEC's program through middle school guidance counselors, preparatory programs, or family members. One ECA alum added that she attended her middle school because she knew of its connection to the HSEC. She knew that high-ability middle school students at this particular middle school could participate in the ECA program and receive preparation for the HSEC.

Why students chose to attend the HSEC. Both ECA alums and non-alums were asked why they chose to attend the HSEC over other high schools. They responded that they wanted to study at the HSEC because of its challenging curriculum, its focus on writing, the opportunity to graduate with an Associates degree, and its feeling of community. One ECA alum said that he

"fell in love" with the HSEC after his experience at the ECA. One of the mentors stated that she especially liked the HSEC because she had felt like part of a community when she visited the school. She became even more interested in the HSEC after she visited another reputable competitive high school in New York City and was disappointed by the lack of community that she experienced there.

The HSEC Climate. Students described the HSEC's learning environment as a positive one. The feeling of community (fostered by small class sizes), collaborative atmosphere, openness of class discussions, increased responsibility and higher quality of work expected of the students, and the close relationships between the students and ECA professors created this unique atmosphere. Participants also discussed their ideal learning environments and emphasized that they found the atmosphere that they desired and needed at the HSEC.

Benefits of smaller class sizes at the HSEC. All three alums and two non-alums stated that the smaller class sizes at the HSEC helped them learn more efficiently. A non-ECA alum stated that smaller classes allowed professors to give every student individual attention. Furthermore, with only about twenty students in each class, students were able to get to know one another easily. NB5 said that the members of her classes often felt like a "family" because they become so familiar with each other. Since the students were more comfortable with each other, they generally felt more at ease participating and taking chances in voicing their opinion, stated one ECA alum.

Collaborative atmosphere at the HSEC. Four students highlighted the collaborative atmosphere that exists at the HSEC. While group work was often required of students or highly encouraged, students also voluntarily helped one another. NB4 and NB7 stated that the students

behaved in this manner because they had common goals and wanted to help each other achieve these dreams. The environment was not competitive in a negative way.

Benefits of class discussion at the HSEC. Two ECA alums and two non-alums stated that they learned best through class discussions in which individuals were able to openly express their opinions. They found this environment at the HSEC, where free expression and rational critique are greatly valued. One mentor even said that the feeling of community created in classes enabled teachers to listen to and learn from students.

Increased responsibility at the HSEC. This mentor's comment demonstrates the idea that the traditional relationship between teacher and student is blurred at the HSEC: students' opinions are greatly valued. A non-ECA alum emphasized this fact by stating that students are treated more like adults at the HSEC. It "makes [this] a really special school," she said.

**HSEC Curriculum.** This section includes student responses on the following: HSEC's focus on writing and thinking, the quality and quantity of the HSEC coursework compared to that at a tradition high school, perceptions of the effects of the HSEC workload, the negative aspects of attending a typical high school, and the benefits of attending the HSEC.

The HSEC's curriculum focus on writing and thinking. Students were asked in a follow-up question how the themes of writing and thinking, two building blocks of the HSEC curriculum, were applied in their classes. Five out of seven students responded to this question, stating that dialectic note taking and free write exercises were imperative to implementing writing and thinking in their work.

One ECA alum commented on the strategy that HSEC used for note-taking, dialectic notes. She believed that this process was "definitely important...especially what other people are saying because sometimes in English [she] realize[s] that [she] think[s] one quote is this way

but then another person interprets it a different way and it's a whole new idea and [she] never really thought about it and then [she] write[s] it down."

All four non-ECA alums stated that they especially implemented different forms of "free writes" to help them explore and organize their thoughts throughout the writing process. NB4 said that these exercises "[taught] [the students] to think freely, take different approaches, and get all of [their] ideas out there." Three of these mentors added more specifically that they used regular and focused free writes for brainstorming ideas before writing. For example, NB6 has been asked to use free writes in his classes, such as Biology, as a "prereflection" exercise to think about an idea before learning about it in greater depth.

This same student stated that free writes were also often assigned in conjunction with the final draft of a project. In his English class, he said, "I had to write a free write to describe my project and any thoughts I had to possibly add or change it if I had more time to work on it." Even after an assignment was "complete" and ready to be turned in, students were asked to continue to think about the project and state in retrospect what they might change if given the chance to redo the project. These student responses show that writing and thinking were pillars of the HSEC curriculum.

Students' perceptions of the quality and quantity of the HSEC coursework and workload compared to coursework and workload at a traditional high school. Students were asked about their perceptions of the HSEC course work and workload compared to those that they might receive at a more typical high school. Five students, two ECA alums and three mentors, believed that the workload was greater at the HSEC. Students at a typical HS "have it so easy," said NB4. A ECA alum had a different perspective: he believed that it was the quality expected of coursework, not the amount of it, that was higher at the HSEC.

workload. While the students sometimes felt overwhelmed by their workload at the HSEC, they each felt that they would gain from such a challenging secondary education. Two students highlighted the fact that it was often difficult to persevere and work hard on school assignments when their peers at other high schools were using far less effort academically. However, two mentors stated that they enjoyed the challenges that the HSEC gave them and that they would be bored at another high school. Another non-ECA alum believed that students felt rewarded after putting so much effort into their academics. She explained

It's fine that we have so much more work because I think that the end result is so great because you have something that you're proud of. Like – I did this and this is my senior thesis and I researched and I worked for months and this is the finished product and I'm proud of it.

NB6 explained that it is necessary for students to increase the quality and quantity of their workload if they want to increase their potential. He added that the goal of every student is to challenge him or herself and continue his or her learning beyond a high school education. He compared this attitude to that of students at a typical high school where many students barely strive to obtain a high school diploma.

Whatever the students' perceptions of their HSEC coursework, their workload was manageable. Two ECA alums noted that HSEC assignments were given to students far in advance, allowing students to plan ahead and complete their work on time.

Perceptions of the negative aspects of attending a traditional HS instead of HSEC.

Students were asked if there were any skills or knowledge that they were learning at the HSEC that they might not have learned at a more typical HS. Four respondents stated that at a typical

high school, curriculum content and course options would be less extensive. One ECA alum believed that she would not be able to show her individuality as much through her work.

Another ECA alum stated that his analytical thinking would be less developed and two students believed that their time management skills would not be as refined at a typical high school. One mentor stated that class sizes would be larger and two respondents emphasized that discussion-based courses would not be the norm. Another mentor added that students would receive less support from the school's students and educators at a traditional high school.

Perceptions of the benefits of a HSEC curriculum compared to a traditional high school's curriculum. Students were asked if they thought that there were any benefits of the HSEC's curriculum compared to that of a traditional high school. Two mentors believed that they were learning a wider range of information at the HSEC. One ECA alum discussed the opportunity for HSEC students to choose their course schedules, even as freshmen. Two students highlighted the benefits of discussion-based classes specifically in terms of the HSEC Seminar courses. These are English classes that students in Year 1 and Year 2 enroll in. The class sizes were kept small in order to allow for more natural open discussion and debate. NB5 even stated that students and their professors talked about books as a class: the professors did not lecture. At the HSEC in general but especially in these classes, a ECA alum stated that professors helped students build on their initial ideas. He added that a balanced dialogue between student and teacher took place. A mentor stated that oftentimes, the class as a whole constructively critiqued other students' ideas or papers and offered suggestions for improvements to be made.

Standardized Testing in Relation to the HSEC's Curriculum. Students commented on standardized testing in general, the school personnels' decision to downplay the importance of

standardized tests, and the advantages and disadvantages in taking college courses instead of AP courses in high school.

General perceptions of standardized testing. Participants were asked about the ability of standardized tests to reflect the intellectual or academic capability of an individual. The five out of seven students who responded to this follow-up question believed that standardized tests are a poor measure of intelligence.

Two mentors believed that standardized tests are more a measure of test-taking ability. One of them said, "People who know how questions are asked on standardized tests will know how to answer them, regardless of their intelligence." She believed that standardized tests only measured a specific skill, not one's broader knowledge or intelligence. This student went on to say that "there are always going to be people who display their strengths in different ways and it's completely unfair to judge intelligence [based] on test-taking abilities."

Another non-ECA alum highlighted the negative atmosphere that standardized tests can create. She said that requiring students to take a standardized test "doesn't really encourage any positive thinking between the students and doesn't build support towards better learning."

Two students did, however, acknowledge that standardized tests can have positive effects. For example, NB7, referring to standardized tests that students take before applying to college, stated that they gave institutions of higher learning a standard measure by which to judge a student's basic ability.

*Opinions on the HSEC's downplay of standardized testing*. Students were asked if they support the HSEC's decision to downplay the importance of standardized tests. All five respondents (one ECA alum and all four non-ECA alums) stated that they support the HSEC's stance in this area. One mentor said, "I do agree with HSEC's downplay of SAT's. The students

have unlimited talent and personality that cannot be reflected on the SAT's." Another non-ECA replied, "Yes. I know that many of my peers have certain disabilities, such as dyslexia, tourette's, aspergers, etc., and while they are exceptionally intelligent, their test scores may not show so." The participants believed that the intelligence of an individual could not be fully measured in a standardized test. They appreciated that the HSEC did not focus on these tests.

Perceptions of benefits of taking college courses instead of AP courses in high school. Students were asked if they thought that there were any benefits or disadvantages in taking college classes accredited by an institution of higher learning instead of AP classes with curriculum approved by the College Board. Several perceived benefits of the HSEC curriculum model were mentioned repeatedly in responses: in college courses, students were better prepared for continuing their higher education, students took on more responsibility, class sizes were smaller, a wider variety of resources was available to students, and college course subject matter was more extensive.

Students also commented on the results-oriented focus of AP tests. Two non-ECA alums believed these tests were too centered on numerical scores. This imbalance led students to focus too much on these results and not enough on what they actually learned in preparation for the tests. One of these students added, "I like that there isn't a similar end goal here at the HSEC. I don't go through my classes thinking that I need to earn above a four or something on a test at the end of the semester so that I'll get credit for the class." NB4 agreed: many AP classes seem to be taught only with the goal of enabling students to achieve passing or high scores on the AP exam, and not to increase students' knowledge and skill levels.

Perceptions of disadvantages of taking college courses instead of AP courses in high school. Two non-ECA alums named disadvantages of taking college courses at the HSEC

instead of AP courses. They worried about the reputability of their HSEC college course grades versus AP scores. Since AP scores are standardized, colleges can use them to compare AP test knowledge between students. On the other hand, the grades that HSEC students receive for their college courses cannot be compared as easily to the grades and AP test scores of other high school students. The quality and content of the HSEC classes has no standard measure: colleges may not place as much value on the grades that students receive from these courses as the HSEC might like. Although NB7 was concerned with this issue, she concluded, "In the end, it's not really about the credits anyway. It's about the knowledge and taking it and applying it to my other classes and everyday life and that's much more important than earning a certain score on an exam." She decided that the long-term benefits of taking college courses instead of focusing on achieving a certain AP grade were worth the risk.

Effectiveness of the HSEC program. Students were asked if the HSEC was preparing them for success in life after they graduate. All seven students believed that the HSEC has prepared them well for whatever path they chose after graduating. They stated that through their experiences at the HSEC, they have honed their close reading, essay writing, and time management skills; learned to listen to their peers and be open-minded; gained a "sense of awareness;" and become more independent. One mentor had particular confidence in the strong preparation that the HSEC had given him for starting the next phase of his life, whatever he wanted to do. He responded

I'm happy to say that I feel that [this school] has given me a leg up in anywhere that I go.

I feel that I could go anywhere – I could go to college, I could go working, I could go to many different things and I know that the education that [this school] has given me has given me some sort of an advantage 'cause I'm more aware... of who I am as a person

and how I learn and how I incorporate that learning into my life... I feel that the sense of awareness that [this school] gives you can help you as soon as you leave those doors.

Adjusting to the HSEC and Forms of Program Support. Students stated their ideas on the skills or knowledge that a successful HSEC student should possess and discussed their own academic difficulties and progress during their time at the HSEC. They also described the strong support system that the HSEC has implemented for students.

Student perceptions of skills or knowledge necessary of a successful HSEC student. In order to better understand how the HSEC students adjusted to the expectations that the school had of them, student respondents were asked what skills or knowledge they thought were necessary for a HSEC student to acquire and implement in order to be successful in this environment. Five students, one ECA alum and all four mentors emphasized the importance of strong time management skills. Three students, one ECA alum and two mentors also highlighted the value of knowing one's limits and understanding when to ask for help from one's teachers. Other responses on what skills and knowledge were necessary included the following: critical and analytical thinking, a desire to learn, good note-taking skills, good reading and writing skills, a good work ethic, listening to others, having an open mind, good oral articulation, taking advantage of academic and extra curricular opportunities, and taking advantage of resources such as the BHSEC writing and math centers.

Students' perceptions of their own academic performance at the HSEC. All seven student respondents discussed that they had experienced especially challenging academic periods while attending the HSEC. The three ECA alums in particular stated that they had not always felt that they were performing as well academically as were their peers. Four students, two ECA

alums and two non-ECA alums stated that the transition from middle school into 9<sup>th</sup> grade was particularly difficult for them. On this topic, one of these mentors explained

The transition from middle school to ninth grade was like being thrown into a completely different environment. I had to completely change my behavior in school because merely showing up to all my classes wouldn't account for an excellent grade. I also had to spend time on my assignments outside of school because I wasn't given just busy work, and in order to do [this], I had to learn how to prioritize and manage my time.

While each of the students had experienced academic difficulties at some point in his or her HSEC career, five of them believed that they were currently performing at the level of their peers. One mentor even stated that at present, he was probably performing above the level of his peers. Thus almost all of the respondents believed that they had made progress academically.

Perceptions of transition from middle school to 9<sup>th</sup> grade. Students were asked whether it was harder for them to adjust to the transition from middle school to 9<sup>th</sup> grade or to the transition from 10<sup>th</sup> grade to Year 1. Five students, two ECA alums and three mentors, stated that the former transition was more difficult. One non-alum said that this transition was harder because a student "[was] coming into a school that [had] a different environment, workload, and pace." B1 also noted the substantial increase in workload between middle school and the HSEC. Another mentor stated that more class participation and greater effort on assignments were required of the students once they entered the HSEC. Two students highlighted the difficulty and importance of mastering time management in 9<sup>th</sup> grade.

One mentor stated that she had found 9<sup>th</sup> grade so challenging that she had wanted to transfer to a different secondary school. She emphasized that it had been incredibly hard to

maintain a high level of work ethic when her peers at other high schools were not putting as much effort into their schoolwork.

However, the same student had a positive retrospective outlook on this difficult transition. She stated that although the initial transition from middle school to 9<sup>th</sup> grade was challenging for many students, "once they [were] more settled into the HSEC they [were] more aware of what they need[ed] to do in order to make it into the college program." Students adapted after becoming more familiar with the faculty and administration's expectations of them.

Descriptions of transition from 10<sup>th</sup> grade to Year 1. Students were asked to describe the transition from 10<sup>th</sup> grade to Year 1 in terms of the new expectations that teachers and administrators had of students in Year 1. This transition led to a more traditional college schedule and lifestyle. One ECA alum and three mentors stated that students received an increased amount of free time in Year 1. However, the workload increased and so the students had to balance this with their free time. Three students highlighted this new responsibility that Year 1 brought.

Perceptions of transition from 10<sup>th</sup> grade to Year 1 prior to transition. Students discussed whether or not they were worried or had worried about the transition from 10<sup>th</sup> grade to Year 1. Two students, one ECA alum (who had not made the transition yet) and one non-alum (who was in Year 2), stated that they were intimidated by having to take on an increased workload. Two other students associated this transition, whether they had experienced it already or not, with excitement about being in college and having more freedom of choice in terms of curriculum. One of these students, a non-ECA alum said, "I don't think I was scared or worried; I think I was more excited by the opportunity to start a college-level education based on my own interests."

Adjusting to transition from 10<sup>th</sup> grade to Year 1. Three students stated that learning how to balance their increased schoolwork expectations with their increased free time was imperative. NB7 said that once she had "adjusted to this new responsibility, [she] [thought] the transition became much easier because [she] didn't think the work load was much different." Understanding when to use resources such as professors' aid was also helpful to this student.

Two students acknowledged that this transition had been stressful for them. However, four students (one ECA alum and three non-ECA alums) stated that their experiences in the 9<sup>th</sup> and 10<sup>th</sup> grades at the HSEC had helped, or would help, prepare them for the college-level classes and expectations of Year 1. More specifically, one non-ECA alum said, "the first two years of [the school] prepare you for the college years because you adjust to the general workload and learn how to manage your time." Thus although students needed to alter their study habits, they already had the tools that they needed to succeed in this new environment.

Forms of support available to students. When students needed extra help at the HSEC, they had a variety of resources to choose from which, all together, created a strong support system. Six students (all three ECA alums and three non-ECA alums) stated that teachers always took time to meet with students. Six of the participants (two ECA alums and all four mentors) also highlighted the availability of student-to-student support for class work and assignments.

NB7 emphasized the importance of peer aid when she said, "I've taken a physics with calculus class with only three other students and without their support, I probably wouldn't have made it through the class." Three students stated that guidance counselor support was also a helpful resource. Four students also discussed the benefits of receiving extra help from the HSEC writing and math centers.

The final form of aid that students discussed was the Teaching Practicum course. In this class, students in Year 1 or Year 2 were taught how to tutor high school students who needed extra academic aid. These tutors then each adopted a group of students to work with on clarifying course material, improving their study habits, and bettering their reading and writing skills. This resource was vital for some students and was especially helpful to those who were transitioning from middle school to 9<sup>th</sup> grade and in need of extra support.

Suggested Areas for Improvement. Students were asked if there were any areas of the program that they would like to see improved in some way. Three students, one ECA alum and two non-ECA alums, were concerned about the school's workload and suggested that it be decreased slightly. NB6 stated that having so much work and so little time for oneself was sometimes depressing. Another mentor added that there should be more communication between professors so that projects are not all due around the same time. Two students, one ECA alum and one non-ECA alum, did not want to change any part of the HSEC experience.

**Popularity of HSEC Concept**. Students offered their opinions on why some students might not chose to attend BHSEC or might transfer after enrolling. They also discussed potential reasons why there are not more schools following a model similar to this HSEC's.

Perceptions of why some students might choose another high school over this HSEC.

Participants were asked if there were any reasons that a student might chose to attend a school other than the HSEC, even if he or she had the potential to attend this HSEC. Two students, both ECA alums, commented that potential applicants might be intimidated by the HSEC's accelerated curriculum. Three other students (on ECA alum and two mentors) stated that the large workload was a particular deterrent and the reason that some students had transferred out of

the HSEC. Other responses were that some students might want to attend a more specialized school or one that might be thought to have a more reputable standing.

Perceptions of qualities that students must have if want to attend the HSEC. Five students, two ECA alums and three non-ECA alums, emphasized that successful HSEC students must desire to learn and be challenged, and be willing to work hard to overcome these challenges. Students who do not have this personal motivation to work hard or the potential to develop it will be overwhelmed by the HSEC's expectations, stated one mentor. A ECA alum stated that a student must be familiar with his or her strengths and weaknesses so that he or she can determine how to best learn and study for his or her needs. One of the mentors believed that most students have the drive that is necessary to do well at a competitive school such as the HSEC. However, he noted that too many students are not presented with opportunities allowing them to discover and exercise this potential. Therefore, they do not know that the potential exists in them and are not inclined to attend such a challenging school.

Perceptions of why there are not more schools using a HSEC model. Students were asked why, if the HSEC program seemed to be so effective, there were not more schools that used a model similar to the HSEC's. Four students agreed that all those involved with a HSEC would have to be devoted to making it function properly. Three of these students emphasized that students would have to have the desire to learn. The fourth student stated that professors would have to be willing to work hard to foster an intellectual and supportive atmosphere. This student added that it's the members of the HSEC community that make the school so effective. Even if a school were to use the HSEC curriculum, "it's really those who...put it into play that make it what it is," she said. Two students, one ECA alum and one non-ECA alum, stated

further that the goals, curriculum, and atmosphere were simply too different at present from those of a typical HS to receive greater public support.

"It's the people more that makes [this school] what it is because ok so you have your curriculum but its really those who kind of put it into play that make it what it is."

Other responses highlighted the following as being potential obstacles in forming a school such as the HSEC: designing the accelerated curriculum, hiring professors who will teach both high school and college-level courses, determining how the professors will teach the curriculum, creating more programs like the ECA to prepare selected students and help them realize that they can do more advanced work, and finding adequate school funding from private and public grants. Despite the aforementioned potential issues, three students (two ECA alums and one non-ECA alum) stated that there should definitely be more learning environments like the HSEC.

# **Implications of the Results**

## **Effective Support for Students**

This study found that the HSEC is effective in helping students achieve success in its challenging learning environment. It offers aid to its students in a number of ways and at every step of the school's experience.

Support through the ECA. Through the ECA, the HSEC reached out to students before they even applied to the school. This program targeted a traditionally underserved middle school student population and successfully aided high-ability students in improving their academic skills and self-confidence. Students who participated in this study agreed that the ECA prepared students very well for the HSEC's application process and for the coursework and pace of the curriculum. Furthermore, all seven participants stated that students who had attended the ECA

were far better prepared for the program's challenges than they would have been had they not attended such a program.

The HSEC accomplished the feat of helping these students become better scholars in several ways. Firstly, the ECA was made up of teachers from the HSEC itself, which allowed students to gain exposure to teaching techniques, content material, and assignment quality and quantity that was similar to that at the HSEC. They were also able to participate in the distinct the curriculum: challenging at every level with an intense focus on critical reading and writing. Through the ECA, students were able to experience first hand the demands and expectations of the school.

Teachers also endeavored to help students understand every topic taught within the ECA program. For instance, teachers were often able to explain a topic in several ways in order to appeal to different learning needs and help the greatest number of students understand the curriculum content. The low student-teacher ratio and presence of student mentors also allowed students to receive frequent one-on-one attention. With these small class sizes, teachers and mentors were readily able to work with students to meet their learning needs. Two ECA alums agreed that this individual aid was invaluable to their learning experience.

In addition to offering ECA students academic assistance, this program also helped students and their families apply to competitive high schools. This complicated process was made more transparent. Here the ECA guidance counselor's actions were in agreement with the beliefs of Nevitt (2001) that counselors who work with high ability students should also work with parents.

Students also cited peer support as an important factor in their education at the ECA. The environment of familiarity and respect that this program created was very positive, productive, and open. This atmosphere fostered cooperation and trust between students.

The effects of providing so much assistance to students within the ECA program are clear: the students learned a great deal and enjoyed the program. The ECA was an invaluable form of aid to the ECA alums from Lower East Side middle schools.

Support directly through the HSEC. The amount of aid that the HSEC offered to its students once they were admitted was remarkable. Teacher dedication to helping students was very strong at the HSEC. The school's small class sizes helped teachers serve the needs of students. The presence of guidance counselors on every floor was also comforting for students. Participants stated that the writing and math centers in the HSEC library were extremely helpful as well.

While all of the above forms of assistance for students were used frequently and were well appreciated, the school offered yet another form of aid that was particularly interesting. The Teaching Practicum class for the HSEC high school students who needed extra academic help was a very effective tutoring system. Younger students learned from older, more experienced college level students. The high school students were able to look up to the latter ones as role models and ask for advice openly, knowing that the older students had recently experienced the same struggles. This tutoring class was one of many examples demonstrating that student-to-student support was incredibly important at the HSEC.

With all of the above forms of support, school personnel helped make the transitions from middle school to 9<sup>th</sup> grade and from 10<sup>th</sup> grade to Year 1 far more manageable for students. The HSEC had an effective method of both challenging and supporting students. Overall, the

students were grateful for both the rigor of their coursework, because they remained engaged in their learning, and for the array of support forms available to them if they ever felt overwhelmed. The success of this system suggests that it could be implemented in other schools as well.

## Effectiveness and Replicability of the HSEC Model

This study also found that the HSEC's overall model for a secondary school program was effective and that it could be described in the type of detail that would allow it to be reproduced in more schools.

Students, teachers, and administrators all supported the program and agreed that it was effective in engaging and challenging students academically and preparing them for a successful higher education experience. While almost every participant had suggestions for changes that could be made, none of them wanted to make drastic alterations to the HSEC way of life. Most importantly, the people for whom the HSEC school system was made, the students, believed that the HSEC program was helping them become better scholars and more well rounded learners in general.

While the students showed support for implementing the HSEC model in more secondary schools, they warned that this program could not be applied in every school environment.

Students must be motivated and have a love of learning. A student should not enter a high school early college program if he or she is not ready for this type of challenge (Rogers, 2004).

Professors too must dedicate themselves to promoting academic excellence through a supportive atmosphere. Furthermore, students must be provided with a support network: a vital component of any early college program (Brody, Muratori, & Stanley, 2004). Also imperative to the BHSEC model is the development of a partnership with a university or college in order to plan

an accelerated curriculum and determine how college credits will be awarded. Administrators must be willing to create a strategy to approach these issues.

In order to hold true to the HSEC's goal of fostering intellectual creativity, schools that might base their curriculum on this model should not center the program on standardized test scores. The HSEC challenged its students with a curriculum that allowed them to cultivate important academic skills and explore their own individuality. Instead of focusing on standardized test scores, as do many public schools, the HSEC neither taught to these tests nor placed much value in them as a measure of intellectual capacity. According to an administrator, an example of a test that the HSEC did not focus on in classes is the set of New York State Regents exams. Their purpose is to measure the college-readiness of high school students. While these tests are employed in every public high school in New York State, their effectiveness is under question. John Garvey, who is a retired employee of the New York City Department of Education and the City University of New York system, recently stated, "everyone is beginning to realize that a Regents diploma has very, very little to do with what it takes to do well in college" (Medina, 2010). The HSEC recognizes that far more knowledge is necessary for a successful college career than that which a multiple-choice test can measure. Even without specific preparation, this school's students still perform very well on the New York State accountability tests (New York State Education Department, 2010). Thus more schools could adopt the HSEC curriculum and still provide their students with the means to achieve good scores on these tests.

Appropriate funding must also be acquired: the HSEC is a public school and so does not charge its New York City students tuition. In order to fund the HSEC model, public and private grant funds are raised to supplement the money that the school receives from its Department of

Education. Although the HSEC model is complex, this study shows that it is an effective program that is not impossible to implement. If secondary school personnel felt that adopting the entire HSEC model would be too drastic a change, perhaps parts of the model could be implemented without the others. For example, a school could decrease the amount that its curriculum is based on the content standardized tests without partnering with a college to allow for dual enrollment. More secondary schools that are ready for such an undertaking should adopt ideas from the HSEC program or implement the model in its entirety in order to bring more students the opportunities that this school offers.

#### **Recommendations for Future Research**

## Researchers should consider the following additional studies:

- The replicability of the HSEC could be examined by studying the HSEC in
   Manhattan and the HSEC II in Queens, New York. It would be interesting to
   better understand how the original HSEC model could be applied in other schools
   and if it is as effective in another environment.
- 2. Comparing the rigor and type of courses at the HSEC to those at a private high school would also be interesting. The HSEC is closer in size to a private school than to a typical public school and so perhaps more aspects of the two types of secondary schools could be compared and examined.

#### References

- Bard High School Early College (2010). Website. Retrieved from <a href="http://www.bard.edu">http://www.bard.edu</a>
- Baldi, S., Jin, Y., Skemer, Green, P.J., Herget, D, & Xie, H. (2007). Highlights from PISA 2006:
  Performance of U.S. 15-year-old students in science and mathematics literacy in an international context. Washington, DC: U.S. Department of Education, National Center for Education Statistics.
- Botstein, L. (1997). Jefferson's children: Education and the promise of American culture. New York: Doubleday.
- Brody, L. E., Muratori, M. C., & Stanley, J. C. (2004). Early entrance to college: Academic, social, and emotion considerations. In N. Colangelo, S. G. Assouline, & M. U. M. Gross (Eds.), *A nation deceived: How schools hold back America's brightest students* (Vol. II, pp. 97-108). Iowa City, IA: The Connie Belin & Jacqueline N. Blank International Center for Gifted Education and Talent Development.
- Calmes, J. (2010, July 29). Obama Defends Education Program. *The New York Times*. Website.

  Retrieved from <a href="http://www.nytimes.com">http://www.nytimes.com</a>
- Colangelo, N. (1997). Counseling gifted students: Issues and practices. In N. Colangelo & G. A. Davis (Eds.), *Handbook of gifted education* (pp. 353-365). Boston: Allyn and Bacon.
- Colangelo, N., Assouline, S. G., & Gross, M. U. M. (2004). A nation deceived: How schools hold back America's brightest students. (Vol. I). Iowa City, IA: The Connie Belin & Jacqueline N. Blank International Center for Gifted Education and Talent Development.
- Colangelo, N., Assouline, S. G., & Gross, M. U. M. (2004). A nation deceived: How schools hold back America's brightest students. (Vol. II). Iowa City, IA: The Connie Belin & Jacqueline N. Blank International Center for Gifted Education and Talent Development.

- Colangelo, N., & Davis, G. A. (1997). Handbook of gifted education. Boston: Allyn and Bacon.
- Heacox, D. (2002). *Differentiating instruction in the regular classroom*. Minneapolis, MN: Free Spirit.
- Institute for Writing and Thinking. (2010). Website. Retrieved from <a href="http://www.bard.edu/iwt/">http://www.bard.edu/iwt/</a>
- Kulik, J. A. (2004). Meta-Analytic Studies of Acceleration. In N. Colangelo, S. G. Assouline, & M. U. M. Gross (Eds.), A nation deceived: How schools hold back America's brightest students (Vol. II, pp. 13-22). Iowa City, IA: The Connie Belin & Jacqueline N. Blank International Center for Gifted Education and Talent Development.
- Lemke, M., Sem, A., Pahlke, E., Partelow, L., Miller, D., Williams, T., Kastberg, D., & Jocelyn,
   L. (2004). International outcomes of learning in mathematics, literacy, and problem
   solving: PISA 2003 results from the U.S. perspective. Washington, DC: U.S. Department
   of Education, Institute of Education Sciences, National Center for Education Statistics.
- Lubinski, D. (2004). Long-term effects of educational acceleration. In N. Colangelo, S. G.

  Assouline, & M. U. M. Gross (Eds.), *A nation deceived: How schools hold back America's brightest students* (Vol. II, pp. 23-38). Iowa City, IA: The Connie Belin &

  Jacqueline N. Blank International Center for Gifted Education and Talent Development.
- Medina, J. (2010, June 27). New Diploma Standard in New York Becomes a Multiple-Question Choice. *The New York Times*. Website. Retrieved from <a href="http://www.nytimes.com">http://www.nytimes.com</a>
- Nevitt. H. (2001). Socio-emotional guidance and counseling. In M. Landrum, Callahan, C., & B. Shaklee (Eds.), *Aiming for Excellence: Gifted Program Standards: Annotations to the NAGC Pre-K-Grade 12 Gifted Program Standards* (pp. 27-37). Washington, DC: NAGC.
- New York State Education Department. (2010). The New York State School Report Card:

  Accountability and Overview Report 2008-09, Bard High School Early College.

- Retrieved from <a href="https://www.nystart.gov/publicweb-rc/2009/9d/AOR-2009-310100011696.pdf">https://www.nystart.gov/publicweb-rc/2009/9d/AOR-2009-310100011696.pdf</a>
- Peterson, R. (2010). An interview with Principal Ray Peterson/Interviewer: Claire E. Delcourt.

  The Learning Environment of a High School Early College Program: A Case Study of
  Bard High School Early College, College of William and Mary, Williamsburg, VA.
- Robinson, N. M. (2004). Effects of academic acceleration on the social-emotional status of gifted students. In N. Colangelo, S. G. Assouline, & M. U. M. Gross (Eds.), *A nation deceived: How schools hold back America's brightest students* (Vol. II, pp. 59-68). Iowa City, IA:

  The Connie Belin & Jacqueline N. Blank International Center for Gifted Education and Talent Development.
- Rogers, K. (2004). The academic effects of acceleration. In N. Colangelo, S. G. Assouline, & M. U. M. Gross (Eds.), *A nation deceived: How schools hold back America's brightest students* (Vol. II, pp. 46-58). Iowa City, IA: The Connie Belin & Jacqueline N. Blank International Center for Gifted Education and Talent Development.
- Simon's Rock (2010). Website. Retrieved from <a href="http://www.simons-rock.edu/">http://www.simons-rock.edu/</a>
- Stolberg, S. G. (2010, August 9). Obama Calls for U.S. to Lead in Graduation. *The New York Times*. Website. Retrieved from <a href="http://www.nytimes.com">http://www.nytimes.com</a>
- Tomlinson, C. A. (1999). *The differentiated classroom*. Alexandria, VA: Association for Supervision and Curriculum Development.
- U.S. Committee on Education and Labor. (2009). Field Hearing: High School/College Dual

  Enrollment Programs. Retrieved from

  <a href="http://edlabor.house.gov/documents/111/pdf/statements/20090918KildeeHearingStatement.pdf">http://edlabor.house.gov/documents/111/pdf/statements/20090918KildeeHearingStatement.pdf</a>

- U.S. Department of Agriculture. (2010). *National School Lunch Program*. Retrieved from <a href="http://www.fns.usda.gov/cnd/Lunch/AboutLunch/NSLPFactSheet.pdf">http://www.fns.usda.gov/cnd/Lunch/AboutLunch/NSLPFactSheet.pdf</a>
- U.S. Department of Education. (2009). *Arne Duncan, U.S. Secretary of Education: Biography*. Website. Retrieved from http://www2.ed.gov/news/staff/bios/duncan.html
- U.S. Department of Education. (2002). *The No Child Left Behind Act of 2001*. Retrieved from <a href="http://www2.ed.gov/nclb/overview/intro/execsumm.html">http://www2.ed.gov/nclb/overview/intro/execsumm.html</a>
- U.S. Department of Education. (2009). *Race to the Top Program: Executive Summary*. Retrieved from <a href="http://www2.ed.gov/programs/racetothetop/executive-summary.pdf">http://www2.ed.gov/programs/racetothetop/executive-summary.pdf</a>
- U.S. Department of Education, Jacob K. Javits Gifted and Talented Education Act. (2005). Bard early college academy: (PR/ Number # S206A050034).
- U.S. Department of Education, Jacob K. Javits Gifted and Talented Education Act. (2008). Bard early college academy: Final Grant performance report (PR/ Number # S206A050034)

Table 1
Student Demographics and Achievement Levels

			Cum. Average		
			After the first		Most Recent
	Year		Semester at the	HS Credits	Available Cum.
Student	Level	Gender	HSEC	Earned	Average
ECA	First				
1		Female	87.49	11.10	91.59
2	First	Female	73.13	6.10	73.13
3	Third	Male	74.18	21.95	82.36
Average			78.27  (sd =  8.00)		82.36  (sd = 9.23)
Non-ECA	Third				
4		Female	90.18	25.30	90.22
5	Fourth	Female	80.93	21.95	81.76
6	Fourth	Male	92.50	26.20	92.43
7	Fourth	Female	92.00	23.70	92.70
Average			88.90 (sd = 5.41)		89.28 (sd = 5.13)

Table 2

Administrator, Teacher, and Support Staff Demographics

		Number of Years
		Involved in the
Subject	Role	Program

	D. I. I. I. I. A.I. DIMORG	
Administrators	Principal and Founder of the BHSEC	8
	Director of the BECA	5
	Assistant Principal of a Middle School	5
	Participating in the BECA	
Teachers	Biology	8
	Political Science	8
	Dance	4
Support Staff	Guidance Counselor	not provided

Table 3

Objectives and Instrumentation Related to Goal 1

Specific Objectives	Instrumentation
1.a To examine why students chose to attend a high school	Student Survey
early college school instead of a more conventional, four-	Student Interview
year high school	
1.b To understand what skills a student should have in	Student Survey
order to be accepted into a program with this type of	Student Interview
accelerated curriculum	ECA Classroom Observation
1.c To collect information about the types of skills a	Student Interview
student is taught at the HSEC	HSEC Classroom Observation
1.d To examine what skills a student needs in order to be	Student Survey
academically successful at the HSEC	Student Interview
	Academic achievement (Grades,
	GPA, standardized test scores)
	Credits Completed
	Attendance

Table 4

Specific Objectives and Instrumentation Related to Goal 2

Specific Objectives	Instrumentation
3.a To investigate the benefits of the HSEC program over	Educator Survey
a more conventional, four-year high school	Educator Interview
3.b To investigate the benefits of students attending a	Educator Survey
preparatory program before applying to the HSEC	Educator Interview
	ECA Classroom Observation
3.c To investigate what teaching methods and forms of	Educator Interview
support are used at the HSEC in order to help students	HSEC Classroom Observation
learn successfully in the accelerated curriculum	

Table 5
Specific Objectives and Instrumentation Related to Goal 3

Specific Objectives	Instrumentation
2.a To investigate the benefits of the HSEC program over	Educator Survey
a more conventional, four-year high school	Educator Interview
2.b To investigate the benefits of students attending a	Educator Survey
preparatory program before applying to the BHSEC	Educator Interview
	ECA Classroom Observation
2.c To investigate what teaching methods and forms of	Educator Interview
support are used at the HSEC in order to help students	HSEC Classroom Observation
learn successfully in an accelerated curriculum	

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curriculum?

Goal 1

# **Student Survey Questions**

**RESEARCHER**: Claire Delcourt, Sophomore, College of William and Mary, Williamsburg, VA

**PROCEDURES**: After individuals and/or parents/legal guardians provide consent for participation in the study, participants will be sent a survey to document background experiences related to the program. A sample of 3-4 students who attended the Bard Early College Academy (BECA) while in middle school and a sample of 3-4 students who did not attend the BECA prior to BHSEC will be selected to complete follow-up interviews. These surveys will provide information to select students for interviews. Those who have ideas that could benefit the purposes of this project will be selected.

**Directions**: The purpose of this survey is to understand why students choose to attend BHSEC and what types of skills are needed to benefit the most from this type of program. Please respond to the following questions in as much detail as you would like:

Name:		
1. What year are yo	u presently in at BHSEC?	
(Circle 1) First Yea	r Second Year Third Year	Fourth Year
2. How old are you	?	
3. (Circle 1) Male	e Female	
4. What middle sch	ool(s) did you attend? (List th	em below)
	` '	ny (BECA) program affiliated with BHSEC?
(Circle 1) Y	es No	
If so		
5a. H	How often did you attend the H	BECA?
5b. V	Why did you enroll in the BEC	CA?
	Did this program adequately he culum?	elp you prepare for BHSEC's accelerated
5d. V	What did you like about this pr	rogram?
	What do you think could be im	
If not	j	
	olid you attend any other type ole 1) Yes No	of preparatory program?
`	If so, what was the program	n's name?

- 6. Why did you choose to attend Bard over other competitive high schools?
- 7. What was the easiest part of your transition from middle school to BHSEC?
- 8. What was the most difficult part of your transition from middle school to BHSEC?
- 9. What skills have you used at BHSEC to help you adjust to and keep up with its accelerated

# Appendix B: Goals 2 and 3

# Teacher, Administrator, Support Staff Survey Questions

**RESEARCHER**: Claire Delcourt, Sophomore, College of William and Mary, Williamsburg, VA

**PROCEDURES**: After individuals provide consent for participation in the study, participants will be sent a survey to document background experiences related to the program. A sample of 3-5 teachers who presently teach at BHSEC and who may or may not have taught in the Bard Early College Academy (BECA) and a sample of 3-4 BHSEC administrators will be sent the survey. They will also be asked to complete follow-up interviews.

**Directions**: The purpose of this survey is to understand why students choose to attend BHSEC and what types of skills are needed to benefit the most from this type of program. Please respond to the following questions in as much detail as you would like:

- 1. What is your current affiliation with BHSEC?
- 2. For how many years have you taught and/or worked at/with BHSEC?
- 3. Have you taught or do you currently teach any classes that are part of the Bard Early College Academy (BECA) program?
- 4. Have you participated in any other part of the BECA program?

If so...

- 4a. What was/is your role?
- 5. If your answer to questions 3 and/or 4 was "yes," please answer the following questions:
  - 5a. For how many years have you participated in the BECA program?
  - 5b. If you have taught classes in this program, what did you teach?
- 5c. What did you hope the students would achieve through their participation in this program?
- 6. What are your goals for the students of BHSEC?
- 7. What skills do the students need to help them achieve success in their studies at BHSEC?
- 8. Have you taught or worked before at any more typical, 4-year high schools that do not have the integration of so much college credit? If so, what do you think are some of the greatest differences in your experiences at both types of schools?

# Appendix C: Goal 1

## **Student Interview Questions**

RESEARCHER: Claire Delcourt, Sophomore, College of William and Mary, Williamsburg, VA

PROCEDURES: Individual interviews will be tape-recorded and transcribed. All participants will have the opportunity to review their transcript for accuracy.

- 1. Background information
  - a. What activities are you involved in at BHSEC?
  - b. Why did you choose to attend BHSEC?
  - c. How did you become involved in the BECA?
- 2. (This question was only asked to teachers and administrators, not to students.)
- 3. How does the Bard Early College Academy (BECA) help students learn and advance academically? (ex. skill area topics, teaching methods used)

#### to BECA alums:

- a. Did you have a favorite class in the program? Why did you like it so much?
- b. Was anything particularly challenging about the program?
  - to BECA alums; non-BECA alums:
- c. What specific skills did the program teach or help students improve upon that students used in applying to BHSEC or in everyday life at BHSEC? (eg. interviewing, application writing, different forms of writing (analytical, creative), creative/analytical thinking, etc.)
- d. In what area(s) do you think students grew the most during the program?
- e. Through what kinds of lessons and in what learning environment did students learn information the best?
  - i. Was information taught in the same way to the students in middle school?
- 4. What role does participation in preparatory programs, such as the BECA, play in students' acceptance to and success in an accelerated academic program such as BHSEC's? In what situations are preparatory programs most appropriate?

### to BECA alums:

- a. Do you think you would have been able to apply and be accepted into BHSEC without the skills you developed or refined through the BECA?
- b. Do you think you would be doing as well as you are in your BHSEC classes without these skills?
- c. How do you feel you are performing academically at BHSEC compared to students who did not attend the BECA program?

#### to non-BECA alums:

d. Did your experience at the middle school(s) you attended help you prepare for the accelerated curriculum at BHSEC? If so, in what way(s)?

- e. Did you receive any assistance in applying to the BHSEC School through programs or mentors? (Whether or not this assistance was affiliated with your middle school.)
- f. How do you feel you are performing academically at BHSEC compared to the other students? Have you always felt this way or have you feel differently at certain times since you enrolled in BHSEC?
- 5. How can the BECA be improved upon?

to BECA alums; non-BECA alums:

- a. Is there anything you wish you had learned through the BECA before beginning your schooling at BHSEC?
- b. Is there anything you would change about the BECA program if you could?

The following questions are for both former BECA students and non-BECA students:

- 6. What specific skills do students need in order to be successful in an accelerated learning environment such as BHSEC's?
  - a. Through what kinds of lessons and in what kind of environment do you learn the best?
    - i. Do you find this environment here at BHSEC?
  - b. How does the workload compare to that at 4-year high schools and colleges?
  - c. What specific skills and/or knowledge do you need to be successful in this accelerated learning environment?
- 7. Is a high school early college system like BHSEC's practical as a widely applied school model? Is it successful? Why or why not?
  - a. Do you like attending BHSEC?
  - b. What do you think is most effective about BHSEC's system of advanced curriculum?
  - c. Are there skills or knowledge you are learning at BHSEC that you don't think you would be learning at a more common, 4-year high school? (Think about friends or family who may attend 4-year high schools.)
  - d. Do you feel that BHSEC is preparing you for success in whatever you chose to do after graduating? Why or why not?
  - e. Is there anything about BHSEC that you would like to improve?
- 8. On the popularity of the high school early college concept:
  - a. If the BHSEC model is effective, why do you think aren't there more schools like it?
  - b. Why do you think some people choose to join accelerated programs like BHSEC and others do not?

### Follow-up Questions:

- 9. (Only educators were asked this question.)
- 10. (Only educators were asked this question.)
- 11. How are the themes of writing and thinking applied in your classes? Please give an example or two.
- 12a. Are you worried about the upcoming transition from 10th grade to Year 1? Do you think it will be challenging? Why or why not?

- 12b. In general, do you think BHSEC students worry more about this transition or the transition from middle school to 9th grade?
- 13a. Do you have a lot of support from your family for you to get a good education?
- 13b. Do you feel that family support an important part of you reaching success in your studies?
- 14a. Do you have any thoughts on standardized tests and their effectiveness as a measure of intellectual or academic ability?
- 14b. Do you support BHSEC's decision to downplay the importance of standardized tests?
- 14c. Do you think that there are any benefits in taking college classes instead of taking AP classes (especially in terms of standardized testing)? Are there disadvantages in doing this?

# Appendix D: Goals 2 and 3

# Teacher, Administrator, Support Staff Interview Questions

RESEARCHER: Claire Delcourt, Sophomore, College of William and Mary, Williamsburg, VA PROCEDURES: Individual interviews will be tape-recorded and transcribed. All participants will have the opportunity to review their transcript for accuracy. This should take approximately 40-45 minutes to complete.

- 1. Background information
  - a. What is your role at BHSEC?
  - b. How did you become involved in the BECA?
  - c. What is/was your role in this program?
- 2. What criteria are used for students to be considered for the BECA program?
- 3. How does the Bard Early College Academy (BECA) help students learn and advance academically? (ex. skill area topics, teaching methods used)

### to BECA educators:

- a. What skills did you help the students improve upon during their time in the BECA?
- b. Were there any general trends in the subject area of students' improvement?
  - to BECA educators and non-BECA educators at BHSEC:
- c. Do you teach any students here at BHSEC who attended the BECA program?
  - i. If so, how are the BECA students who you teach performing in your classes?
    - 1. Do you see any difference between these students and those who have not participated in the BECA? (in terms of study skills, writing skills, public speaking skills, etc)
- d. How is the BECA meant to help students prepare for a school with an accelerated curriculum such as BHSEC's?
- 4. What role does participation in preparatory programs, such as the BECA, play in students' acceptance to and success in an accelerated academic program such as BHSEC's? In what situations are preparatory programs necessary?
  - to BECA educators and non-BECA educators at BHSEC

# 5. Improving the BECA

to BECA educators and non-BECA educators at BHSEC:

- a. Can the BECA be improved upon?
- b. Do you have any goals for the program?
- c. Has the BECA changed over time?
- 6. What specific skills do students need in order to be successful in an accelerated learning environment such as BHSEC's?

#### to BECA educators and non-BECA educators at BHSEC:

- a. Is the education that a student receives at the BECA different from that at a traditional four-year high school?
  - i. Is it different from that at another high school early college program?
- b. How does the workload compare to that at 4-year high schools and colleges?
- c. What specific skills do you think a high school early college student needs to be successful in this accelerated learning environment?
- d. Do you expect students to enter BHSEC with the skills they need to succeed here? Are there specific skills that you teach students throughout their four years at BHSEC that you think are different from skills needed to be successful in other high schools?
- e. What resources are made available to the students to help them cope with this accelerated curriculum?
- 7. Could a high school early college system like BHSEC's be applied in other schools? Is it successful? Why or why not?

#### to BECA educators and non-BECA educators at BHSEC:

- a. If you or any acquaintances have worked at a more typical 4-year high school or college, can you compare your/their experience(s) to your experience here at BHSEC?
- b. What do you think is most effective about the BHSEC model?
- c. Has BHSEC changed over time?
  - i. Is there anything about BHSEC that you would like to improve?
- d. Do you have any specific goals for your students, yourself, or the school that you would like to achieve this year or over the next few years?
- 8. On the popularity of the high school early college concept:

## to BECA educators and non-BECA educators at BHSEC:

- a. If the BHSEC model is effective, why do you think there aren't more schools like it?
- b. Why do you think some people choose to join accelerated programs like BHSEC and others do not?

## Follow-up Questions:

- 9. Are the Arts an important part of the BHSEC environment?
- 10. Please discuss your knowledge of the BHSEC Inquiry Team Committee and the Teaching Practicum Course.
- 11. How do you apply the themes of writing and thinking in your classes? Please give an example or two.
- 12. Transitions
  - a. Do you feel that the transition from 10th grade to Year 1 is challenging for BHSEC students or is it pretty seamless? Why?
  - b. In general, do you think BHSEC students worry about and struggle more through this transition or the transition from middle school to 9th grade?
  - c. How do you help students prepare for this transition and work through any struggles that they might have during this time?

# 13. Family Support

- a. In general, do the students at BHSEC receive support from their families for them to get a good education?
- b. Is family support an important part of the students reaching success in their studies?

# 14. Standardized Testing

- a. Do you have any thoughts on standardized tests and their effectiveness as a measure of intellectual or academic ability?
- b. Do you support BHSEC's decision to downplay the importance of standardized tests?
- c. Do you think that there are any benefits in taking college classes instead of taking AP classes (especially in terms of standardized testing)? Are there disadvantages in doing this?